# MUSEUM

CURATORIAL REPORT NUMBER 89

Fishes of Nova Scotia: Species Recorded in the Accession Books of Harry Piers From 1899 to 1939

by John Gilhen

Sault Whitefish, Coregonus labradoricus now known as Atlantic Whitefish, Coregonus huntsmani



NOVASCOTIA
Tourism and Culture

# Fishes of Nova Scotia: Species Recorded in the Accession Books of Harry Piers From 1899 to 1939

by John Gilhen Research Associate, Nova Scotia Museum of Natural History

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Museum of Natural History Nova Scotia Museum Nova Scotia Department of Tourism and Culture

#### CURATORIAL REPORTS

The Curatorial Reports of the Nova Scotia Museum make technical information on museum collections, programs, procedures and research accessible to interested readers.

This report contains the preliminary results of an on-going research program of the Museum. It may be cited in publications, but its manuscript status should be clearly noted.

Cover illustration: Harry Piers portrait by LeRoy Zwicker, 1940 and illustration of Sault Whitefish, now known as Atlantic Whitefish, by S. Edgar March, 1920.

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### I. FOREWORD

### A Biography Of Harry Piers<sup>1</sup>

Harry Piers (Fig. 1, Pl. 1<sup>2</sup>; Fig. 2A and B, Pl. 2<sup>3</sup>) was born in Halifax in 1870 and educated there. He was a descendant of one of the city's founders, and had a great interest in local history and a wide knowledge of the subject.

In 1889 he became Assistant Librarian of the Legislative Library. He was appointed Curator of the Provincial Museum in 1899 and in 1900 he became Librarian of the Provincial Science Library, holding these positions until his death.

He was a man of diverse knowledge and an active member of practically every cultural organization in Halifax. He was President of the Nova Scotian Institute of Science and its Secretary for forty years. During this time he wrote many articles for the Institute Proceedings on a variety of scientific subjects. He was also the author of a number of books and pamphlets including a detailed 560 page catalogue of the library of King's College, Windsor, published in 1893.

Two notable works were published after his death. One of these The Evolution of the Halifax Fortress, 1749-1928 published by the Public Archives of Nova Scotia, was the result of some forty years of research by Mr. Piers and was compiled from manuscript and working notes left by him, and edited by G.M. Self and Phyllis Blakeley. It was published both for its value as a source of information on the early fortifications of Halifax, and as a tribute "to the patient and life-long labours of one who loved both his native city and antiquarian research". It has been said that he was the born antiquarian who, in his investigations, could not resist the claims of the smallest detail. Another valuable work, published posthumously by the Antiquarian Club of Halifax in 1948, was Master Goldsmiths and Silversmiths of Nova Scotia and Their Marks. This was based on a paper given before the Nova Scotia Historical Society in 1939. Published with a supplement by Donald C. MacKay it contains a wealth of information and is much sought after today.

Harry Piers was President of the Nova Scotia Historical Society, Nova Scotia Society of Artists and the Nova Scotia Museum of Fine Arts; President of the local branch of the Canadian Authors' Association, a director of the Nova Scotia College of Art and Nova Scotia representative on the Geographic Board of Canada.

He carried on a copious correspondence with specialists in many fields all over the world and had a detailed knowledge of his own collections. He died January 24 th, 1940.

<sup>&</sup>lt;sup>1</sup>Excerpted from "Three Directors In Ninety-Eight Years" By Barbara Smith. Nova Scotia Museum Newsletter. Vol. 4, No. 4, December 1965.

<sup>&</sup>lt;sup>2</sup>Figure 1, Plate 1. Portrait of Harry Piers (Negative No. 9,569)

<sup>&</sup>lt;sup>3</sup>Figure 2 A and B, Plate 2. Harry Piers at work, about 1933-1935, Nova Scotia Provincial Museum, Halifax. (Negative No's 9,620 and 10,786)

### II. INTRODUCTION

Serious workers want to know the history of their profession. They especially want to know who preceded them and what contribution they made. This report summarizes the work on fishes done by Harry Piers, one of the most significant figures in natural history in Nova Scotia during the last 100 years. Since his death in January 1940 Piers's everyday writing recorded in his six accession books were in storage and therefore were unknown and unavailable to natural history researchers in the 1940's through 1960's. Because of their immense cultural history value they rested for two decades secluded from the view of even most staff members of the museum, in a cabinet in the History Branch, which was located at the Halifax Citadel until 1971. The contents of these six volumes are now on microfilm in the library at the Nova Scotia Museum of Natural History, 1747 Summer Street, Halifax, Nova Scotia, Canada. B3H 3A6.

Harry Piers's accession books are official hardbound volumes approximately 40.5 centimetres long by 25.5 cm wide by 7.5 cm thick, each containing approximately 300 pages. He used a fine-nibbed quill pen and black india ink to make the entries, including sketches, in his accession books. His writing is often very small (Fig. 3 A and B, Pl. 3) and at first glance appears illegible, but with time and experience can be deciphered. Piers also did rough sketches of fishes before transferring them onto the pages of his accession books (Fig. 28, Pl. 30: Fig. 29, Pl. 31). Sometimes, to illustrate a point, he inserted small sketches within paragraphs or in the margin (Fig. 4, Pl. 4). There is one sketch, made from memory by K.G. Dalton, of a "Shovel-nosed Shark" (Fig. 5, Pl. 5) on which Piers made notes. Lacking more substantial evidence and the uncertainty regarding the species, it was not entered in his accession book.

Browsing through the Accession Books of Harry Piers is a fascinating educational adventure in Nova Scotia history and natural history. Piers was much more than a skilled technician in ichthyology (the study of fishes). He meticulously recorded artifacts relating to Nova Scotia archeology, ethnology, early European settlement, marine history, military history, numismatics and also items of interest and importance pertaining to the fishing, lumbering, mining and manufacturing industries in this province. He documented, with the same attention to detail, specimens in geology, palaeontology, botany, entomology, malacology, ichthyology, herpetology, ornithology and mammalogy. The time, effort and patience required to record, for future generations, 9,338 entries (average 234 per year) over a 40 year period (1899-1939) as curator of the Provincial Museum has been recognized by very few workers.

Piers was a remarkable example of a complete curator of fishes. He had a thorough knowledge of the museum fish collection. He was able to collect, preserve and catalogue fish specimens. He had a good working knowledge of the available literature, both popular and scientific, on fish. Using technical keys he could identify specimens unfamiliar to him. He could interpret ichthyology for those lay persons who brought specimens to him and, he published important records in the scientific literature. Perhaps his most important attribute was his uncanny sense of what information would be important for future researchers.

Natural history is a living, ever expanding and changing study. In order to appreciate the contributions Harry Piers made to the study of Nova Scotia fishes one has to realize very little was known about our fish fauna in 1899 when he first became curator of the Provincial Museum. There were no simplified identification keys to species available to Piers. He had to become familiar with all the technical terms relating to fish meristics and morphometrics in order to identify fish species unknown or unfamiliar to him,

and to complete his descriptions and label his line drawings. He consulted David Starr Jordan on methods of measuring fish (Fig. 6, Pl. 6).

Piers consulted with Dr. Philip Cox, ichthyologist and professor, University of New Brunswick, Fredericton; Andrew Halkett, Canadian Fisheries Museum, Ottawa; Alexander G. Huntsman, Biological Station, St. Andrew's, New Brunswick; Edward E. Prince, Dominion Commissioner of Fisheries, Department of the Naval Service, Ottawa, all of whom were authorities on Maritime fishes at that time. He also corresponded with scholars such as David Starr Jordan, President, Leland Stanford Junior University, Stanford University, California and Barton Warren Evermann, United States Fish Commission (co-authors of the 1896, four-volume Fishes of North and Middle America); Barton A. Bean, Curator, Division of Fishes, Smithsonian Institution, United States National Museum, Washington D.C. and Henry B. Bigelow (senior author of the 1925 Fishes of the Gulf of Maine). These were four of the authorities in the study of North American fishes at that time. Some of these letters are significant documents pertaining to the history of Nova Scotia fishes. The responses to his enquiries in the form of official letters and notes, some of which are wonderfully hand written, were catalogued (by Susan Whiteside, former Librarian) and are now filed as "The Harry Piers Papers" in the library at the Nova Scotia Musuem of Natural History.

Harry Piers collected specimens himself and purchased them for small sums of money at the Halifax fish markets. His brother Edward S.F. Piers was his most frequent donor of fish specimens. He and Edward collected material in the Hubbards area, Halifax County. Piers received many specimens from local fishermen. In addition his Mi'kmaq friend Jerry Lone-cloud, Lancelot A. Purcell and H. St. Claire Silver contributed specimens, as did many individuals of the general public.

Harry Piers provided us with the first record of the following species of fish in Nova Scotia: Thresher Shark, White Shark, Smooth Hammerhead, Tarpon, Fallfish, Atlantic (Acadian) Whitefish, Bluespotted Cornetfish, Dolphin (*Coryphaena hippurus*), Tautog, Atlantic Bonito, Albacore, Planehead Filefish and Striped Burrfish. He not only described each species in his accession books but somehow found the time to do sketches of many species, natural size whenever possible. He publish three of his first records (White Shark, Atlantic Whitefish [Sault White-fish] and Striped Burrfish) in the Proceedings of the Nova Scotian Institute of Science. He also recorded the second collections of Tautog, Long-finned Albacore and Gray Triggerfish.

Harry Piers kept a catalogue of the fishes he recorded on 5 x 7 inch index cards. He consulted Jordan and Evermann (1896) in numbering each species and filed his records following their taxonomy. It appears that he may have also planned to publish a book on fishes, as he received a congratulatory gesture in a letter from Philip Cox (Figs. 7A and B, Pls. 7 A and B). Piers left four two-ring binders of notes, labelled on end panel "Fishes Of N. S.". The title page of each volume "Catalogue of Fishes of Nova Scotia by Harry Piers" (Fig. 97, Pl. 102). The contents of these volumes in themselves are worthy of a curatorial report (Fig. 98, Pl. 103). For example, there is a section called "Introduced fish" which included four species introduced into Nova Scotia. In his account of the "Great Lake Trout, Cristivomer namaycuch (Walbaum)" he states,

"Sometime about 1877, Great Lake Trout and Whitefish from the Great Lakes were hatched at the Bedford Hatchery and planted in nearly every lake in Nova Scotia. This was kept up for over 20 years, but they did not propagate in our waters, and not one, Mr. Ogden says, has ever been seen since. He considers that our waters are too warm for them. (Vide Alfred Ogden, letters of Feb. & March, 1915)"

(Figs. 8A and B, Pls. 8 and 9:Fig. 9, Pl. 10). Since information concerning introductions of Lake Trout in this province was lacking, all details are important. To put his fish records in context he gives in chronological order all previous records for each species, on his catalogue cards and in his four volumes of notes. He extracted all previous records of fish taken in the Canadian Atlantic and the fresh waters of Nova Scotia dating back to Jones (1882) "List Of The Fishes of Nova Scotia" and Jordan and Evermann (1896) "The Fishes of North and Middle America".

On 14 and 15 September 1915, Harry Piers attended the Provincial Exhibition and prepared a number of notes relating to fish and fishing gear (Fig. 61, Pl. 65; Fig. 62, Pl. 66; Fig. 63, Pl. 67; Fig. 74, Pl. 79; Fig. 75, Pl. 80; Fig. 76, Pl. 81; Fig. 77, Pl. 82 and Fig. 78, Pl. 83).

Every Nova Scotian should have the opportunity to view the accession books of Harry Piers. Historians and naturalists alike will marvel, as I do, at his ingenious ability to describe in interesting detail, often including superbly accurate and detailed sketches, of numerous artifacts and specimens. His ability to write with authority in so many diverse disciplines overwhelms the imagination. Inserted in the sleeve on the inside of the back cover is a reproduction of page 235 from Accession Book No. 4. I hope by presenting his records in this curatorial report it will finally bring to light the remarkable contribution Harry Piers made to the study of Nova Scotian fishes.

### III. ACKNOWLEDGEMENTS

Throughout my 29-year career at the Nova Scotia Museum of Natural History I would try to spend at least one hour a month in the library to check the latest issues of various journals relating to ichthyology and herpetology for papers relevant to Nova Scotia. The hour usually stretched into two hours as the need to set up the micro-film machine and browse through the accession books of Harry Piers became an obsession. I vowed on my retirement I would return to the Museum of Natural History to publish a report on the work of this remarkable man. The project I thought could be accomplished in about six months.

I want to thank Andrew Hebda, Curator of Zoology, Nova Scotia Museum of Natural History for his assistance in deciphering certain letters and words in the fine hand writing of Harry Piers, during this two and one-half year project. Dr. W. Beverley Scott, Huntsman Marine Science Centre, St. Andrews, New Brunswick, and Frederick Scott, Research Associate, Nova Scotia Museum of Natural History, reviewed a draft of the manuscript and their comments and advice is greatly appreciated. Robert Grantham, Curator of Geology, Nova Scotia Museum of Natural History, reviewed the fossil fish records under the "Fish Related Items" section. Scott Robson, Curator of Collections, Museum Services Division, Nova Scotia Museum provided the original photographs of Harry Piers used in Figures 1 and 2, Plates 1 and 2. All of the excellent photographs used (Figures 1 to 102, Plates 1 to 107) in this report are by Roger Lloyd and Richard Plander, Learning Resources and Technology, N.S. Department of Education. Cover design is by Barry Donovan, Learning Resources and Technology, N.S. Department of Education. Finally I must thank my wife, Karen, who assisted in the final formatting of the manuscript and, after many thirty minute drives to and from the museum, listened patiently as I spoke of Harry Piers: the man was an expert, the man was a professional, the man was exceptionally talented, the man was gifted, the man was a genius, he never had a degree, he never received an award, he never received any formal recognition, the work he did amazes me. My mentor, Harry Piers.

### IV. LIST OF FISHES

Common names of fishes vary from one community to the next. For example, the Alewife in Nova Scotia is also known as Gaspereau, sawbelly and kyak. Scientific names may also change over time, as we look at the morphology of groups of fishes more carefully and undertake DNA studies. In order to organize and make a list of the fish records made by Harry Piers from 1899 to 1939 it was necessary to place all of the records of each species in chronological order (using the names given by Piers) under the common and scientific name presently in use and in taxonomic order following Robins et al. 1990 Common and Scientific Names of Fishes from the United States and Canada.

For example, during his 40 year tenure Piers recorded three samples of Common Shiner: in June 1918 under the name "Shiner; Red-fin, Dace, Notropis cornutus (Mitchill), var. Fontinalis (Agassiz)"; in 1919 under the name "Shiner; red-fin, Notropis cornutus (Mitchill)" and in 1935 under the name "Common Shiner, Notropis cornutus (Mitchill)". These three records are listed in chronological order under the present name for this species, Common Shiner, Luxilus cornutus (Mitchill, 1817) which falls under Minnows - Cyprinidae.

### **Petromyzontidae - Lampreys**

#### Sea Lamprey, Petromyzon marinus Linnaeus, 1758

Mus. No. 3820: (see Appendix 52, Page 54)
[Land-locked] Great Sea Lamprey; Lamprey Eel

Petromyzon marinus, Linn.; probably variety unicolor (DeKay)
Grand Lake, Halifax Co., N. S.
21 June 1912:1 specimen: Jos. E. Campbell

Mus. No. 4167: (see Appendix 58, Page 57)
Great Sea Lamprey, Petromyzon marinus, Linn.
Shubenacadie River near Benery Brook near Enfield, Halifax Co., N. S.
28 June 1914: 1 specimen: John MacDonald

### **Alopiidae - Thresher Sharks**

### Thresher Shark, Alopias vulpinus (Bonnaterre, 1788)

Mus. No. 5152: (see Appendix 108, Page 87)
Thresher; Fox-shark, *Alopias vulpes* (Gmelin)
Horseshoe Cove, Cape d'Or, Minas Channel, Cumberland Co., N. S.
26 July 1922: 1 specimen: Photograph: Eli James

#### **Lamnidae - Mackerel Sharks**

#### White Shark, Carcharodon carcharias (Linnaeus, 1758)

Mus. No.7508: (see Appendix 133, Page 104)

Man-eater Shark, Carcharodon carcharia (Linn.)

Digby Gut, Annapolis Co., N. S.

About 2 July 1932:1 specimen: upper lateral tooth removed from boat after attack:

Wilson Munroe, fisherman

Mus. No. 7901: (see Appendix 140, Page 112)

Man-eater Shark, Carcharodon carcharias (Linn.)

Pig Island, Merigomish, Pictou Co., N. S.

27 July 1934:1 specimen; tooth: Charles Wilmont, Indian

#### Porbeagle, Lamna nasus (Bonnaterre, 1788)

Acc. No. 5571: (see Appendix 119, Page 94)

Porbeagle; Mackerel Shark, Lamna cornubica (Gmelin)

About 3 miles southeast of Devil's Island, off Halifax Harbour, N. S.

31 October 1924:1 specimen: Douglas Henneberry

### Carcharhinidae - Requiem Sharks

#### Blue Shark, Prionace glauca (Linnaeus, 1758)

Acc. No. 3778: (see Appendix 50, Page 53)

Great Blue Shark; "Blue Dog" (local), Prionace glauca (Linn.) (= Carcharhinus glaucus (Linn.)

Off mouth of Halifax Harbour, Halifax Co., N. S.

September 1909:1 specimen: Benj. Henneberry

Acc. No. 4940: (see Appendix 99; Page 80)

Great Blue Shark, *Prionace glauca* (Linn.)

About 3 miles off Chebucto Head, Halifax Co., N. S.

23 September 1920: 1 specimen: jaws, and basal part of skull

Acc. No. 4941: (see Appendix 100, Page 81)

Great Blue Shark, Prionace glauca (Linn.)

4 miles southeast of Chebucto Head, Halifax Co., N. S.

10 October 1920: 1 specimen: jaws:Crew of No. 2 Pilot Boat (Schooner)

Acc. No. 7921: (see Appendix 142, Page 113)

Great Blue Shark, Prionace glauca (Linn.)

East of entrance of Halifax Harbour, Halifax Co., N.S.

11 September 1934:1 specimen: jaws: James T. Elgan

### Sphyridae - Hammerhead Sharks

#### Smooth Hammerhead, Sphyrna zygaena (Linnaeus, 1758)

Acc. No. 4545: (see Appendix 74, Page 68)
Hammer-headed Shark, Sphyrna zygaena
About 2 miles off Prospect Harbour, Halifax Co., N. S.
28 August 1917: 1 specimen: Peter Hardiman

### Squalidae - Dogfish Sharks

#### Spiny Dogfish, Squalus acanthias Linnaeus, 1758

Acc. No. 984: (see Appendix 17, Page 37)
Dogfish, Squalus acanthias, Linn.
North West Arm, Halifax Co., N. S.
7 August 1902: 4 specimens, young: Purchased

Acc. No. 5025: (see Appendix 105, Page 85)
Dog-fish, Squalus acanthias, Linn.
Off Halifax Harbour, Halifax Co., N. S.
21 September 1921: 1 specimen: Jos. Perrin

### Rajidae - Skates

### Raja species

Acc. No. 4997: (see Appendix 102, Page 84)
Skate (egg-case); "Devil's Pocketbook" or "Sea-purse", Raja sp.
Cow Bay, Halifax Co., N. S.
Received 9 June 1921: 1 specimen: Mrs. Amelia Reid

### Little Skate, Raja erinacea Mitchill, 1825

Acc. No. 4522: (see Appendix 70, Page 66)
Common Skate; "Basket Skate", called "Pot Skate" by Cyrus Dauphinee,
Raja erinacea, Mitchill
Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.
16 July 1917: 1 specimen: Edward S. F. Piers

### Barndoor Skate, Raja laevis, Mitchill

Acc. No. 4901: (see Appendix 90, Page 77)
Barn-door Skate, *Raja laevis*, Mitchill
Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.
28 July 1920: 1 specimen; jaws: Harry Piers

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Acc. No. 5582: (see Appendix 120, Page 95)

Barn-door Skate; or Starry Skate, Raja laevis or Raja radiata

Hunt's Point, Port Mouton, Queens Co., N. S.

1924:1 specimen; jaws and teeth of male: H. A. Lawrence, C. E.

#### Winter Skate, Raja ocellata Mitchill

Acc. No. 4521: (see Appendix 69, Page 65)

Big Skate, Raja ocellata, Mitchill

Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.

14 July 1917: 1 specimen; jaws: Harry Piers

Acc. No. 4539: (see Appendix 73, Page 68)

Big Skate (or else Barndoor Skate),

Raja ocellata, Mitchill (or else Raja laevis, Garman)

Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.

About 14 July 1917: 1 specimen; of skeleton of cartilaginous skull & vertebrae

Acc. No. 4630: (see Appendix 80, Page 73)

Skate, Raja ocellata, Mitchill?

Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.

About 21 July 1918:1 specimen; Cartilaginous Cranium and anterior Vertebrae

Acc. No. 4645; (see Appendix 84, Page 74)

Skate, Raja ocellata, Mitchill (?), or less likely R. laevis

Hubbards, Halifax Co., N. S.

About July 1918:1 specimen; Cartilaginus Cranium

### **Acipenseridae - Sturgeons**

### Atlantic Sturgeon, Acipenser oxyrhynchus Mitchill, 1814

Acc. No. 67: (see Appendix 3, Page 31)

Common (American) Sturgeon, Acipenser sturio var. oxyrhynchus

Shubenacadie River, Hants Co., N. S.

Speared about 1896: 1 specimen: Alex. Horne

Acc. No. 7600: (see Appendix 135, Page 107)

Common Sturgeon, Acipenser sturio, Linn.

Mouth of Salmon River, Cole Harbour, Halifax Co., N. S.

23 May 1933: 1 specimen: Samuel Embirly

### **Elopidae - Tarpons**

#### Tarpon, Megalops atlanticus Valenciennes, 1847

Acc. No. 3034: (see Appendix 24, Page 39)

Tarpon or Tarpum, Tarpon atlanticus (Cuv. & Valen.) (= Megalops atlanticus of Jordans [sic])

Harrigan Cove, Halifax Co., N. S.

6 September 1906: 1 specimen: Edward McDonald

### **Anguillidae - Freshwater Eels**

#### American Eel, Anguilla rostrata (Lesueur, 1817)

Acc. No. 3671: (see Appendix 46, Page 52)

Eel, Anguilla chrysypha, Rafinesque (= Anguilla anguilla rostrata (Le Sueur))

Nictaux River near Middleton, Annapolis Co., N. S.

June 1910: 2 specimens: Dr. Frank H. Reid

Acc. No. 3796: (see Appendix 51, Page 54)

American Eel; Freshwater Eel, Anguilla chrysypa, Rafinesque (= A. anguilla rostrata (Le Sueur))

North West Arm, Halifax Co., N. S.

22 June 1912: 1 specimen: Edward S. F. Piers

Acc. No. 4695: (see Appendix 86, Page 75)

American Eel, Anguilla chrysypa, Rafinesque

Shubenacadie River, Elmsdale, Hants Co., N. S.

12 February 1919: 1 specimen; skin: Jerry Lone-cloud

### **Clupeidae - Herrings**

### Alewife (Gaspereau), Alosa pseudoharengus (Wilson, 1811)

Acc. No. 4242: (see Appendix 62, Page 61)

Alewife; "Gaspereau", Pomolobus pseudoharengus (Wilson)

Nine Mile River, St Margaret's Bay Road, Halifax Co., N. S.

29 May 1915: 1 specimen: [collector unknown]

Acc. No. 4243: (see Appendix 63, Page 61)

Alewife; "Gaspereau", Pomolobus pseudoharengus (Wilson)

Nine Mile River, St Margarets Bay Road, Halifax Co., N. S.

29 May 1915: 1 specimen: Nil

Acc. No. 5029: (see Appendix 106, Page 85)

Alewife; Gaspereau, Pomolobus pseudoharengus (Wilson)

Shubenacadie River at Elmsdale, Hants Co., N. S.

29 September 1921: 4 specimens: Jerry Lone-cloud

Acc. No. 8572: (see Appendix 147, Page 117)

Alewife; Gaspereau, Pomolobus pseudoharengus (Wilson)

Sawler's Lake, Hubbards, Halifax Co., N. S.

20 September 1936: 1 specimen: Edward S. F. Piers

#### Atlantic Herring, Clupea harengus Linnaeus, 1758

Acc. No. 4537: (see Appendix 71, Page 67)

Common Herring, Clupea harengus, Linn.

Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.

31 July 1917: 9 specimens: Edward S. F. Piers

### **Cyprinidae - Carps and Minnows**

#### Lake Chub, Couesius plumbeus (Agassiz, 1850)

Acc. No. 3553: (see Appendix 36, Page 47)

Couesius plumbeus (Agassy) [sic]

Penhorn Lake, Dartmouth, Halifax Co., N. S.

4 May 1910: 6 specimens: Lancelot A. Purcell

Acc. No. 4934: (see Appendix 96, Page 79)

Couesius plumbeus (Agassig) [sic]

Shubenacadie River at Enfield, Hants Co., N. S.

August 1919: 4 specimens: Alexander H. Leim

#### Common Shiner, Luxilus cornutus (Mitchill)

Acc. No. 4622: (see Appendix 79, Page 72)

Shiner; Red-fin, Dace, Notropis cornutus (Mitchill), var. fontialis (Agassiz) = N. megalope

(Rafinesque)

Wright's Lake, Halifax Co., N. S.

About end of June 1918: 2 specimens: James T. Thompson

Acc. No. 4933: (see Appendix 95, Page 79)

Shiner; Red-fin, Notropis cornutus (Mitchill)

Shubenacadie River at Elmsdale, Hants Co., N. S.

August 1919: 2 specimens: Alexander H. Leim

Acc. No. 8170: (see Appendix 143, Page 114)

Common Shiner, Notropis cornutus (Mitchill)?

Crawford's Falls, Musquodoboit River, Halifax Co., N. S.

30 June 1935: 1 specimen: Edward S. F. Piers

#### Golden Shiner, Notemigonus crysoleucas (Mitchill, 1814)

Acc. No. 3263: (see Appendix 26, Page 41)

Golden Shiner, Abramis (Notemigonus) crysoleucas (Mitchill)

9 miles above tide-water, on river, Antigonish, Antigonish Co., N. S.

July 1908: 1 specimen: Dr. W. H. Macdonald

Acc. No. 3540: (see Appendix 31, Page 44)

Golden Shiner, Abramis (Notemigonus) crysolucas

Maynard's Lake, Dartmouth, Halifax Co., N. S.

19 April 1910: 12 specimens: Lancelot A. Purcell

Acc. No. 4224: (see Appendix 60, Page 58)

Golden Shiner, Abramis crysoleucas (Mitchill)

Blueberry Lake near Beachville St. Margaret's Bay Road, Halifax Co., N. S.

10 July 1897: 1 specimen: Harry Piers

Acc. No. 4932: (see Appendix 94, Page 78)

Golden Shiner, Notemigonus [Abramis] chrysoleucas (Mitchill)

Shubenacadie River at Elmsdale, Hants Co., N. S.

22 May 1920: 3 specimens: Alexander H. Leim

Acc. No. 7608: (see Appendix 136, Page 108)

Golden Shiner, Abramis chrysoleucus (Mitchill) of Pratt's Man. Of Vert. Animals

Notemigonus chrysoleucas (Mitchill) of Jordan, Everman & Clark's Check List

Hubbards River, Halifax Co., N. S.

18 June 1933: 1 specimen: E. S. Bringloe

#### Northern Redbelly Dace, *Phoxinus eos* (Cope, 1862)

Acc. No. 4930: (see Appendix 92, Page 78)

Red-bellied Dace, Chrosomus erythrogaster, Rafinesque

Shubenacadie River between Enfield & Milford, Halifax- Hants Co's, N. S.

August 1919: 6 specimens: Alexander H. Leim

#### Creek Chub, Semotilus atromaculatus (Mitchill, 1818)

Acc. No. 3670: (see Appendix 45, Page 52)

Horned Dace; Creek Chub, Semotilus atromaculatus (Mitchill)

Nictaux River near Middleton, Annapolis Co., N. S.

June 1910: 2 specimens: Dr. Frank H. Reid

Acc. No. 4931: (see Appendix 93, Page 78)

Horned Dace; Creek Chub, Semotilus atromaculatus (Mitchill)

Shubenacadie River at Milford, Hants Co., N. S.

August 1919: 2 specimens: Alexander H. Leim

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Acc. No. 5481: (see Appendix 118, Page 94)

Horned Dace or Creek Chub, called "chub" at Musquodoboit, Semotilus atromaculatus (Mitchill)

Musquodoboit River near Crawford's Falls, Halifax Co., N. S.

23 June 1924: 1 specimen: H. St. Claire Silver

#### Fallfish, Semotilus corporalis (Mitchill, 1817)

Acc. No. 4605: (see Appendix 77, Page 70)

Fall-fish; Silver Chub, Semotilus corporalis (Mitchill) = Semotilus bullaris (Rafinesque)

Stream from Marsh Lake to Sackville River, Halifax Co., N. S.

5 May 1918: 1 specimen: R. Frank Eager

#### **Catostomidae - Suckers**

#### White Sucker, Catostomus commersoni (Lacepede, 1803)

Acc. No. 31: (see Appendix 1, Page 31)

Sucker, Catostomus teres (= C. commersonii)

Porters Lake, Halifax Co., N. S.

13 April 1900: 1 specimen: Purchased in market

Acc. No. 4160: (see Appendix 57, Page 57)

Common Sucker, Catostomus commersonii (Lacepede) = C. teres (Mitchill)

Nine Mile River at St. Margaret's Bay Road, Halifax Co., N. S.

3 June 1914: 1 specimen: Harry Piers

Acc. No. 4200: (see Appendix 59, Page 58)

Common Sucker, Catostomus commersonii (Lacepede)

Mira (probably Mira River), Cape Breton Co., N. S.

30 December 1914: 1 specimen: James Macdonald

Acc. No. 4929: (see Appendix 91, Page 77)

Common Sucker, Catostomus commersonii (Lacepede)

Shubenacadie River at Elmsdale, Hants Co., N. S.

August 1919: 2 specimens: Alexander H. Leim

#### Ictaluridae - Bullhead Catfish

#### Brown Bullhead, Ameiurus nebulosus (Lesueur, 1819)

Acc. No. 3560: (see Appendix 39, Page 48)

Horned Pout, "Catfish" (local), Ameurus [sic] nebulosus (Lesueur)

Red Bridge Pond, Dartmouth, Halifax Co., N. S.

20 May 1910: 1 specimen: Lancelot A. Purcell

Acc. No. 3570:

(see Appendix 42, Page 50)

Horned Pout; Common Bullhead; "Catfish" (local), Ameiurus [sic] nebulosus (Le Sueur)

Farrell's (=Carter's) pond, part of First Dartmouth Lake, Halifax Co., N. S.

2 June 1910: 1 specimen: Lancelot A. Purcell

#### **Osmeridae - Smelts**

#### Rainbow Smelt, Osmerus mordax (Mitchill, 1815)

Acc. No. 94:

(see Appendix 4, Page 32)

Smelt, Osmerus mordax (Mitch.)

near Halifax, Halifax Co., N. S.

3 November 1900: 1 specimen: Faders Fish Market

Acc. No. 7081:

(see Appendix 128, Page 99)

American Smelt, Osmerus mordax (Mitchill)

north end of Grand Lake, Hants Co., N. S.

about spring of 1930: 1 specimen: Sandy McDonald

Acc. No. 7370:

(see Appendix 131, Page 102)

Smelt; "Shiner" of people about Hubbards, Osmerus mordax (Mitchill) J. & E.

Dauphinee Mill Lake, near Hubbards, Lunenburg Co., N. S.

7 May 1932: 4 specimens: Edward S. F. Piers

Acc. No. 7815:

(see Appendix 138, Page 110)

American Smelt; Frost-fish, Osmerus mordax (Mitchill)

Sawlor's Lake, Halifax Co., N. S.

17 June 1934: 1 specimen: Edward S. F. Piers

#### **Salmonidae - Trouts**

### Atlantic (Acadian) Whitefish, Coregonus huntsmani Scott, 1987

Acc. No. 5225:

(see Appendix 111, Page 88)

Sault White-fish, Coregonus labradoricus, Richardson

Millipsigate Lake, Lunenburg Co., N. S.

9 May 1923: 1 specimen: S. Edgar Marsh

Acc. No. 5454:

(see Appendix 114, Page 91)

Sault Whitefish, Coregonus labradoricus, Richardson

Millipsigate Lake, Lunenburg Co., N. S.

5 May 1924: 1 specimen: S. Edgar Marsh

Acc. No. 5455:

(see Appendix 115, Page 91)

Sault Whitefish, Coregonus labradoricus, Richardson

Millipsigate Lake, Lunenburg Co., N. S.

5 May 1924: 1 specimen: S. Edgar Marsh

#### Atlantic Salmon, Salmo salar Linnaeus, 1758

Acc. No. 226: (see Appendix 7, Page 33)

Land-locked salmon "Grayling" (local), Salmo salar sebago (Gerard)

Grand Lake, Halifax Co., N. S.

9 May 1901: 1 specimen: Frank Wiltshire

Acc. No. 4593: (see Appendix 75, Page 70)

Common Atlantic Salmon ("Grilse"), Salmo salar, Linnaeus

North River a few miles from Truro, Colchester Co., N. S.

25 October 1915: 1 specimen:

Acc. No. 5636: (see Appendix 121, Page 95)

Atlantic Salmon "Sand Trout" or "Gudgeon" young, parr, Salmo salar, Linn.

Nine-mile River where it runs in Shubenacadie River, Elmsdale, Hants Co., N. S.

25 May 1925: 1 specimen: Jerry Lonecloud

#### Brook Trout, Salvelinus fontinalis (Mitchill, 1815)

Acc. No. 3370: (see Appendix 28, Page 43)

Brook Trout, Salvelinus fontinalis (Mitchiull)

Little Salmon River (head of Cole Harbour), Halifax Co., N. S.

30 May 1909: 1 specimen: Simon Meaden

Acc. No. 4594: (see Appendix 76, Page 70)

Brook Trout, Salvelinus fontinalis (Mitchill)

Trout Lake, Colchester Co., N. S.

5 July 1917: 1 specimen: H. S. Cruikshank

Acc. No.4995: (see Appendix 101, Page 82)

Brook Trout; Lake Trout "Sea Trout", Salvelinus fontinalis (Mitchill)

Morris (McDonald) Lake, Halifax Co., N. S.

5 June 1921: 1 specimen: George Robert Foster

Acc. No. 5242: (see Appendix 112, Page 90)

Brook Trout, Salvelinus fontinalis (Mitchill)

Square Lake, Lunenburg Co., N. S.

25 May 1923: 1 specimen: E. L. McDonald

Acc. No. 5496: (see Appendix 185, Page 129)

Brook Trout, (Salvelinus fontinalis)

Black Brook ½ mile south of Elmsdale, Halifax Co., N. S.

18 June 1924:1 specimen; of globular white Quartz pebble in stomach: Jerry Lonecloud

#### Lake Trout, Salvelinus namaycush (Walbaum, 1792)

Acc. No. 41: (see Appendix 2, Page 31)

Salvelinus namaycush

Pockwock Lake, Halifax Co., N. S.

7 June 1901: 1 specimen: Tremaine Thompson

Acc. No. 935: (see Appendix 15, Page 36)

Great Lake Trout, Cristovomer [sic] namaycush (Wal.)

Nine Mile Lake (Sherbrooke Lake), Lunenburg Co., N. S.

4 June 1902: 1 specimen: Arthur E. Harrington

Acc. No. 1840: (see Appendix 20, Page 38)

Great Lake Trout, Cristivomer namaycush (Walb.)

Nine Mile Lake (Sherbrooke Lake), Lunenburg Co., N. S.

15 May 1903: 1 specimen: Col. Charles J. Macdonald

Acc. N. 3244: (see Appendix 25, Page 40)

Great Lake Trout, Cristivomer namaycush (Walbaum)

Dollar Lake, Halifax Co., N. S.

22 June 1908: 2 specimens: Nil

Acc. No. 7832: (see Appendix 139, Page 110)

Great Lake Trout; "Hake" or "Grayling" (local, Sherbrooke Lake);

"Pickerel" (local, Pockwock Lake, Hx. Co.), Cristivomer namaycush (Walbaum)

Sherbrooke Lake, Lunenburg Co., N. S.

7 & 8 July 1934: 4 specimens; heads: Edward S. F. Piers

### Alepisauridae - Lancetfishes

### Longnose Lancetfish, Alepisaurus ferox Lowe, 1833

Acc. No. 6046: (see Appendix 125, Page 98)

Lancetfish or handsawfish, Alepisaurus ferox, Gill

Taken on cape of Emerald Bank, Nova Scotia

14 Jul. 1927: 2 specimens; Wm. McKenzie of Schooner "Archie McKenzie"

#### Gadidae - Codfishes

#### Cusk, Brosme brosme (Ascanius, 1772)

Acc. N. 4059: (see Appendix 55, Page 55)

Cusk, Brosmius brosme (Muller)

Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.

7 July to 4 August 1913: 10 specimens: Edward S. F. Piers

#### Fourbeard Rockling, Enchelyopus cimbrius (Linnaeus, 1766)

Acc. No. 241: (see Appendix 8, Page 33)

Four-bearded Rockling, Enchelyopus cimbrius (Linn.) (=Rhinonemus cimbrius)

North West Arm, Halifax Co., N. S.

17 May 1901: 1 specimen: A. Wilson & Son

#### Atlantic Cod, Gadus morhua Linnaeus, 1758

Acc. No. 3724: (see Appendix 49, Page 53)

Cod-fish, Gadus collarias [sic], Linn.

near Halifax, Halifax Co., N. S.

June 1911: 1 specimen: Unknown

Acc. No. 4498: (see Appendix 66, Page 63)

Cod-fish, Gadus collaris [sic]

off Shag Bay, Halifax Co., N. S.

about 24 April 1917: two small bones, cranial cavity: D. Coolin

Acc. No. 8927: (see Appendix 190, Page 131)

Cod-fish, Gadus collarias [sic], L.

No doubt from off Halifax Co., N. S.

Received 21 October 1937: 6 specimens; otoliths, probably 3 pairs: Purchased from

Mrs. R.F. Eagar

#### Silver Hake, Merluccius bilinearis (Mitchill, 1814)

Acc. No. 3425: (see Appendix 29, Page 44)

Silver Hake; Whiting, Merluccius bilinearis (Mitchill)

North West Arm, Halifax Co., N. S.

14 September 1909: 1 specimen: Edward S. F. Piers

### Cyprinodontidae - Killifish

### Banded Killifish, Fundulus diaphanus (Lesueur, 1817)

Acc. No. 3537: (see Appendix 30, Page 44)

"Minnow" (local), Fundulus diaphanus (Le Sueur)

Cole Harbour, Halifax Co., N. S.

15 April 1910: 13 specimens: Purchased in market

Acc. No. 3562: (see Appendix 41, Page 49)

"Minnow" (local), Fundulus diaphanus

Little Salmon River, Halifax Co., N. S.

20 May 1910: 14 specimens: Purchased in market

Acc. No. 4266:

(see Appendix 64, Page 62)

Freshwater Killifish; Freshwater Minnow, Fundulus diaphanus (Le Sueur)

Dauphinee Beach, Hubbards, Halifax Co., N. S. 26 July 1915: 200 specimens: Edward S. F. Piers

Acc. No. 4501:

(see Appendix 67, Page 64)

Freshwater Minnow; Freshwater Killifish, Fundulus diaphanus? (Le Sueur)

in inner part of Cole Harbour, Halifax Co., N. S.

4 May 1917: 25 specimens: Purchased in market

Acc. No. 4935:

(see Appendix 97, Page 80)

Gray-back Minnow; Killifish; Freshwater "Minnow", Fundulus diaphanus (Le Sueur)

Shubenacadie River at Milford, Hants Co., N. S.

August 1919: 3 specimens: A. H. Leim

#### **Atherinidae - Silversides**

#### Atlantic Silverside, Menidia menidia (Linnaeus, 1766)

Acc. No. 4502:

(see Appendix 68, Page 64)

Common Silverside called "Sprat" by man who had them in market,

Menidia menidia notata (Mitchill)

Cole Harbour, Halifax Co., N. S.

4 May 1917: 48 specimens: Purchased from Cole Harbour man

### **Gasterosteidae - Sticklebacks**

### Fourspine Stickleback, Apeltes quadracus (Mitchill, 1815)

Acc. No. 4017:

(see Appendix 54, Page 55)

Four-spined Stickleback, Apeltes quadracus (Mitchill)

North West Arm, Halifax Co., N. S.

1 July 1913: 6 specimens: Edward S. F. Piers

### Threespine Stickleback, Gasterosteus aculeatus Linnaeus, 1758

Acc. No. 3547:

(see Appendix 34, Page 46)

Common Eastern Stickleback (locally sometimes called "Thorn-fish"),

Gasterosteus bispinosus bispinosus Walbaum

in canal under bridge Dartmouth, Halifax Co., N. S.

29 & 30 April 1910: 65 specimens: Lancelot A. Purcell

Acc. No. 4786:

(see Appendix 88, Page 76)

Gasterosteus gladiunculus, Kendall

Sissiboo River, St. Mary's Bay, Digby Co., N. S.

30 June 1919: 5 specimens: Dr. Philip Cox

#### Ninespine Stickleback, Pungitius pungitius (Linnaeus, 1758)

Acc. No. 3561: (see Appendix 40, Page 49)

Nine-spined Stickleback, Pygosteus pungitius (Linn.)

Little Salmon River, Halifax Co., N. S.

19 May 1910: 1 specimen: Lancelot A. Purcell

Acc. No. 4675: (see Appendix 85, Page 74)

Nine-spined Stickleback, Pygosteus pungitius (Linnaeus)

Skating Pond Brook at Indian Reservation 1 mile southeast of Elmsdale Station, Halifax Co., N. S.

13 November 1918: 1 specimen: Jerry Lone-cloud

#### Fistulariidae - Cornetfishes

#### Bluespotted Cornetfish, Fistularia tabacaria Linnaeus, 1758

Acc. No. 4227: (see Appendix 61, Page 59)

Trumpet-fish, Fistularia petimba, Lacepede (= Fistularia serrata, Cuvier)

Little Hope Lighthouse Station, near Port Mouton, Queens Co., N. S.

5 September 1914:1 specimen: Reuben Colp

### Syngnathidae - Pipefishes

#### Northern Pipefish, Syngnathus fuscus Storer, 1839

Acc. No. 243: (see Appendix 9, Page 34)

Common Pipe-fish, Siphostoma fuscum (Storer)

Cow Bay, Hx. Co., N. S.

17 May 1901: 2 specimens: Purchased in market

Acc. No. 2169: (see Appendix 22, Page 39)

Common Pipe-fish, Siphostoma fuscum (Storer)

Whycocomagh Bay, Bras d'Or Lake, Inverness Co., N. S.

July 1903: 1 specimen: Richard H. Brown

Acc. No. 3369: (see Appendix 27, Page 41)

Common Pipe-fish, Siphostoma fuscum (Storer)

Melville Island Cove, North West Arm, Halifax Co., N. S.

11 May 1909: 1 specimen: Arnold Smith

Acc. No. 3558: (see Appendix 37, Page 48)

Common Pipefish, Siphostoma fuscum (Storer)

Mill Cove, Bedford Basin, Halifax Co., N. S.

16 May 1910: 1 specimen: Lancelot A. Purcell

Acc. No. 3559: (see Appendix 38, Page 48)
Common Pipefish, Siphostoma fuscum (Storer)
Mill Cove, Bedford Basin, Halifax Co., N. S.
16 May 1910: 1 specimen: Lancelot A. Purcell

Acc. No. 4013: (see Appendix 53, Page 55)
Pipefish, Siphostoma sp. (Related to S. fuscum; or a variety of that species)
North West Arm, Halifax Co., N. S.
7 June 1913: 1 specimen: Edward S. F. Piers

Acc. No. 4538: (see Appendix 72, Page 67)
Common Pipe-fish, Siphostoma fuscum (Storer)?
Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.
31 July 1917: 1 specimen: Edward S. F. Piers

Acc. No. 4616: (see Appendix 78, Page 71)
Common Pipefish, Siphostoma fuscum (Storer)? variety
Jollimore, North West Arm, Halifax Co., N. S.
17 June 1918: 1 specimen: W. B. McIlreith

Acc. No. 4636: (see Appendix 82, Page 73)
Common Pipe-fish (variety), Siphostoma fuscum (Storer)? variety
Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.
25 July 1918; 1 specimen; Edward S. F. Piers

Acc. No. 4637: (see Appendix 83, Page 74)
Common Pipe-fish (variety), Siphostoma fuscum (Storer)? variety
Hubbards Cove, St. Margaret's Bay, Halifax Co., N. S.
25 July 1918; 1 specimen; Edward S. F. Piers

Acc. No. 7213: (see Appendix 129, Page 100)

Common Pipe-fish, Siphostoma fuscum (Storer) or variety, or related form Long Cove, Bedford Basin, Halifax Co., N. S.

15 July 1931; 1 specimen; David Murray

Acc. No. 7214: (see Appendix 130, Page 101)
Common (?) Pipe-fish, Siphostoma fuscum (Storer) or variety, or related form Halifax Harbour, Halifax Co., N. S.
23 July 1931; 1 specimen; Edward S.F. Piers

Acc. No. 7524: (see Appendix 134, Page 107)

Northern Pipefish, Siphostoma fuscum (Storer) = Siphostoma fuscus, Storer. Probably a variety (?) or related form

Back Harbour, Chester, Lunenburg Co., N. S.
about 10 August 1932; 1 specimen; George MacDonald

### **Cottidae - Sculpins**

#### Sea Raven, Hemitripterus americanus (Gmelin, 1759)

Acc. No. 5021: (see Appendix 104, Page 84)
Sea Ravin, *Hemitripterus americanus* (Gmelin)
North West Arm, Halifax Co., N. S.
22 August 1921; 1 specimen; Charles Allen

### **Cyclopteridae - Lumpfishes and Snailfishes**

#### Lumpfish, Cyclopterus lumpus Linnaeus, 1758

Acc. No. 2696: (see Appendix 23, Page 39)
Lump-sucker; Lump-fish, Cyclopterus lumpus, L.
Halifax Harbour, Halifax Co., N. S.
26 August 1904; 1 specimen; Edward McLeod

Acc. No. 5347: (see Appendix 113, Page 91)
Lumpfish; Lump-sucker, *Cyclopterus lumpus*, Linn.
Northwest Arm, at Jollimore, Hx. Co., N. S.
11 Oct. 1923; 1 specimen; Wm. MacIlreith

### **Percichthyidae - Temperate Basses**

#### White Perch, Morone americana (Gmelin, 1788)

Acc. No. 224: (see Appendix 6, Page 32) White Perch, *Morone americana* Cole Harbour (fresh water), Hx. Co., N. S. 2 May 1901; 1 specimen; Chas. Morash

Acc. No. 272: (see Appendix 10, Page 34)
White Perch, *Morone americana* (Gmelin)
near Cow Bay, Halifax Co., N. S.
23 May 1901; 4 specimens; purchased in market

Acc. No. 926: (see Appendix 14, Page 35)
White Perch, *Morone americana* (Gmelin)
Cole Harbour, Halifax Co., N. S.
30 May 1902; 1 specimen; purchased in market

Acc. No. 3588: (see Appendix 43, Page 50) White Perch, *Morone americana* (Gmelin) Cow Bay Pond, Halifax Co., N. S. 5 August 1910; 4 specimens; purchased in market

Acc. No. 5480: (see Appendix 117, Page 93)
White Perch, *Morone americana* (Gmelin)
Musquodoboit River near Crawford's Falls, Halifax Co., N. S.
23 June 1924; 1 specimen; H. St.Claire Silver

Acc. No. 7428: (see Appendix 132, Page 103) White Perch, *Morone americana* (Gmelin) Lake Mattatall, Cumberland Co., N. S. 21 June 1932; 1 specimen; Dr. C. H. Craig

Acc. No. 7609: (see Appendix 137, Page 109) White Perch, *Morone americana* (Gmelin) Sawlor's Lake, Hubbards, Halifax Co., N. S. 19 June 1933; 1 specimen; Edward S. F. Piers

Acc. No. 7913: (see Appendix 141, Page 112)
White Perch, *Morone americana* (Gmelin)
Sawlor's Lake, Hubbards, Halifax Co., N. S.
26 August 1934; 5 specimens; Edward S. F. Piers

Acc. No. 8437: (see Appendix 145, Page 115) White Perch, *Morone americana* (Gmelin) Sawlor's Lake, Hubbards, Halifax Co., N. S. 3 May 1936; 1 specimen; Edward S. F. Piers

### Striped Bass, Morone saxatilis (Walbaum, 1792)

Acc. No. 3723: (see Appendix 48, Page 53) Striped Bass, *Roccus loneatus*, (Bloch) Canso, Guysborough Co., N. S. July 1911; 1 specimen; an Indian fisherman

Acc. No. 5014: (see Appendix 103, Page 84)
Striped Bass, *Roccus lineatus* (Bloch)
Shubenacadie River, at Black Rock, Col. Co., N. S.
20 May 1921; 1 specimen; Mr. McNutt

### Percidae - Perches

### Yellow Perch, Perca flavescens (Mitchill, 1814)

Acc. No. 3713: (see Appendix 47, Page 52) Yellow Perch, *Perca flavescens* (Mitchill) Grand Lake, Halifax Co., N. S. 10 June 1911; 1 specimen; John Hallett

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Acc. No. 4936: (see Appendix 98, Page 80)

Yellow Perch, Perca fluviatilis, Linn.[= P. flavescens (Mitchill)]

Shubenacadie River at Milford, Hants Co., N. S.

August 1919; 1 specimen; Alexander H. Leim

Acc. No. 5479: (see Appendix 116, Page 93)

Yellow Perch, Perca flavescens (Mitchill)

Musquodoboit River near Crawford's Falls, Halifax Co., N. S.

23 June 1924; 2 specimens; H. St. Claire Silver

### Carangidae - Jacks

#### Atlantic Moonfish, Selene setapinnis (Mitchill, 1815)

Acc. No. 8587: (see Appendix 148, Page 117)

Horse-head; Look-down, Moonfish, Vomer setipinnis, Mitchill

Stonehurst, southwestern side of entrance to Mahone Bay, Lunenburg Co., N. S.

27 August 1936; 1 specimen; Earl Levy

### Coryphaenidae - Dolphins

#### Dolphin, Coryphaena hippurus Linnaeus, 1758

Acc. No. 357: (see Appendix 13, Page 35)

Common Dolphin, Coryphaena hippurus, Linn.

Mouth of Parker's Brook, Bedford Cove, Bedford Basin, Halifax Co., N. S.

7 August 1901;1 specimen; children of Harold S. Silver

#### Labridae - Wrasses

#### Tautog, Tautogo onitis (Linnaeus, 1758)

Acc. No. 950: (see Appendix 16, Page 36)

Tautog; Black-fish, Tautoga onitis (Linn.) (=Hiatula onitis)

Scotts Bay, Bay Of Fundy, Kings Co., N. S.

12 June 1902; 1 specimen; T. Vardy Hill

Acc. No. 1845: (see Appendix 21, Page 38)

Tautog, Tautoga onitis, (Linn.) (=Hiatula onitis)

Petpeswick Inlet, Halifax Co., N. S.

21 May 1903; 1 specimen; purchased in market

### **Ammodytidae - Sand Lances**

### American Sand Lance, Ammodytes americanus DeKay, 1842

Acc. No. 6690: (see Appendix 127, Page 99)
Sand Lance; Sand Launce; Sand Eel; Lant, Ammodytes americanus, DeKay J. & E. p.833
near Mauger's Lighthouse Beach, McNab's Island, Halifax Harbour, Halifax Co., N. S.
13 July 1930; 1 specimen; Mrs. E. Harrigan

#### Scombridae - Mackerels

### Atlantic Bonito, Sarda sarda (Bloch, 1793)

Acc. No. 1066: (see Appendix 18, Page 37)
Bonito, Sarda sarda, Cuvier
Upper Prospect, Halifax Co., N. S.
17 October 1902; 1 specimen; Joseph Doherty

#### Albacore, Thunnus alalunga (Bonnaterre, 1788)

Acc. No. 5146: (see Appendix 107, Page 86)
Long-finned Albacore, *Germo alalunga* (Gmelin)
off Devil's Island, Halifax Co., N. S.
8 September 1922; 1 specimen; examined at fish market [not in collection]

### Bluefin Tuna, Thunnus thynnus (Linnaeus, 1758)

Acc. No. 4633: (see Appendix 81, Page 73)

Tunny; Horse Mackerel; Great Albacore, *Thunnus thynnus* (Linn.) off Hubbards, St. Margaret's Bay, Halifax Co., N. S.

July 1918; 1 specimen (vertebrae); Lawson Harnish

Acc. No. 7858: (see Appendix 188, Page 130)
Albacore, *Thunnus secundodorsalus*, Storer
off Hubbards, St. Margaret's Bay, Halifax Co., N. S.
About middle of August 1934; 2 specimens (photographs); Geo. Gannin

Acc. No. 7945: (see Appendix 189, Page 131)
Great Albacore or Tuna, *Thunnus thynnus*, Linn. (*T. secundodorsalis*, Storer)
Hubbards Cove, west side St. Margaret's Bay, Lunenburg Co., N. S.
16 September 1934; 12 photographs; Edward S. F. Piers

### Xiphiidae - Swordfish

#### Swordfish, Xiphias gladius Linnaeus, 1758

Acc. No. 158 & 159:

(see Appendix 5, Page 32)

Sword-fish, Xiphias gladius, L.

Sable Island, N. S.

About 1890; 1 specimen (sword); purchased both for 15 cents

Acc. No. 1090:

(see Appendix 19, Page 37)

Swordfish, Xiphias gladius, L.

Cole Harbour, Halifax Co., N. S.

5 November 1902; 1 specimen; Harry Piers

Acc. No. 3549:

(see Appendix 35, Page 47)

Common Sword-fish, Xiphias gladius, Linn.

Lockeport, Shelburne Co., N. S.

29 August 1909; 1 specimen (sword); Thos. M. Fraser

Acc. No. 4273:

(see Appendix 65, Page 63)

Common Swordfish, Xiphias gladius Linn.

off Hubbards, St. Margaret's Bay, Halifax Co., N. S.

5 August 1915; 2 specimens (swords); Freeman & Gilbert Harnish

Acc. No. 4712:

(see Appendix 87, Page 75)

Common Swordfish, Xiphias gladius, Linn.

off Shad Bay, Halifax Co., N. S.

summer 1915; 1 specimen (sword); D. Coolin

### **Pleuronectidae - Righteye Flounders**

#### Winter Flounder, Pleuronectes americanus Walbaum, 1792

Acc. No. 276:

(see Appendix 11, Page 34)

Flatfish, Pseudopleuronectes americana (Wal.), or Liopsetta glacialis (Pal.)

near Cow Bay, Halifax Co., N. S.

29 May 1901; 1 specimen; purchased in market

Acc. No. 277:

(see Appendix 12, Page 35)

Flatfish, Pseudopleuronectes americana

near Cow Bay, Halifax Co., N. S.

29 May 1901; 1 specimen; purchased in market

Acc. No. 3545 & 3546:

(see Appendix 32 & 33, Page 45)

Common Flatfish; "Flatfish" (local), Pseudopleuronectes americanus (Walbaum)

Eastern Passage, Halifax Co., N. S.

29 April 1910; 2 specimens; purchased in market

### Yellowtail Flounder, Pleuronectes ferruginea (Storer, 1839)

Acc. No. 5176: (see Appendix 110, Page 88)
Rusty Dab; marketed locally under the name "Sole", *Limanda ferrugineus* (Storer) off Halifax Harbour, Halifax Co., N. S.
8 November 1922; 2 specimens; purchased in fish market

#### Smooth Flounder, Pleuronectes putnami (Gill, 1864)

Acc. No. 4827: (see Appendix 89, Page 76)
Eel-back Flounder, *Liopsetta putnami* (Gill)
near Halifax, Halifax Co., N. S.
about 4 January 1920; 1 specimen; purchased in fish market among Smelts

### **Balistidae - Leatherjackets**

#### Gray Triggerfish, Balistes capriscus Gmelin, 1789

Acc. No. 3601: (see Appendix 44, Page 51)
Leather-jacket; Trigger-fish, *Balistes carolinensis*, Gmelin (= *B. capriscus*, Gmelin)
Halifax Harbour, Halifax Co., N. S.
25 August 1910; 1 specimen; Thomas Henneberry

Acc. No. 4109: (see Appendix 56, Page 56)
Leather-jacket; Trigger-fish, Balistes carolinensis, Gmelin
Admiral Rock, Bedford Basin, Halifax Co., N. S.
20 August 1912; 1 specimen; Alexander Griswold

Acc. No. 8313: (see Appendix 144, Page 115)
Trigger-fish; Leather-jacket, *Balistes carolinensis*, Gmelin Lawlor's Island, Eastern Passage, Halifax Co., N. S. 24 October 1935; 1 specimen; Samuel Dowinton

### Planehead Filefish, Monacanthus hispidus (Linnaeus, 1766)

Acc. No. 5155: (see Appendix 109, Page 87)
Fool Fish; File Fish, *Monacanthus hispidus* (linnaeus)
near Bald Rock, about 1 mile south of Prospect, Halifax Co., N. S.
20 September 1922; 1 specimen; John and William Hardeman

### V. APPENDICES

### **Fishes Accessioned by Harry Piers**

The following Appendices (Appendices 1 through 148) represent all of the fish specimens recorded verbatim in chronological order as they occur in the accession books of Harry Piers: Appendix 1 is Museum No. 31 (Sucker, Porters Lake, Halifax Co., 13 April 1900) being the first fish accessioned and Appendix 148 is Museum No. 8587 (Moonfish, Stonehurst, Lunenburg Co., 27 August 1936) being the last. Additional appendices (149 to 191) represent fish-related items. For example, Appendix 162 provides details of Museum No. 556, fossil fish remains from Horton Bluff, Kings Co. Collected 13 August 1901.

Piers frequently abbreviated words, and in some cases shortened them to a single letter. He also omitted words. For example, in his descriptions instead of writing, dorsal fin rays = 12, he would write: "D. 12" or "dorsal, 12". In such cases, to make it easier for the non-ichthyologist, I have inserted in brackets my interpretation of the abbreviation or letter. Piers's punctuation varied over the years. For example in 1900, under the heading **Scientific Name**., he did not place a period following the name given. He did place a period after the name given in other years. Each appendix is a direct quote from Mr. Piers's accession books as I have interpreted them. It is interesting to note Piers used "Accession No." and "Museum No." interchangeably. In some accessions Piers included a sketch and these were photographed and assigned a figure number and plate number. All rough sketches, draft notes and correspondence relating to an accession have also been photographed and assigned a figure number and plate number.

### Appendix I: Accession Book No. I; Page 2; Museum No. 31

Museum No. 31

Scientific Name. Catostomus teres (=C. commersonii)

Common Name. Sucker Phylum, &c. [none given]

Locality and when collected. Porter's Lake, Hx. [Halifax] Co., N.S.: Ap. [April] 13, 1900

Collector (c) and Donor (d). Purchased in market

Received. Ap. 14, 1900

No. of specimens. 1

Remarks. No. 31.- Lat. [Lateral] Line, 66; scales from lat. line to front of dorsal, 11; scales from lat. line to vent, 9. Dorsal [fin], 12 rays (or 13 if 1st short semi-ray is counted). Head 4 1/4 in length; depth 4 1/4. Ventral [fin], 10 rays. Length 12 3/4 ins. Sides faint rosy; head bluish black with yellowish on opercle.

### Appendix 2: Accession Book No. I; Page 2; Museum No. 41

Museum No. 41

Scientific Name. Salvelinus namaycush

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Pockwock Lake, Hammond's Plains, Hx. [Halifax] Co., N.S. June 7, 1901

Collector (c) and Donor (d). Tremaine Thompson (c.d.)

Received. June 8, 1901

No. of Specimens. 1

Remarks. Sketch & description made

### Appendix 3: Accession Book No. I; Page 4; Museum No. 67

Museum No. 67

Scientific Name. Acipenser sturio var. [variety] oxyrhynchus

Common Name. Common (American) Sturgeon

Phylum, &c. [none given]

Locality and when collected. Shubenacadie River, about 1 ½ miles from Grand Lake. About last of August, about 1896

Collector (c) and Donor (d). Speared by Alex. Horne, Enfield, N.S. & loaned by him.

Received. Sept. 15, 1900

No. of Specimens. 1

Remarks. Weight when taken 163 lbs. Total length as preserved 7 ft. 5 in. Length of last dorsal plate 3 in. Length of 2nd. last dorsal plate 5 in. No. of dorsal plates 11. No. of lateral plates 24 or 25 on right side, 26 or 27 on left side. No. of ventral plates; left side 9, right side 10; followed by single

row of about 4 (?) [sic] plates between ventrals & anal. Preserved, Horne says, in salt, turpentine, acids (?) [sic] etc. All of interior removed, varnished outside.

### Appendix 4: Accession Book No. I; Page 6. Museum No. 94

Museum No. 94

Scientific Name. Osmerus mordax (Mitch.) [Mitchill]

Common Name. Smelt Phylum, &c. [none given]

Locality and when collected. Near Halifax, N.S. Nov. 3, 1900

Collector (c) and Donor (d). Faders fish market

Received. Nov. 3, 1900

No. of Specimens. 1

Remarks. Pectoral [fin ] 12 [rays]; D. [dorsal fin ] 11 [rays]; A. [anal fin] 16 [rays]; lat. [lateral] line about 66 [scales].

### Appendix 5: Accession Book No. I; Page II. Museum No. 158 and 159

Museum No. 158 and 159

Scientific Name. Sword of Xiphias gladius, L. [Linnaeus]

Common Name. Sword-fish Phylum, &c. [none given]

Locality and when collected. Sword found on western track of Sable Island, N.S.: about 1890

Collector (c) and Donor (d). Purchased [ both] for .15 cents

Received. Mar. 20, 1901

No. of Specimens. 2 [ swords]

Remarks. Imperfect

### Appendix 6: Accession Book No. 1; Page 14. Museum No. 224

Museum No. 224

Scientific Name. Morone americana

Common Name. White perch

Phylum, &c. [none given]

Locality and when collected. Cole Harbour (fresh water), Hx. Co., May 2/01

Collector (c) and Donor (d). Chas. [Charles] Morash (c.d.)

Received. May 4, 1901

No. of Specimens. 1

Remarks. [none given]

### Appendix 7: Accession Book No. I; Page 15. Museum No. 226

Museum No. 226

Scientific Name. Salmo salar sebago (Girard)

Common Name. Land-locked Salmon "Grayling" (local)

Phylum, &c. [none given]

Locality and when collected. Grand Lake, Hx. Co.; May 9/01

Collector (c) and Donor (d). Frank Wiltshire (c.d.) of Bedford

Received. May 11, 1901

No. of Specimens. 1

Remarks. Drawing filed. Measurements:- Head in length (to end of last vertebrae) 4 1/4 = 2.85in. Depth in ditto [length] 4 3/4 = 2.55in. Length, snout to end of caudal, 14.50in. Length, snout to end of vertebrae, 12.10in. Length, snout to end of scales, 12.60in. Weight, 12oz.

Last week in April best time to fish for this species (Bradley)

Note.- The extreme weight of this variety (actually weighed by Mr. Wiltshire, who has caught very many) was 3 ½ lbs. The average weight he says is about 1 ½ lbs. He has taken it at head of tide waters in Shubenacadie River, 3 miles from Grand Lake. Also, he says, found in all the Beaver Bank Lakes it can get into, and in lakes this side of Waverley. Not found elsewhere in Nova Scotia. He thinks it may possibly be in some way destructive to Trout, as the latter are very rare in Grand Lake.

### Appendix 8: Accession Book No. 1; Page 15. Museum No. 241

Museum No. 241

Scientific Name. Enchelyopus cimbrius (= Rhinonemus cimbrius)

Common Name. Four-bearded Rockling

Phylum, &c. [none given]

Locality and when collected. North West Arm, Hx.; May 17/01.

Collector (c) and Donor (d). A. Wilson & Son, Hx. (c.d.)

Received. May 17, 1901

No. of Specimens. 1

Remarks. Rays of long dorsal 50; 1st. dorsal band of fringe preceded by one ray. Wilson says "our fishermen say they never saw one like it in our waters".

### Appendix 9: Accession Book No. 1; Page 16. Museum No. 243

Museum No. 243

Scientific Name. Siphostoma fuscum (Storer).

Common Name. Common Pipe-fish

Phylum, &c. [none given]

Locality and when collected. Cow Bay, Hx. Co.; May 17/01

Collector (c) and Donor (d). Purchased in market (alive)

Received. May 18, 1901

No. of Specimens. 2

Remarks. In lobster trap. Dorsal of one counted had 42 rays. May warrant colour examination. See notes under 7214.

### Appendix IO: Accession Book No. I; Page I7. Museum No. 272

Museum No. 272

Scientific Name. Morone americana (Gmelin)

Common Name. White Perch

Phylum, &c. [none given]

Locality and when collected. Near Cow Bay (Cole Har.?) [Cole Harbour], Hx. Co.; May 23/01

Collector (c) and Donor (d). Purchased in market (.10 [cents])

Received. May 25, 1901

No. of Specimens. 4

Remarks. Fin rays: D [Dorsal] IX- I, 12; A [Anal] III,9

### Appendix II: Accession Book No. 1; Page 17. Museum No. 276

Museum No. 276

Scientific Name. Pseudopleuronectes americana (Wal.) [Walbaum], or Liopsetta glacialis (Pall.) [Pallas]

Common Name. (Flatfish)

Phylum, &c. [none given]

Locality and when collected. On sandy bottom, near Cow Bay, Hx. Co.; May 29/01.

Collector (c) and Donor (d). Purchased in market (.10 [cents])

Received. June 1, 1901

No. of Specimens. 1

Remarks. Dorsal [fin]61[rays]; Anal 46. Head 4 times in length. Depth 2 1/3 times in length. Length 11 inches.

## Appendix I2: Accession Book No. I; Page I7. Museum No. 277

Museum No. 277

Scientific Name. Pseudopleuronectes americana (Wal.), or Liopsetta glacialis (Pal.)

Common Name. (Flatfish)

Phylum, &c. [none given]

Locality and when collected. On sandy bottom, near Cow Bay, Hx. Co.; May 29/01.

Collector (c) and Donor (d). Purchased in market (.10 [cents])

Received. June 1, 1901

No. of Specimens. 1

Remarks. Dorsal[fin] 62[rays]; Anal 49. Head 4 times in length. Depth 2 1/3 times in length. Length 11.75 inches.

## Appendix 13: Accession Book No. 1; Page 23. Museum No. 357

Museum No. 357

Scientific Name. Coryphaena hippurus Linn. [Linnaeus] (young)

Common Name. Common Dolphin

Phylum, &c. [none given]

Locality and when collected. Mouth of Parker's Brook, Bedford Cove, Bedford Basin, Hx.[Halifax] Co.; Aug. 7, 1901

Collector (c) and Donor (d). Captured by hand (!) by children of Harold S. Silver. Harold S. Silver (d.)

Received. Aug. 8, 1901

No. of Specimens. 1

**Remarks.** Total length 19.20 in. Dorsal 61 rays, Anal 30. Possibly injured by Fish Hawk as dorsal fin was torn. A parasite (*Penella*) penetrated side. This is the <u>first record</u> of this species being taken in Nova Scotia.

## Appendix 14: Accession Book No. 1; Page 56. Museum No. 926

Museum No. 926

Scientific Name. Morone americana (Gmelin)

Common Name. White Perch

Phylum, &c. [none given]

Locality and when collected. Cole Harbour, Hx. Co., N.S. (In fresh water); May 30, 1902

Collector (c) and Donor (d). Purchased in market (.10 [cents])

**Received.** May 31, 1902

No. of Specimens. 1

Remarks. Large specimen, 12.50 in. long. Under side of lower jaw, deep Lavender approaching Lilac colour.

## Appendix I5: Accession Book No. I; Page 56. Museum No. 935

Museum No. 935

Scientific Name. Cristovomer namacush (Walb.)? (Compare with No. 1840)

Common Name. Great Lake Trout

Phylum, &c.: [none given]

Locality and when collected. Nine-mile [Sherbrooke ] Lake, northwestern part of Lunenburg Co., N.S.; June 4, 1902

Collector (c) and Donor (d). Arthur E. Harrington (d.)

Received. June 6, 1902

No. of Specimens. 1

Remarks. Said never to rise to a fly; caught by deep fishing with bait. Sometimes go into Wentzell Lake. Locally, I think, called "Silver Grey Trout".

Note.- Head 4 1/4 times in total length; depth 5 in length. Weight 3 3/4 lbs. Branchiostegals 13 (or possibly 12). Lateral line 185 (1st. count) or 187 (2nd. count);38 scales from lateral line to back (2 counts); 46 or 47 scales from lateral line to belly (2 counts). Gill rakers 12 or 11 below, 6 or 7 above; longest gill raker .25 in. First dorsal fin of 14 rays (1st. ray about .50 in. long; 2nd. ray 1.00 long, 3rd. ray 2.20 in. long, 4th. ray 2.75 in. long or to greatest height of fin); before the 1st. ray as above referred to, may be an excessively rudimentary ray, possibly .20 in. long. Anal fin of 11 rays (the 3rd. or 4th. going to front of greatest height of fin); before the first ray may be an excessively rudimentary ray.

<u>Colour</u>:- Dorsal mottled. Very faint indications of what may have been spots on sides, 3 and 4 scales in size. Pectorals & ventrals reddish on outer posterior margin. Mr. Harrington says that the fish is reported to have red spots on the sides when first taken from the water, but these soon die out.

Large teeth on front of tongue; small teeth on back of tongue.

Reference: Figure 10, Plate 11. Line drawing of upper part of mouth of Great Lake Trout from Nine-mile [Sherbrooke] Lake, Lun. Co., N.S. by Harry Piers (Museum No. 935, Negative Number 12,439)

## Appendix 16: Accession Book No. 1; Page 57. Museum No. 950

Museum No. 950

Scientific Name. Tautoga onitis (Linn.) (= Hiatula onitis). J. & E., p. 1578; fig. 596

Common Name. Tautog; Black-fish

Phylum, &c.: [none given]

Locality and when collected. Scott's Bay, Bay of Fundy, Kings Co., Nova Scotia; June 12, 1902.

Collector (c) and Donor (d). T. Vardy Hill (c.d.)

Received. June 14, 1902

No. of Specimens. 1

Remarks. New to Nova Scotia! Length 19.50 in. D. [dorsal fin] XVII,10; A. [anal fin] III,8; V. [ventral fin] I,5. No teeth on vomer; no slit behind 4th gill; gill membrane free from the isthmus.

### Appendix 17: Accession Book No. I; Page 60. Museum No. 984

Museum No. 984

Scientific Name. Squalus acanthias, Linn.

Common Name. Dogfish; young with remains of yolk-sac

Phylum, &c.: [none given]

Locality and when collected. North West Arm, Hx.; Aug. 7,1902

Collector (c) and Donor (d). Purchased (.25)

Received. Aug. 9, 1902 No. of Specimens. 4

Remarks. Cut out of the mother fish (which was about 3 ½ ft. long). 5 young originally, but one lost.

### Appendix 18: Accession Book No. 1; Page 65. Museum No. 1066

Museum No. 1066

Scientific Name. Sarda sarda, Cuvier

Common Name. Bonito Phylum, &c.: [none given]

Locality and when collected. In net Upper Prospect, Hx. Co; Oct. 17, 1902

Collector (c) and Donor (d). Joseph Doherty (c.d.). Prospect

Received. Oct. 18, 1902 No. of Specimens. 1

Remarks. Length 22 in. depth 4.75 in.; head 5 ½ in.; 8 stripes on side, extending below lateral line. Gill Rakers about 17. 1st dorsal 21 rays, 2nd dorsal, 13 or 14, finlets 8. Vomer toothless; palatines with a single row of rather strong, conical teeth.

## Appendix 19: Accession Book No. 1; Page 67. Museum No. 1090

Museum No. 1090

Scientific Name. Xiphias gladius, L.

Common Name. Swordfish

Phylum, &c. [none given]

Locality and when collected. Cole Harbour, Hx. Co.; Nov. 5,1902

Collector (c) and Donor (d). H. Piers (c.)

Received. Nov. 8, 1902

No. of Specimens. 1: Drawing with measurements, of Swordfish

Remarks. Got into channel and tried to go out wrong way. Was brought up to Beazely & Henrion's fish market, Halifax, where I examined it.

Reference:

Figure 11, Plate 11. A sketch including measurements of a Swordfish from Cole Harbour by Harry

Piers (Museum No. 1090, Neg. No. 23,506).

## Appendix 20: Accession Book No. I; Page II2. Museum No. 1840

Museum No. 1840

Scientific Name. Cristivomer namaycush (Walb.)

Common Name. Great Lake Trout

Phylum, &c.: [none given]

Locality and when collected. Nine Mile [Sherbrooke] Lake (about 10 miles westward of New Ross), back part of Lunenburg Co., N.S.; May 12, 1903

Collector (c) and Donor (d). Col. Charles J. Macdonald (c.d.) post-office inspector, Hx.

Received. May 15, 1903

No. of Specimens. 1

Remarks. Right side 1st gill arch given to Hx. Fish. Exper. [Experimental] Station, 2 June 1933. Compare with no. 41, 935 & 3244

### Appendix 21: Accession Book No. I; Page II2. Museum No. 1845

Museum No. 1845

Scientific Name. Tautoga onitis (Linn.) (= Hiatula onitis)

Common Name. Tautog
Phylum, &c.: [none given]

Locality and when collected. Petpiswick [Petpeswick], Hx. Co., N.S.; May 21, 1903. In salt water

Collector (c) and Donor (d). Purchased in market (.35 [cents])

Received. May 23, 1903

No. of Specimens. 1

Remarks. Dor.[dorsalfin] XVI, 10; Anal [fin] III,7; Ventral [fin]I, 5; Pectoral [fin] 16. Length to base of caudal 13 1/8 ins., to end of caudal 15 ins. Head in length 3 1/4, depth in length 3, eye 6 in head. Scales from lat. [lateral] line to dorsal 16, scales in dorsal line 65, scales from lat. line to vent 32. No teeth on vomer, no slit behind 4th gill. Iris yellow & brown. General colour rather dark.

N. B. This is only the second time this species has been noted in Nova Scotia (see no. 950). Another Specimen, about 19 inches long was also in the market today from the same place & taken same time. The women who had them called them "Black Bass".

### Appendix 22: Accession Book No. 1; Page 133. Museum No. 2169

Museum No. 2169

Scientific Name. Siphostoma fuscum (Storer) Female

Common Name. Common Pipe Fish

Phylum, &c. [none given]

Locality and when collected. Whycocomagh Bay, Inver. Co., N.S.; July 1903

Collector (c) and Donor (d). Richard H. Brown (c. d.) Halifax

Received. Oct. 8, 1903

No. of Specimens. 1

Remarks. Total length (tip of snout to end of caudal fin) 6.95 ins.; length (tip of snout to caudal fin) 6.71 ins.; length of head 1.07 in.; head in length (snout to base of caudal) 6 1/3 times; length of snout .52 in. (= about 2 in head length); length of tail (vent to base of caudal) 3.52 ins. (Much longer than trunk)= 1 6/7 in length; greatest depth of body (including carinations) .45in. Length of dorsal fin 1.04in.; heigth of dorsal .27; length of caudal .24in.

Fin rays: Dorsal 39; Pectoral 13?; Anal 3 (?) (Punctuated with black); banded.

Rings: 19 body rings (counting vent as in last body ring), +35 caudal rings. Dorsal fin on 9 3/4 rings, normaly 4 ½ body rings +5 1/3 caudal rings (counting vent as last body ring) (This is about normal, the description saying 4 - 5 + 5 - 4).

Compare with No. 3369, 3558, 3559, 4013

### Appendix 23: Accession Book No.1: Page 183. Museum No. 2696

Museum No. 2696

Scientific Name. Cyclopterus lumpus, L. Common Name. Lump-sucker; Lump-fish

Phylum, &c.: [none given]

Locality and when collected. City wharf, Halifax Harbour, Hx., N.S.; 26 Aug./04

Collector (c) and Donor (d). Edward McLeod (c.d.)

Received. Aug.26, 1904 No. of Specimens. 1

Remarks. Colour blue-green when first from water

## Appendix 24: Accession Book No.1: Page 206. Museum No. 3034

Museum No. 3034

Scientific Name. Tarpon atlanticus (Cuv. & Valen.). = Megalops atlanticus of Jordon's "Manuel of Vertebrates".

Common Name. Tarpon or Tarpum

Phylum, &c.: [none given]

Locality and when collected. Taken with a spear in eel-grass (shallow water) in Harrigan Cove, Halifax Co., Nova Scotia; on 6 September 1906

Collector (c) and Donor (d). Edward McDonald (c.) Harrigan Cove, N.S. Thomas McDonald (d.) Harrigan Cove, N.S.

Received. 11 Sep. 1906

No. of Specimens. 1

Remarks. Note.- This is the first record of this species (the Tarpum) having been taken in this province or so far north. As above stated it was taken with a spear in eel-grass (shallow water) in Harrigan Cove, Hx. Co., N.S. on Thursday, 6th. September 1906, by Edward McDonald of that place. It showed no fight when speared. Brought to Museum on 11 September 1906 by Thomas McDonald of Harrigan Cove. The fish, before being received at the Museum, had been roughly skinned at Harrigan Cove, and the head and tail were separated from the rest of the skin. When the parts were placed together they furnished the following measurements, etc.

(Approximate, of course, as regards length and breadth):- Total length, snout to tip of caudal, 5ft. 4in. = 64 inches. Length, snout to end of vertebrae, 4ft. 4in. = 52 inches. Head, 13.25 inches long. Head into length (snout to end of vertebrae), nearly 4 times. Depth of body about 11.50 inches. Depth into length (snout to end of vertebrae) about 4 6/11 times. (This is less depth than normal & may be owing to constriction of skin.)

Dorsal fin, 12 rays (plus a very short rudimentary 1st. ray). Filament of dorsal (posterior ray), 13.25 inches long. Pectoral fin, 14 rays. Ventral [fin], 9 rays. Anal [fin], 20 rays. Lateral line of 43 scales. Largest scale 2.90 inches in diameter. Colour bright silvery, the back darker. (Sent to T. J. Egan, 14 Sept., to be mounted as well as can be)

References:

Figure 12 A, Plate 12: Figure 12 B, Plate 13. Two page letter to Harry Piers from Andrew Halkett dated 17 January 1916 concerning Tarpon (Museum No. 3034, Negative Nos. 23,488 and 23,489).

Figure 13 A, Plate 14: Figure 13 B, Plate 15. Two letters to Harry Piers from Edward E. Prince dated 8 February and 2 May 1916 concerning Tarpon (Museum No. 3034, Negative Nos. 24,058 and 23,456).

## Appendix 25: Accession Book No. 1: Page 224. Museum No. 3244

Museum No. 3244

Scientific Name. Cristivomer namaycush (Walbaum).

Common Name. Great Lake Trout.

Phylum, &c.: [none given]

Locality and when collected. Dollar Lake, Halifax Co., N.S.; 22 June 1908

Collector (c) and Donor (d). -? - [none given]

Received. 24 June 1908

No. of Specimens. 2

Remarks. Dollar Lake is a little south of Wyse's Corner, eastern section of Hx. Co.

## Appendix 26: Accession Book No. I: Page 226. Museum No. 3263

Museum No. 3263

Scientific Name. Abramis (Notemigonus) crysoleucas (Mitchill)

Common Name. Golden Shiner.

Phylum, &c.: [none given]

Locality and when collected. 9 miles above tide-water, on river, Antigonish, Antig. Co., N.S.; July 1908

Collector (c) and Donor (d). Dr. W. H. Macdonald (c.d.) Antigonish, N.S.

Received. 5 July 1908 No. of Specimens. 1

Remarks. Belongs to Cyprinidae. Total length (snout to end of caudal) 5.40 in. Depth in length 3 1/4;

head in length 4 1/3; eye in head 3 1/2.

Dorsal fin 8 ½ rays; Anal 12; Ventrals 9.

Scales: 11 in vertical series between front of dorsal & lateral line - 51 in lateral line - 4 between

lateral line & vent (not counting lat. line scales itself). Very brilliant

## Appendix 27: Accession Book No. 1: Page 235. Museum No. 3369

Museum No. 3369

Scientific Name. Siphostoma fuscum (Storer)

Common Name. Common Pipe-fish

Phylum, &c. [none given]

Locality and when collected. Found in boat used by soldiers for fishing, Melville Island Cove, North West Arm, Halifax Co., N.S.; about 11 May, 1909

Collector (c) and Donor (d). Arnold Smith (c.d.) (son of S. R. Smith)

Received. 1 June 1909

No. of Specimens. 1; female, it has no egg-pouch

Remarks. Caught in net in Melville Island Cove. Hosterman property, North West Arm, Halifax.

Doubtless a male? As body is not as deep as in female (Compare No. 2169)

Description:- Total length, tip of snout to end of caudal fin, 7.32 inches; length, tip of snout to base of caudal, 6.96 ins., length of caudal fin, .36 in.; length of head (snout to posterior margin of opercle) .90 in.; head in length (snout to base of caudal) 7 8/9 times; length of snout, about .45 in. (= about 2 in head length); length of tail (vent to base of caudal), 4 ins. (much longer than trunk) = 1 7/8 in total length; greatest depth of body (including carinations), .15 in. Head 7 8/9 in length to base of caudal, 8 1/4 in total length to end of caudal. Snout short (about .45 in.), about 2 times in head; median line of snout, above and below, well keeled, this ridge on each side of median ridge rather conspicuous. Occiput, medial plates and opercle (?) Carinate; belly somewhat convex, severely keeled. Dorsal [fin] 1.20 ins. long, (longer than head); dorsal about .30 in. high (about 4 times in it's length). Dorsal covering 11 1/3 rings, namely 5 body rings + [plus] 6 1/3 caudal rings (counting the vent one as last body ring).

Fin rays: Dorsal 40; Pectoral 14; Anal 5; Caudal 10

Rings: 19 body rings (counting the vent in last body ring), + 36 caudal rings

Colour: greenish-brown above and on sides, showing darker at the junction of rings, thus having a banded appearance. Below whitish; slightly darker on anterior part of under side of snout and on posterior part of under side of tail, lower part of opercle silvery.

Dorsal with about 11 obscure dark bands on lower part, breaking up into mottling towards upper part of the fin. Caudal dark.

N.B.- The only apparent variation from the typical S. fuscum is in the number of rings which the dorsal fin covers. Jordan & Evermann, Fishes of N. A., p. 770, say the dorsal covers 4 to 5 + 5 to 4 rings. This makes a total of 9 rings. In the present specimen the dorsal covers 11 1/3 rings, namely 5 body rings + 6 1/3 caudal rings (counting the vent, naturally, as the last body ring). Taking the number of body rings covered as normal, then there are 6 1/3 caudal rings covered, instead of 4 or possibly 5 as in the typical species. Weather this is enough to make a new species of this (if constant) or weather it is to be considered as merely variation is a question. Compare with no. 2169, 3558, 3559, 4013, 4538.

## Appendix 28: Accession Book No. I: Page 236. Museum No. 3370

Museum No. 3370

Scientific Name. Salvelinus fontinalis (Mitchill)

Common Name. Brook Trout Phylum, &c.: [none given]

Locality and when collected. Caught with minnow, at Little Salmon River, in pool in river, between the shore road & the harbour, head of Cole Harbour, Hx. Co., N.S.; 30 May 1909

Collector (c) and Donor (d). Simon Meaden (c.d.) 19 Agricola St., Halifax

Received. 2 June 1909 No. of Specimens. 1; male

Remarks. Note.- The fish rose to artificial fly, but was caught with minnow. The lower part of the pool in which the fish was caught has brackish water in it, but the water was fresh enough to drink where the fish was taken.

Weight when caught (absolutely accurate weight, as I assumed by Mr. Meaden); 6 3/4 pounds. Weight when received at Museum on 2 June (loss easily accounted for by evaporation), 96 ozs. = 6 pounds, exactly.

Total length (snout to tip of Caudal fin)

Length (snout to base of Caudal fin)

Greatest depth (a little in front of Dorsal fin)

Width (thickness) of body

Girth (according to Meaden)

Length of head (3 3/4 times in length from snout to base of Caudal).

23.25 ins.

6.20 ins.

2.85 ins.

15.25 ins.

5.65 ins.

Teeth on head of vomer (not on shaft); no teeth on hyoid bone, but teeth on edge of tongue. Back dark, with distinct darker markings. Sides darkish grey variegated with pale, flesh-coloured spots, some of these with inner spot of pale yellow or pale orange-yellow, and some (26 of them on one side) very deep red inner spots, one of these red spots being above lateral line. Belly yellowish-grey (with perhaps very faint pinkish tinge); median line of belly white. Has no appearance whatever of the silvery-grey colour of the "sea trout". Dorsal fin mottled with dark. Pectoral fins tinged reddish-yellow; Ventrals about half red; Anal mostly bright vivid red. Dorsal with 10 rays + 2 immature rays; Anal with 9 rays + 2 immature ones.

Flesh deep pink.

This fish had no appearance whatever of the sea-run trout ("Sea Trout"), being vividly coloured & with the dark markings and red markings of the normal brook trout. It must be definitely & undoubtedly referred to the ordinary brook trout (not sea-run) as far as colour is concerned, & that is the only way to distinguish between the two forms of this species. John Jennings, a veteran fisherman of trout, also on seeing it emphatically stated it was not a sea-trout.

There is a specimen of trout in the Museum, weight 7 ½ lbs. taken in 1871 by John Y. Payzant in the same Little Salmon River, but some distance higher up. From its pale colour in alcohol I decided it is a "Sea Trout", but this colour may have removed the original colour. Payzant's fish is still largest Salvelinus fontinalis ever recorded from Nova Scotia. If it was a so-called "Sea Trout" then the present specimen would be the largest typical Brook Trout (not sea-run) ever taken in this province.

#### Appendix 29: Accession Book No.I: Page 240. Museum No. 3425

Museum No. 3425

Scientific Name. Merluccius bilinearis (Mitchill)

Common Name. Silver Hake; Whiting

Phylum, &c.: [none given]

Locality and when collected. North West Arm, Hx., N.S.; 14 Sept. 1909

Collector (c) and Donor (d). E. [Edward] S. F. Piers (c.d.) Halifax

Received. 15 Sept. 1909 No. of Specimens. 1

Remarks. Common in N. W. Arm at this time. In for 2 or 3 weeks

Colour = above, brownish with bluish reflections; below, bright silvery.

Head in length (to base of caudal), 3 2/3 times

Depth in length (to base of caudal), 6 1/4 times

Dorsal [fin] rays 13-39 (notched at 18th. ray of the 39); pectoral [fin], 14 [rays]; ventrals [fins], 7

[rays]; anal [fin], 39 [rays](notched at 18th.).

Lateral line; about 115

Length (to base of caudal) 12.25 ins.

## Appendix 30: Accession Book No. I: Page 253. Museum No. 3537

Museum No. 3537

Scientific Name. Fundulus diaphanus (Le Sueur)

Common Name. "Minnow" (local name)

Phylum, &c.: [none given]

Locality and when collected. Cole Harbour, Hx. Co., N.S.; 15 April 1910

Collector (c) and Donor (d). Purchased in market .5 [cents] a dozen

Received. 16 April 1910 No. of Specimens. 13

Remarks. Family Cyprinodontidae

Head in length 4 1/8 to 4 ½ times

Dorsal 13 rays (one had 12, another had 15 rays); Anal 11 rays (the one with 15 rays in dorsal, had 12 rays in anal); Ventral, 6 rays.

Scales from posterior margin of opercle to end of body, 39 to 43

This is the common "minnow" of Nova Scotia; and the only fresh water representative of this family in eastern Canada according to Dr. P. Cox.

## Appendix 31: Accession Book No. 1: Page 254. Museum No. 3540

Museum No. 3540

Scientific Name. Abramis (Notemigonus) chrysolucas (Mitchill)

Common Name. Golden Shiner

Phylum, &c.: [none given]

Locality and when collected. Maynard's Lake, Dartmouth, Hx. Co., N.S.; 19 April 1910

Collector (c) and Donor (d). Lancelot A. Purcell (c.d.) Dartmouth

Received. 20 Apr. 1910 No. of Specimens. 12

Remarks. Family: Cyprinidae. Common in Maynard's Lake

<u>Description</u>:- Dorsal fin one, of soft rays only. Vent behind ventrals. Head without scales. Gill membrane united to isthmus. Mouth toothless. Air-bladder in two lobes; the anterior lobe about 1/3 of total length of air-bladder. Peritoneum <u>silvery white</u>, with very small black dots. Alimentary canal seems to be no longer then twice length of body. Lateral line present. Pharyngeal teeth one rowed (i.e. a single row on each pharyngeal bone), thus (*drawing*) of five teeth each (pharyngeal teeth 5 - 5). Abdomen behind ventrals compressed to an edge.

Head 4 times in length (snout to end of vertebrae) Depth 4 ½ times in length.

Dorsal fin of 2 rays; Anal fin of 13 (thirteen) rays; Ventral fin of 2 rays

Scales: 10 between front of dorsal and lateral line (excluding lateral line); 53 in lateral line; 4 or 5 between lateral line and vent (excluding the one in lateral line)

Length from 4.50 inches (largest) to about 2.50 in.

<u>Colour</u>: Olivaceous above; sides and belly bright silvery, the sides with beautiful purple, blue, and green reflections. A dark longitudinal band on sides (somewhat faint). Head with gold-silvery colours on sides.

## Appendix 32: Accession Book No. I: Page 254. Museum No. 3545

Museum No. 3545

Scientific Name. Pseudopleuronectes americanus (Walbaum).

Common Name. Common Flatfish "Flatfish" (local).

Phylum, &c.: [none given]

Locality and when collected. Eastern Passage, Hx. Harbour, N.S.; 29 April 1910

Collector (c) and Donor (d). Bought in market

Received. 30 April 1910

No. of Specimens. 1

Remarks. Length 10.70 in.

Head in length 3 7/8; depth in length 2 1/6.

Fin-rays = dorsal 65 (longest 35th.); anal 47 (longest 23rd.); ventrals 6; pectorals 10.

Lateral line of 75 scales.

Teeth chiefly on blind side; teeth incisor like; mouth unsymmetrical.

Colour dark rusty-brown, obscurely blotched.

## Appendix 33: Accession Book No. 1: Page 254. Museum No. 3546

Museum No. 3546

Scientific Name. Pseudopleuronectes americanus (Walbaum)

Common Name. Common Flatfish "Flatfish" (local)

Phylum, &c. [none given]

Locality and when collected. Eastern Passage, Hx. Harbour, N.S.; 29 April 1910

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Collector (c) and Donor (d). Bought in market

Received. 20 April 1910

No. of Specimens. 1

Remarks. Length 10.75 in.

Head in length 4 1/4; depth in length 2 1/3.

Fin-rays: dorsal 64 (longest 36th.); Anal 42 (longest 23rd.); ventrals 6; pectorals 10

Lateral line of 78 scales.

Colour dark rusty-brown, with obscure blotches. Dark brown blotches on dorsal & anal fins.

### Appendix 34: Accession Book No. I: Page 255. Museum No. 3547

Museum No. 3547

Scientific Name. Gasterosteus bispinosus bispinosus, Walbaum

Common Name. Common Eastern Stickleback (Locally sometimes called "Thorn-fish")

Phylum, &c. [none given]

Locality and when collected. Brackish water, canal bridge near St. James Church, Dartmouth, Hx. Co., N.S.; 29 & 30 April 1910

Collector (c) and Donor (d). Lancelot A. Purcell (c.) Dartmouth

Received. 2 May 1910

No. of Specimens. 65

**Remarks.** Owing to the more or less fully plated sides of these specimens, I have determined them as the typical marine form G. bispinosus and not the incompletely plated brackish-water & fresh-water form G. bispinosus cuviere (Compare Jordan & Evermann's Fishes of N. A., p.748).

It is not considered good for bait by local anglers.

It was formerly considered identical with the European Stickleback (G. aculeatus), from which it is now separated by the greater length of the dorsal spines in the American species, as shown in these specimens.

Memo. of examination of 3 of above specimens.

	Specimen A	Specimen B	Specimen C
Dorsal Fin	II-I,13	II-I,12	II-I,11
Anal Fin	I,9	I,9	I,9
Pectoral Fin	11	10	11
Head in length	3 5/8 times	3 5/8 times	3 ½ times
Depth in length	4 ½ times	4 ½ times	4 1/8 times

The bony plates on sides are <u>not</u> wanting on posterior half of body; and are continued, although much more obscurely, on keel on sides of tail. In specimen A there are about 28 indent plates on sides, while counting the obscuring ones on the keel, there are about 32. In specimen B there are about 28 indent plates on sides, while counting the obscurer ones on the keel, there are about 32. In specimen C there are about 26 indent plates on sides, while counting the obscurer ones on the keel, there are about 30 in all.

This would evidently make this the typical marine form G. bispinosus bispinosus and not the less fully armed brackish-water & fresh-water form G. bispinosus cuvieri.

Length averages about 2.25 inches

## Appendix 35: Accession Book No. I: Page 255. Museum No. 3549

Museum No. 3549

Scientific Name. Xiphias gladius, Linn.

Common Name. Common Sword-fish

Phylum, &c. [none given]

Locality and when collected. Lockeport, Shelburne Co., N.S.; 29 August 1909

Collector (c) and Donor (d). Thos. M. Fraser (d) Editor of "Echo". Halifax

Received. 3 May 1910

No. of Specimens. 1; "Sword"

Remarks. Length of "sword" 3 ft. 2 1/2 in.

The original fish must have measured about 9 ft. 9 in. from tip of sword to end of caudal; or about 8 ft. 2 in. from tip of sword to base of caudal.

This was the largest swordfish which had ever been taken at Lockeport up to then.

## Appendix 36: Accession Book No. I: Page 255. Museum No. 3553

Museum No. 3553

Scientific Name. Couesius plumbeus (Agassiz)

Common Name. [none given]

Phylum, &c. Fish

Locality and when collected. Penhorn Lake, 1 ½ miles NE of Dartmouth, Hx. Co., N.S.; 4 May 1910

Collector (c) and Donor (d). Lancelot A. Purcell (c.d.) Dartmouth, Hx. Co., N.S.

Received. 6 May 1910

No. of Specimens. 6

Remarks. Identified by Prof. Philip Cox, of Univ. of N. B., Fredericton. Dr. Cox says that several years ago he collected this species in La Have River, N.S. He says the type in the La Have R. is very near the lake forms in New Brunswick, though differing from the Gaspe variety.

Description: Colour: above olivaceous; below & parts of sides silvery; dark stripe (more or less apparent) on side, with a narrow light line just above. Purplish reflections on sides. No blotches on fins.

Peritoneum silvery white. Pseudobranchae present. Lateral line complete. Dorsal fin one, of soft rays only; dorsal inserted immediately behind ventrals. Vent behind ventrals.

Gill membrane united with isthmus. Head without scales. Mouth toothless.

Head 4 5/8 times in length; depth 5 times in length.

Dorsal fin of 8 rays (with an additional anterior rudimentary ray, about 1/3 length of others) Anal fin of 8 rays (so in two specimens examined. With a very rudimentary anterior ray in addition). Ventral fin of 8 rays. Pectoral fin of about 14 or 15 rays.

Scales= 12 or 13 between front of dorsal & lat. [lateral] line (excluding scale of lat. line). 63 in lateral line, 7 between lateral line & vent (excluding scale of lat. line).

Compare Dr. Philip Cox's "Cyprinidae of Eastern Canada" (*Proc. Nat. Hist. Soc. Of Miramichi*, No. 2, 1901, pp. 39-42)

## Appendix 37: Accession Book No. I: Page 256. Museum No. 3558

Museum No. 3558

Scientific Name. Siphostoma fuscum (Storer)? variety.

Common Name. Common Pipefish

Phylum, &c. [none given]

Locality and when collected. Mill Cove (Dartmouth Cove), Dartmouth, Hx. Co., N.S.; 16 May 1910

Collector (c) and Donor (d). Lancelot A. Purcell (d) Dartmouth

Received. 18 May 1910

No. of Specimens. 1; female

Remarks. Description.- Total length, 8.35 ins. Length (to base of caudal), 8.05 inches.

19 body rings + 36 caudal rings.

Dorsal fin 43 rays, on 5 + 6 1/3 rings. Dorsal with about 17 vertical blackish bands.

<u>Differs from normal</u> in having 3 more rays in dorsal than maximum normal number (40); and in dorsal being on 11 1/3 rings instead of on only 9 rings. It must be either a variety or else a new species. See also next specimen, & compare with no. 3369, 2169, 4013, 243

#### Appendix 38: Accession Book No. I: Page 256. Museum No. 3559

Museum No. 3559

Scientific Name. Siphostoma fuscum (Storer)? variety

Common Name. Common Pipefish

Phylum, &c. [none given]

Locality and when collected. Mill Cove (Dartmouth Cove) Dartmouth, Hx. Co., N.S.; 16 May 1910

Collector (c) and Donor (d). Lancelot A. Purcell (d) Dartmouth

Received. 18 May 1910

No. of Specimens. 1

**Remarks.** Description. Total length, 5.87 ins.Length (to base of caudal), 5.60 inches. 19 body rings + 38 caudal rings.

Dorsal fin 43 rays, on 5 + 7 rings. Dorsal unmarked

<u>Differs from normal</u> in having 3 more rays in dorsal than maximum normal number (40); and in dorsal being on 12 rings instead of only 9 rings. It must be either a variety or else a new species. See also proceeding specimen, & compare with no. 3369.

## Appendix 39: Accession Book No. I: Page 256. Museum No. 3560

Museum No. 3560

Scientific Name. Ameiurus nebulosus (Le Sueur)

Common Name. Horned Pout; "Catfish" (local)

Phylum, &c. [none given]

Locality and when collected. Red Bridge Pond, east side of Second Dartmouth Lake, 2 1/4miles NNE of Dartmouth, Hx. Co., N.S.; 20 May 1910

Collector (c) and Donor (d). Lancelot A. Purcell (c) Dartmouth

Received. 21 May 1910

No. of Specimens. 1

Remarks. Not uncommon in this pond.

<u>Colour.</u>- Blackish (mottled) above, <u>greyish</u> on sides, belly white; lower jaw yellowish, under part of head pale-pinkish white, barbels black; a yellowish-white blotch covered by pectorals; iris yellow.

Description.- Dorsal before ventrals; adipose fin present; posterior margin of adipose fin free. 8 barbels; posterior nostril with barbel.

Humeral process somewhat roughened, .70 in. long, more than 3/4 length of pectoral spine. Lower jaw not projecting beyond upper jaw (lower jaw just to end of upper jaw).

Length (to base of caudal), 6.85 in. (total length 8.40 ins.) Head 1.92 in. Head in length, 3 ½ times. Width of head 1.50 in. Width of head in length, 4 1/4 times. Depth of body in length, 4 1/5 times. Pectoral spines .87 inch. Pectoral spines in length of head, 2 1/5 times. Length to base of Anal, 1.55 in. Base of Anal 4 ½ times in length of fish. Length of longest anal ray, 1.10 in. Greatest height of Anal, measured at right angle to body, .95 in.

Fins.- Dorsal I,5 rays. Anal 20 rays (1st. one short) Caudal fin very slightly emarginate (see sketch in margin).

Reference:

Figure 14, Plate 16. Line drawing of caudal fin of Brown Bullhead by Harry Piers (Museum No. 3560, Negative No. 12,440).

### Appendix 40: Accession Book No. 1: Page 257. Museum No. 3561

Museum No. 3561

Scientific Name. Pygosteus pungitius (Linn.) variety (?)

Common Name. Nine-spined Stickleback

Phylum, &c. [none given]

Locality and when collected. In brackish water in pool at outlet of Little Salmon River, head of Cole Harbour, Hx. Co., N.S.; 19 May 1910

Collector (c) and Donor (d). Lancelot A. Purcell (d) Dartmouth

Received. 21 May 1910

No. of Specimens. 1

**Remarks.** Taken with Minnow (Fundulus diaphanus)

Dorsal IX,8 (the descriptions give formula as IX-I,9 but there is no sign of the additional spine before the second [soft] dorsal)

Anal I.8 Tail keeled.

Colour olivaceous, punctuated & irregularly blotched with black.

N.B.- The variation in the dorsal may indicate a variety.

## Appendix 41: Accession Book No. 1: Page 257. Museum No. 3562

Museum No. 3562

Scientific Name. Fundulus diaphanus (Le Sueur)

Common Name. "Minnow" (local)

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Phylum, &c. [none given]

Locality and when collected. Near outlet of Little Salmon River, Cole Harbour, Hx. Co., N.S.; 20 May 1910

Collector (c) and Donor (d). Purchased in market

Received. 21 May 1910 No. of Specimens. 14 Remarks. [none given]

## Appendix 42: Accession Book No. I: Page 258. Museum No. 3570

Museum No. 3570

Scientific Name. Ameiurus nebulosus (Le Sueur)

Common Name. Horned Pout; Common Bullhead; "Catfish" (local)

Phylum, &c. [none given]

Locality and when collected. Farrell's (=Carter's) Pond, part of (on SE side of) First Dartmouth Lake, about 1 m.[mile] from Dartmouth, Hx. Co., N.S.; 2 June 1910

Collector (c) and Donor (d). Lancelot A. Purcell (c.) Dartmouth

Received. 3 June 1910

No. of Specimens. 1

Remarks. Description.- Colour; brown above with yellowish blotches on top and sides of head; sides of body gray with yellowish cloudings; beneath head <u>yellowish</u> white; belly and beneath tail white; barbels black. Caudal pinkish red. Other fins with red as mentioned below.

Total length, 10.75 in. Length to base of caudal, 9.10 in. Length of head, from post. [posterior] margin of opercle to offset of snout, 2.60 in. Length of head, from post. margin of opercle direct to end of snout, 2.75 in. Width of head, 2.28 in. Head in length 3  $\frac{1}{2}$  times. Depth of body in length 4  $\frac{1}{9}$  times (depth = 2.20 in.). Base of anal fin, 2.00 ins. ( $\frac{4}{2}$  times in length of head). Pectoral spine .95 in. long (2.6 times in length of head). Humeral process about .80 in. long (rather smooth). Longest barbel (at corner of mouth), about 2.45 ins. long. Lower jaw equal in length to upper one (not distinctly longer or shorter) Compare No. 3560

Dorsal fin, I,7 rays. Anal fin, 21 rays, counting rudiment (2nd ray, 40 in. long, with very minute one before it)

Greatest length of anal 1.20 in. Membrane of anal red & purple between rays.

Ventral fins, 8 rays (blotched with red between rays). Pectoral fins, I,8 (with a few red spots). Caudal fin not forked (nearly entire). See sketch in margin. Dorsal short, placed before ventrals; adipose fin present, with it's posterior margin free. Barbels 8 (posterior nostril with a barbel).

Reference:

Figure 15, Plate 16. Line drawing of caudal fin of Brown Bullhead by Harry Piers (Museum No. 3570, Negative No. 12,446)

## Appendix 43: Accession Book No. I: Page 261. Museum No. 3588

Museum No. 3588

Scientific Name. Morone americana (Gmelin)

Common Name. White Perch

Phylum, &c. [none given]

Locality and when collected. Cow Bay Pond (brackish water), Cow Bay, Halifax Co., N.S.; 5 Aug. 1910

Collector (c) and Donor (d). Purchased in market 25c [cents]

Received. 6 Aug. 1910 No. of Specimens. 4

Remarks. Head in length 3 1/8; depth in length, 3 1/8; Length 7.20 to 7.80 inches.

Fin rays: dorsal IX-I,12 (13 in one specimen). Ventrals I,5 Anal III,9

Lateral line 54 scales Scales: 8 - 54 - 12

2nd anal spine about 3 in head

# Appendix 44: Accession Book No. I: Page 262. Museum No. 3601

Museum No. 3601

Scientific Name. Balistes carolinensis, Gmelin (=B. capriscus, Gmelin)

Common Name. Leather -jacket; Trigger-fish

Phylum, &c. [none given]

Locality and when collected. Taken with spear, near shore, Halifax Harbour, between Woodside sugarrefinery & Fort Clarence, Dartmouth, Hx. Co., N.S.; evening of 25 August 1910

Collector (c) and Donor (d). Thomas Henneberry (c.) Woodside, Dartmouth. Arthur Manley (d.) Woodside, Dartmouth

Received. 26 Aug. 1910

No. of Specimens. 1 Adult

Remarks. Description.- Length (snout to base of caudal), 15.30 ins. (Total length, to end of caudal lobes, 18.75 ins.) Depth 7.15 ins.; depth in length 2 1/9 times. Greatest thickness, 2.00 ins. Head, 4.90 ins.; head in length 3 1/8 times. Gill opening length 1.60 ins.; eye opening .65 in. long Fin rays: dorsals III-27 (2nd dorsal length 5.00 in., height 3.75 in.; 5th ray longest);

pectoral 14 rays (4th ray longest, length 2.00 in.); anal 24 rays (length 4.35 in., height 3.15 in.; 5th ray longest). Broad spine in front of anus.

Lateral line (gill opening to base of caudal) about 57 scales; about 38 scales in oblique series from vent upward and forward Lateral line of the shape described by Jordan & Evermann.

Colour.- Light olive brown; whitish below. 1st dorsal fin dusky, irregularly spotted with pale blue. 2nd dorsal with bluish cloudings towards base and the anal with bluish spots towards base Pectorals light coloured, with brownish mottlings and spots (darkest at base), and with bluish spots near base. Caudal brown (tinged reddish evidently with blood) very obscurely mottled and spotted with darker brown and with bluish spots towards base. Iris brownish yellow. Teeth (incisor-like and strong) white.

Note.- J. M. Jones in his "List of Fishes of N.S." (Trans. N.S. Inst. Nat. Sc., vol. V, 95) reports a specimen of Balistes capricus Gmelin (= B. carolinencis Gmelin.) which had been taken at St. Margaret's Bay, N.S., and which was then in the Prov. [Provincial] Museum. I have not recognized that specimen in the Museum. The present is the second occurrence of this fish here. It is very accidental. Jordan & Evermann (Fishes of N. A., p. 1701) give it's range as "Tropical parts of the Atlantic; occasional northward in the Gulf Stream; very common on our coast & in the Mediterranian, rarely north to England." DeKay records it from New York. The present specimen is typical & agrees well with descriptions.

## Appendix 45: Accession Book No. I: Page 273. Museum No. 3670

Museum No. 3670

Scientific Name. Semotilus atromaculatus (Mitchill)

Common Name. Horned Dace; Creek Chub

Phylum, &c. [none given]

Locality and when collected. Nictaux River, near Middleton, Ann. Co., N.S.; June 1910

Collector (c) and Donor (d). Dr. Frank H. Reid (c.d.) late of Middleton, Ann. Co., N.S.

Received. 13 Mar. 1911

No. of Specimens. 2

Remarks. D.[Dorsal fin] 8 rays; A. [Anal fin] 8; V.[Ventral fin] 8; P.[Pectoral fin] 16 or 17.

Scales 9 or 10 - 55 - 6

Black spot on anterior lower part of dorsal. Reid says they are called by all sorts of local names. He says he has never observed any "horns" on them, can occasionally a spur over the eyes.

#### Appendix 46: Accession Book No. 1: Page 273. Museum No. 3671

Museum No. 3671

Scientific Name. Anguilla chrysypha, Rafinesque (= Anguilla anguilla rostrata (LeSueur)) of most writers

Common Name. Eel

Phylum, &c. [none given]

Locality and when collected. Nictaux River, near Middleton, Ann. Co., N.S. June 1910

Collector (c) and Donor (d). Dr. Frank H. Reid (c.d.) Late of Middleton, Ann. Co., N.S.

Received. 13 Mar. 1911

No. of Specimens. 2: Heads of Eels

Remarks. [none given]

### Appendix 47: Accession Book No. I: Page 278. Museum No. 3713

Museum No. 3713

Scientific Name. Perca flavescens (Mitchill)

Common Name. Yellow Perch

Phylum, &c. [none given]

Locality and when collected. Grand Lake, Hx. Co., N.S.; 10 June 1911

Collector (c) and Donor (d). John Hallett (c.) Truro. Purchased for \$1.00 from H. S. Cruikshank

Received. 8 Sept. 1911

No. of Specimens. 1

Remarks. Mounted specimen (Mounted by H. S. Cruikshank)

Length, 8.40 ins.

Head in length (as mounted) 3 1/8 times

Dorsal rays XIV,14. Ventral rays I,5. Anal rays II,7.

Scales 5 - 57 - 17

Jordan's Manual gives fin formulae as D.[Dorsal fin] XIII; A.[Anal fin] II,7. Seems to be somewhat variable in Jordan & Evermann. Fishes of N. A.

### Appendix 48: Accession Book No. I: Page 279. Museum No. 3723

Museum No. 3723

Scientific Name. Roccus loneatus (Bloch) Jordans Manuel, no. 372

Common Name. Striped Bass

Phylum, &c. [none given]

Locality and when collected. Canso, Guys. Co., N.S.; July 1911

Collector (c) and Donor (d). An Indian fisherman (c.)

Received. 18 Sept. 1911

No. of Specimens. 1

Remarks. Plaster cast of Roccus loneatus (Bloch)

Cast made by H. S. Cruikshank, Truro, from the fish. Purchased from Cruikshank for \$1.50

Length, 17.75 inches. Head in length, 3 1/2 times; depth in length, 3 3/4 times;

Dorsal fin, about IX,12. Anal probably III,11.

Weight of original fish in flesh, 3 pounds.

## Appendix 49: Accession Book No. I: Page 279. Museum No. 3724

Museum No. 3724

Scientific Name. Gadus collarias, Linnaeus

Common Name. Cod-fish Phylum, &c. [none given]

Locality and when collected. Caught near Halifax, Hx. Co., N.S.; June 1911

Collector (c) and Donor (d). Unknown

Received. Purchased; mounted, from H. S. Cruikshank, Truro, \$3.50(sold in Truro market)

No. of Specimens. 1

Remarks. Length (to base of caudal) 3ft. 2 1/4 inches. Head in length 3 7/8 times.

Dorsal rays: 14 (last ray very small). - 19 - 20 (last ray very small). Anal rays: 20 (last ray very

small)- 18 (last ray very small). Pectoral rays: 19. Ventral rays: 6.

Weight 25 pounds.

## Appendix 50: Accession Book No. 2: Page 3. Museum No. 3778

Museum No. 3778

Scientific Name. Prionace glauca (Linn.) = Carcharhinus glaucus (Linn.)

Common Name. Great Blue Shark; "Blue Dog" (local)

Phylum, &c. {none given}

Locality and when collected. Taken on a trawl (line), about 10 miles east by south from Devil's Island, off mouth of Halifax Harbour, N.S.; Sept., 1909

Collector (c) and Donor (d). Benj. Henneberry (c.) Devil's Island, Hx. Harbour. S. Y. Wilson (d.) Supt. [Superintendent] of Fisheries Building of Prov. [Provincial] Exhibition of 25 Sept. 1909

Received. 30 March 1912

No. of Specimens. 1

Remarks. Family: Galcorhinidae

This is the first time this species has been reported from Nova Scotia. It is a native of warm seas, occasionally taken in coasts of U. S. A.

Original total length of this specimen was 6ft. 11 3/4 ins.; snout to base of caudal, 5 ft. 4 ins.; greatest length of pectoral fins, 1 ft. 2 3/4 ins. (= 14 3/4 ins.). Teeth serrated in both upper and lower jaws. The specimen was shown at the Priovincial Exhibition (Fisheries exhibit) of 1909.- I find on further investigation that this species although not mentioned in Jones's's list of 1879, has been noted before. I have a N.S. note of a specimen seen by me, which was taken about 30 miles off Devil's Island, off Halifax Harbour, in October, 1895, which measured about 6 ft. to tip of caudal. Cornish reports it from the banks off Canso, N.S. in 1901-2 and says it is locally called "Blue Dog".-I have also come across unsigned N.S. notes of Robt. Morrow to DeKay's plates of a serrated-toothed shark, Carcharias aruleus (= Carcharhinus milberti, Muller & Henle) In which he says "Halifax Harbour, Aug. 17th, 1883," and further says, "1st dorsal should be midway between post. [posterior] margin of pectorals and ant. [anterior] margin of 2nd. dorsal." This seems to indicate pretty plainly that it must have been Prionace glauca which Morrow had before him at Halifax.

See also 4940

### Appendix 51: Accession Book No. 2: Page 5. Museum No. 3796

Museum No. 3796

Scientific Name. Anguilla chrysypa, Rafinesque (= A. anguilla rostrata (LeSueur))

Common Name. American Eel; Freshwater Eel

Phylum, &c. [none given]

Locality and when collected. Estuary of brook at head of North West Arm, Halifax, N.S.; 22 June 1912

Collector (c) and Donor (d). E. S. F. Piers (c.d.). Halifax

Received. 24 June 1912

No. of Specimens. 2 young

Remarks. Length 2.30 and 2.15 ins. A number of small eels at that place then.

# Appendix 52: Accession Book No. 2: Page 7. Museum No. 3820

Museum No. 3820

Scientific Name. Petromyzon marinus, Linn.; probably variety unicolor (DeKay)

Common Name. [Land-locked] Great Sea Lamprey; Lamprey Eel

Phylum, &c. Fish

Locality and when collected. Grand Lake, Hx. Co., N.S.; 21 June, 1912

Collector (c) and Donor (d). Jos. E. Campbell (c.d.) H. M. Customs, Halifax

Received. 24 Oct. 1912

No. of Specimens. 1

Remarks. When taken it was attached to the belly of a Land-locked Salmon ("Grayling"), Salmo salar sebago

Total length, 5.70 ins.; distance between end of first dorsal and beginning of second dorsal, .25 in. Colour:- Brownish-blackish-slate above; slate-gray on sides (not mottled); silvery-yellowish-white below. Buccal disk & mouth pale orange-buff; teeth deep orange-buff.

### Appendix 53: Accession Book No. 2: Page 24. Museum No. 4013

Museum No. 4013

Scientific Name. Siphostoma sp. (related to S. fuscum, or a variety of that species)

Common Name. Pipefish

Phylum, &c. Zool. Fish.

Locality and when collected. Near head of North West Arm (at Walch's Independent Boathouse), Halifax, N.S.; 7 June 1913

Collector (c) and Donor (d). E. S. F. Piers (c.d.)

Received. 9 June 1913

No. of Specimens. 1 Male, with egg-pouch

Remarks. Was swimming in semi-upright position, by undulating movements of the dorsal fin, near surface of the water.

Total length, 7.44 ins.; dorsal fin rays, 42; dorsal fin covers 5 body rings + 7 caudal rings, total 12 rings; body rings, 19; caudal rings, 38. It differs chiefly from the description of S. fuscum in as much as the dorsal fin covers more rings then is typical in fuscum, the maximum being apparently 10 in the latter species.

## Appendix 54: Accession Book No. 2: Page 25. Museum No. 4017

Museum No. 4017

Scientific Name. Apeltes quadracus (Mitchill)

Common Name. Four-spined Stickleback

Phylum, &c. Zool. Fish.

Locality and when collected. Brackish water, head of North West Arm, Halifax, N.S.; 1 July 1913

Collector (c) and Donor (d). Edward S. F. Piers (c.d.)

Received. 2 July 1913

No. of Specimens. 6

Remarks. [none given]

## Appendix 55: Accession Book No. 2: Page 28. Museum No. 4059

Museum No. 4059

Scientific Name. Brosomius brosme (Muller)

Common Name. Cusk

Phylum, &c. Zool. Fish.

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Locality and when collected. Off H. L. Dauphinee's wharf (Dauphinee House), Hubbard's Cove, Hubbards, Hx. Co., N.S.; various dates, 7 July to 4 (?) Aug. 1913

Collector (c) and Donor (d). E. S. F. Piers (c.d.) Halifax

Received. About 4 Aug. 1913

No. of Specimens. 10 Young

Remarks. These young Cusk were common there, averaged about 4 inches in length, and took a baited hook.

### Appendix 56: Accession Book No. 2: Page 38. Museum No. 4109

Museum No. 4109

Scientific Name. Balistes carolinensis, Gmelin

Common Name. Leather-jacket; Trigger-fish

Phylum, &c. Zool. Fish.

Locality and when collected. Picked up dead, but quite fresh, on the shore near Admiral Rock, eastern side of <u>Bedford Basin</u>, near <u>Bedford</u>, Hx. Co., N.S.; 20 August <u>1912</u>

Collector (c) and Donor (d). Alexander Griswold (c.) Bedford, N.S. Alfred Ogden (d.) Bedford Fish Hatchery, Bedford

Received. 5 Jan. 1914

No. of Specimens. 1

Remarks. When it was found, Crows had picked out the eyes and intestines.

This is a widely distributed species, very common in West Indies and Mediterranean Sea.

Sometimes carried northward in Gulf Stream to New York & Massachusetts.

This is the fourth record for Nova Scotia:- one specimen from St. Margarets Bay (Jones), one from Banquereau, 1901-2 (Cornish) one from Halifax Harbour, 25 Aug. 1910 (see Mus. No. 3601); and this present one.

Compare with Acc. No. 3601 & 8313

Total length, snout to end of caudal 12.50 ins.

Length, snout to base of caudal 10.00 ins.

Head about 3 in length (snout to base of caudal); depth 1 6/7 in length.

Dorsal fin rays, III,26; anal fin rays, 26.

Lateral line, 54 scales

References:

Figure 16, Plate 17. Letter to Harry Piers from Alfred Ogden dated 5 January 1914 concerning a Gray Triggerfish (Museum No. 4109: Neg. No. 23,436)

Figure 17, Plate 18. Letter to Harry Piers from Alfred Ogden dated 7 January 1914 concerning a Gray Triggerfish (Museum No. 4109: Neg. No. 23,474)

### Appendix 57: Accession Book No. 2: Page 45. Museum No. 4160

Museum No. 4160

Scientific Name. Catostomus commersonii (Lacepede) = C. teres (Mitchill).

Common Name. Common Sucker.

Phylum, &c. Fish.

Locality and when collected. Nine-mile River at Boutilier's saw-mill, a little westward of Bowsers, St. Margaret's Bay Road, Hx. Co., N.S.; 3 June 1914.

Collector (c) and Donor (d). H. Piers (c.)

Received. 4 June 1914.

No. of Specimens. 1 Male

Remarks. Saw about 20 of these fish in the stream at this place.

Length to end of caudal fin, 12.80 ins.

Length to base of caudal fin, 10.90 ins.

Head in length, 4 1/4 times.

Dorsal fin, 14 rays (1st. one short).

Pectoral [fin], 14 rays.

Ventrals 2 rays (1st. one short, last one very short, that leaves 7 developed rays)

Anal [fin], 10 rays

Scales in lateral line, 65.

Without doubt a male, with anal and caudal fins tuberculate, and with faint yellowish-reddish lateral band.

## Appendix 58: Accession Book No. 2: Page 46. Museum No. 4167

Museum No. 4167

Scientific Name. Petromyzon marinus, Linn.

Common Name. Great Sea Lamprey

Phylum, &c. Fish

Locality and when collected. Shubenacadie River, near Benery Brook, near Enfield, Hx. Co., N.S.; 28
June 1914

Collector (c) and Donor (d). John McDonald (c.) Enfield, N.S. Bought for .40

Received. 30 June 1914

No. of Specimens. 1

Remarks. Length, snout to tip of caudal, 27 inches. Head, 2.75 ins.

Dorsal fins separated by about 1/2 inch.

Colour.-Grayish-white, mottled with black confluent patches, the black predominating on the top of head and anterior half of back. Under parts grayish-white, lighter anteriorly, and whitish on underside of head.

Note. The dorsal fins would seem to be closer together than is usual with *P. marinus*, in which they are stated to be "well separated". The land -locked form *P. marinus unicolor*, has "the fins closer together", but it is spoken of as a "dwarfish form, darker and more uniform in colour" (Jordan & Evermann). This specimen is not dwarfish, and cannot be spoken of as "more uniform in colour".

# Appendix 59: Accession Book No. 2: Page 53. Museum No. 4200

Museum No. 4200

Scientific Name. Catostomus commersonii (Lacepede).

Common Name. Common Sucker.

Phylum, &c. Fish.

Locality and when collected. Taken by a gull which was attacked by Crows on the beach, Mira, C. B. Co., N.S.; about 30 Dec. 1914 (It doubtless had been taken by the gull in some part of the Mira River as it is a fresh-water fish).

Collector (c) and Donor (d). James Macdonald (c.) Mira. J. S. Macdonald (d.) Editor, Glace Bay Gazette, Glace Bay, N.S.

Received. 7 Jan. 1915.

No. of Specimens. 1

Remarks. Total length, 16.40 ins. Length, snout to base of caudal, 13.75 ins. Head, 3.00 ins. Head in length, 4 ½ times.

Dorsal, 12 rays (last 2 rays, although split to base, may be actually a single ray at the insertion) This fish was considered remarkable where found, and an article appeared on it in Glace Bay Gazette (copied in Echo, Hx., 2 Jan. 1915):- Many of the old fishermen viewed it, but never saw anything like it before. Also spoken of as "the most peculiar fish that was ever seen at Mira. J. S. Macdonald of Glace Bay Gazette, in letter to me of 6 Jan. 1915, says "an old sea captain, I am told, said it is commonly known as a red sand-sucker, and that it is often found in fresh-water, but seldom in salt. It may possibly be common enough in river waters of Nova Scotia, though nobody who saw it here had ever seen it before".

References:

Figure 18, Plate 19. Letter to Harry Piers from Editor, Glace Bay Gazette dated 6 January 1915 concerning a White Sucker (Museum No. 4200. Neg. No. 23,43).

Figure 19, Plate 20. Copy of report on White Sucker from Mira, in Echo, Halifax, 2 January 1915 (Museum No. 4200. Neg. No. 23,441)

Figure 20, Plate 21. Rough notes on White Sucker from Mira by Harry Piers (Museum No. 4200: Negative No. 23,440).

### Appendix 60: Accession Book No. 2: Page 56. Museum No. 4224

Museum No. 4224

Scientific Name. Abramis crysoleucas (Mitchill).

Common Name. Golden Shiner.

Phylum, &c. Fish.

Locality and when collected. Blueberry Lake, near Beachville, St. Margaret's Bay Road, Halifax County, Nova Scotia; 10 July 1897

Collector (c) and Donor (d). Harry Piers (c.d.) Halifax.

Received. 31 March 1915

No. of Specimens. 1

Remarks. Length to end of caudal, 4.15 ins. Head 4 1/10 in length; depth merely 3 ½ in length

Scales, 10 - 50 - 3

Dorsal fin, 9 rays (1st. ray close to 2nd. ray); anal [fin], 13 [rays]; ventral [fin],8 [rays].

### Appendix 61: Accession Book No. 2: Page 56. Museum No. 4227

Museum No. 4227

Scientific Name. Fistularia petimba, Lacepede (of Jordan & Evermann's Fishes of N. & M. America) (= Fistularia serrata, Cuvier).

Common Name. Trumpet-fish.

Phylum, &c. Fish

Locality and when collected. Found washed ashore, alive, on beach, at Little Hope Lighthouse Station, near Port Mouton, Queens Co., Nova Scotia; <u>5 September</u>, <u>1914</u>.

Collector (c) and Donor (d). Reuben Colp (coll.) lighthouse keeper, Little Hope Light. Frederick L. Fultz (d.) Marine & Fisheries Dept., Halifax.

Received. 12 Feb. 1915

No. of Specimens. 1

Remarks. No. 1108 of Jordan & Evermann's "Fishes of North & Middle America"

Had first been placed in alcohol, and was given to the Museum as a dry specimen.

#### Measurements from dry specimen:

	Measurements Made about	Measurements made very carefully
	1 Feb. 1915	19 March 1915
Extreme length, snout to end of caudal filament		26.20 ins.
Length, snout to end of caudal fin		18.55 ins.
Length, snout to base of middle caudal ray	18.20 ins.	17.85 ins.
Caudal filament	8.40 ins.	8.30 ins.
Length of head (snout to posterior edge of opercle)	6.50 ins.	6.45 ins.
Anterior margin of eye, to end of snout		5.03 ins.
Head in body	2 4/5 times	$\{ 2.76 \text{ times} = \text{about} \}$
ricad in oody		2 3/4 times

Fin Formulae. - Dorsal 15 (1st. ray very small); pectorals, 16; ventrals, 6; anal, 15 (1st. ray very small and weak). (Note.- Jordan & Evermann give the fin formula as D. 14; V. 6; A. 13. An old dried specimen in this Museum, 15.10 ins. From snout to end of caudal, has following fin formula: D. 14 or 15 (1st. ray very small); P. 16; V. 6; A. 14 or 15 (1st. ray very small). Pectorals small, with broad base. Ventrals very small, inserted about midway between end of snout and caudal fin. Anal opposite dorsal. Skin rough.

Lateral edges of snout <u>serrated</u>, from eyes to more than half-way towards end of snout. <u>Colour</u>, from dry, washed specimen, as noted on 20 March 1915:- Upper parts brownish; varying from Sipea behind head, to Hair Brown on snout and posterior part of back, and to dark Drab on tail (<u>No</u> bluish spots noticeable). Under parts light Tawney to Ochraceous. Fins yellowish white; dorsal and anal, pale Orange Ochraceous at base (darker in the case of the anal fin). A darker patch of the same colour, or pale Orange Rufous, immediately posterior to the anal fin. The whole body had been covered, before washing, with a whitish deposit.

Letter of Dr. David Starr Jordan, Leland Stanford Junior University, Office of the Chancellor, Stanford University, Cal., March 12th, 1915.

Mr. Harry Piers Provincial Museum, Nova Scotia.

Dear Mr. Piers:

My recollection of *Fistularia* has grown vague. I have a note, that seems to admit of no doubt, that the original *Fistularia patimba* is the one called in our Fishes of North America, *Fistularia depressa*. This type of *F. petimba* was from New Britain. The *F. petimba* of our book became *F. serrata*. Evidently we overlooked the records of Goode and of Jones [for West Indies and Nova Scotia]. I have no reason for doubting either.

F. tabaccaria is thus American, ranging north in the Gulf Stream to Rhode Island.

F. petimba (called depressa by us) is of Pacific, ranging north to Southern California and Japan.

*F. serrata* (called *petimba* by us) is in Japan. And South Seas, also in the Atlantic, ranging northward to Nova Scotia.

Can it be that the Atlantic form is a different species? (Bloch's figure, type of *serrata*, locality unknown, is said to be spotted with blue, the snout serrate). If so there is no other Atlantic name.

F. starksi is Chinees

F. corneta belongs to Panama fauna

These fishes are rather difficult, and have been somewhat mixed up. What if yours should prove different from the one in the Pacific called *serrata*? I don't remember to have seen blue spots on any but *tabaccaria*.

Very truly yours (Sgd) David Starr Jordan

N. B.- From the above letter it appears that the name F. petimba should not be used for this species in the Atlantic, as F. petimba is the correct name of what Jordan and Evermann called F. depressa. F. serrata therefore becomes the correct name for the Atlantic, etc., species, unless as is quite likely the Atlantic form differs from F. serrata (which is said to have blue spots), in which case there is no name for the Atlantic species and it would require a new name.

#### References:

Figure 21, Plate 22. Letter to Harry Piers from B. A. Bean dated 13 March 1915 concerning Coronetfish, *Fistularia* (Museum No. 4227. Negative No.23, 479)

Figure 22, Plate 23. Letter to Harry Piers from David Starr Jordan dated 10 April 1915 concerning Coronetfish, *Fistularia* (Museum No. 4227. Negative No. 23,478).

Figure 23, Plate 24. Letter to Harry Piers from J. O. Snyder dated 15 April 1915 concerning Coronetfish, *Fistularia* (Museum No. 4227: Negative No. 23,447).

Figure 24, Plate 25. Letter to Harry Piers from R. J. Colp dated 25 April 1915 concerning Coronetfish, *Fistularia* (Museum No. 4227: Negative No. 23,433).

On receiving a correspondence from Barton A. Bean (Figure 25 A, Plate 26) advising Piers of the capture of a Scup, *Stenotomus chrysops*, in Halls Harbour (Bay Of Fundy), Kings County, Nova Scotia on 21 August 1911, which was sent to the Smithsonian Institute, Washington, Harry Piers

on 9 April 1915 wrote to Bean asking if the U.S. National Museum would repatriate this specimen to the N.S. Provincial Museum (Figure 25 B, Plate 27).

# Appendix 62: Accession Book No. 2: Page 58. Museum No. 4242

Museum No. 4242

Scientific Name. Pomolobus pseudoharengus (Wilson).

Common Name. Alewife; "Gaspereau".

Phylum, &c. Fish

Locality and when collected. Boutilier's old saw-mill dam, Nine-mile River, near Bowser's, St. Margaret's Bay Road, Hx. Co., N.S.; 29 May 1915.

Collector (c) and Donor (d). [none given]

Received. 31 May 1915

No. of Specimens. 1 Female

Remarks. Very many there. Measurements, etc.

Weight 11 3/4 oz.

Total length 12.50 inches

Snout to base of caudal 10.55 inches

Greatest depth, front of dorsal to near front of ventrals 3.10 inches

Depth of tail 1.00 inch

Length of head 2.26 inches

Diameter of eye - socket (anterior-post. measurement) .70 inch

Diameter of eye itself, about .60 inch

Length of largest dorsal ray 1.68 inches

Length of dorsal fin 1.75 inches

Highest anterior point of dorsal, when laid back, reaching almost to posterior part of attachment of dorsal to back.

Head in length 4.67 times

Depth in length 3.40 times = 3.2/5

Peritoneum: Light coloured.

Fin rays: Dorsal 17 (3rd. longest)

Pectoral 16

Ventral 9

Anal 18

## Appendix 63: Accession Book No. 2: Page 58. Museum No. 4243

Museum No. 4243

Scientific Name. Pomolobus pseudoharengus (Wilson).

Common Name. Alewife; "Gaspereau".

Phylum, &c. Fish

Locality and when collected. Boutilier's old saw-mill dam, Nine-mile River, near Bowser's, St. Margaret's Bay Road, Hx. Co., N.S.; 29 May 1915.

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Collector (c) and Donor (d). [none given]

Received. 31 May 1915

No. of Specimens. 1

Remarks. Very many there

Measurements, etc.

11 3/4 oz. Weight 12.30 inches Total length 10.50 inches Snout to base of caudal 3.06 inches Greatest depth, front of dorsal to near front of ventrals .95 inch Depth at tail 2.25 inches Length of head .67 inch Diameter of eye-socket (anterior-post. measurement) .60 inch Diameter of eye itself, about 1.68 inches Length of largest dorsal ray 1.75 inches Length of dorsal fin

Highest anterior point of dorsal, when laid back, reaching almost to posterior part of attachment of dorsal to back.

Head in length 4.67 times
Depth in length 3.43 times

Peritoneum: Light coloured

Fin Rays: Dorsal 17 (3rd. Longest)

Pectoral
Ventral
2
Anal

## Appendix 64: Accession Book No. 2: Page 62. Museum No. 4266

Museum No. 4266

Scientific Name. Fundulus diaphanus (Le Sueur).

Common Name. Freshwater Killifish; Freshwater Minnow.

Phylum, &c. Fish

Locality and when collected. Abundant in lagoon, brackish, Dauphinee Beach, Hubbards, Hx. Co., N.S.; 26 July 1915.

Collector (c) and Donor (d). Edward S. F. Piers (c.d.) Halifax

Received. 9 Aug. 1915

No. of Specimens. 200

Remarks. Very common there.

Total length 1.45 to 2.90 inches (average about 2.00 ins.)

Head in length, 3 1/3 times; depth in length, 4 1/4 (to 5 times in small specimens).

Fin formula: D. [dorsal] 13 or 14 (14 counting all); A. [anal] 12; V. [ventral] ?; P. [pectoral] 16 or 17. Dorsal inserted before anal.

Scales: 40 to 53 in lateral line; 8 from lat. line to dorsal (descriptions of species say from 12 to 15).

Head dark on top. 14 to 18 dark transverse bars on sides, sometimes very obscure or almost wanting.

Dorsal inserted before anal

Reference:

Figure 73, Plate 78. Original note by Harry Piers concerning Banded Killifish, *Fundulus diaphanus*, at Dauphinee Beach, Hubbards 26 July 1915.

# Appendix 65: Accession Book No. 2: Page 62. Museum No. 4273

Museum No. 4273

Scientific Name. Xiphias gladius, Linn. Common Name. Common Swordfish

Phylum, &c. Fish

Locality and when collected. St. Margaret's Bay, off Hubbards, Hx. Co., N.S.; 5 Aug. 1915. (Received at Hubbards by Harry Piers 5th. and 7th. Aug. 1915):

Collector (c) and Donor (d). Freeman & Gilbert Harnish, Hubbards, N.S. (c.d.)

Received. 17 Aug. 1915

No. of Specimens. 2; swords of Common Swordfish

Remarks. The fish from which these "swords" were taken were about 8 ft. 6 ins. in total length including the sword, and would probably weigh about 200 lbs. dressed (that is without, head, fins and entrails). They had been harpooned by Freeman Harnish, from a "pulpit" on a gasoline motor-boat, out on the Bay, and the bodies of the fish forwarded to Boston, U. S. A., market, for food. One of the swords is 3 ft. 10 ½ ins. from nostril to extremity of sword, and 4.50 ins. wide near broad part; and the other is 3 ft. 8 ½ ins. from nostril to extremity, and 4 inches wide near basal part (The weight of the total fish, as taken from water must have probably been about 440 and 420 lbs.; as a sword 4 ft. long, shown at Prov.[Provincial] Exhibition in 8 Sept. 1915, by D. Coolen, was said to have been from a fish which weighed 448 lbs.) Compare with Acc. No. 4712

## Appendix 66: Accession Book No. 2: Page 98. Museum No. 4498

Museum No. 4498

Scientific Name. Gadus collaris.

Common Name. Cod-fish.

Phylum, &c. Fish.

Locality and when collected. Fish taken off Shag Bay, Hx. Co., N.S.; about 24 April 1917.

Collector (c) and Donor (d). D. Coolen (c.)

**Received.** 27 Apr. 1917.

No. Of Specimens. Two small bones from the lower part of the cranial cavity of Gadus collaris; the Codfish.

Remarks. This fish was about 20 or 24 ins. long. The bones seem to be unattached to the cranium.

## Appendix 67: Accession Book No. 2: Page 98. Museum No. 4501

Museum No. 4501

Scientific Name. Fundulus diaphanus? (Le Sueur). Jordan & Evermann no. 939 pg. 645.

Common Name. Freshwater Minnow; Freshwater Killifish.

Phylum, &c. Fish.

Locality and when collected. Sunny shoal-water of little cove, brackish water, in inner part of <u>Cole Harbour</u>, Hx. Co., N.S.; 4 May 1917.

Collector (c) and Donor (d). Bought in market (.05 [cents] a dozen; .10 [cents])

Received. 5 May 1917.

No. of Specimens. 25

Remarks. Noted in my MS paper on fish.

Total length Length to base Head Depth	e of caudal	Largest Specimen 3.55 inches 2.95 inches .82 inch .76 inch	1.67 i	Specimen nches nches
Total length	Scales in lat. line	Depth of Body Into length to Base of caudal	Dorsal Rays	Anal Rays
3 inches	47, 46, 46, 48 (42, 48 to where scales on base of caudal begin)	5	11	<u>10</u>

# Appendix 68: Accession Book No. 2: Page 98. Museum No. 4502

Museum No. 4502

Scientific Name. Menidia menidia notata (Mitchill). Jordan & Evermann, no. 1166, p. 800.

Common Name. Common Silverside (called "Sprat" by man who had them in market).

Phylum, &c. Fish.

Locality and when collected. On sandy spots in shallow parts of channels, in brackish water, Cole Harbour, Hx. Co., N.S.; 4 May 1917.

Collector (c) and Donor (d). Purchased from Cole Harbour man in Halifax Market for .20 (.05 a dozen).

Received. 5 May 1917

No. of Specimens. 48

Remarks. The man said they first appeared about the 21 April, and remain about a month at least[probably to spawn] Noted in my MS. fish paper.

Measurements & Fin rays & Scales:-

	Largest Specimen	Smallest Specimen
Total length	5.52 inches	4.04 inches
Length to base of caudal	4.70 inches	3.42 inches
Head	1.06 inches	.76 inch
	4 ½ times into	4 3/8 times into
	length to base	length to base
	of caudal	of caudal
Eye (longitudinal diameter)	.28 inch	.22 inch
Depth of body	.80 inch	.65 inch
1st. dorsal rays	<u>IV</u> ,4	<u>IV</u> ,4
2nd dorsal rays	I,8 (1st ray about	I,8 (with a very
	1/3 length of 2nd;	short rudimentary
	3rd longest)	one in front)
Pectoral rays	13	13
Ventral rays	6	6
Anal rays	I,20	I,22
Scales in lateral line	48	47

## Appendix 69: Accession Book No. 2: Page 102. Museum No. 4521

Museum No. 4521

Scientific Name. Raja ocellata, Mitchill.

Common Name. Big Skate.

Phylum, &c. Fish.

Locality and when collected. Found dead on shore of inner cove, Hubbards Cove, Hx. Co., N.S.; 14 July 1917.

Collector (c) and Donor (d). H. Piers (c.)

Received. 6 Aug. 1917

No. of Specimens. 1: jaws of Female

Remarks. The fish (which was not preserved) was 22 inches in total length.

Middle line of back and tail behind shoulders without spines.

Outline of disk before spiracle obtuse

Jordan & Evermann gives the teeth as about? 90 series in each jaw.

Teeth in 85/92 series

Uppe	er jaw, on	e side only.	Lower jaw, o	
Different counts made of series of teeth		Different counts made of series of teeth		
	42		46	
	41		46	
	42	6/254	47	say $46 \times 2 = 92 \text{ teeth}$
	43	$42 \frac{1}{3} = \text{say } 43 \times 2 = 86$		in series in lower jaw
	43	say teeth in 85 series in		
	43	upper jaw		
		11 3		Say $46 \times 2 = 92$ teeth
6	254			in series in lower jaw

 $42 \frac{1}{3} = \text{say } 43 \text{ X } 2 = 86$ Say teeth in 85 series in upper jaw

### Appendix 70: Accession Book No. 2: Page 102. Museum No. 4522

Museum No. 4522

Scientific Name. Raja erinacea, Mitchill.

Common Name. Common Skate; "Pot Skate"; "Basket Skate".

Phylum, &c. Fish.

Locality and when collected. Taken with hand-line, in about 10 feet of water, in inner cove, Hubbards Cove, Hx. Co., N.S.; 16 July 1917.

Collector (c) and Donor (d). E. S. F. Piers (c.d.) Halifax.

Received. 6 Aug. 1917

No. of Specimens. 1 Male

Remarks. Cyrus Dauphinee, fisherman of Hubbards, says they call it a "Pot Skate", and that it often rolls itself up when caught (as this one did). He says they also live at Hubbards a much larger Skate which grows about 3 feet in length. People about there do not eat skates.

It rolled its pectoral fins under its body when caught.

Measurements: Total length, 20 1/4 inches; greatest width across pectorals, 12 ½ ins. Snout to posterior end of pectorals, 11 ½ ins.

Ventrals of 20 rays.

Teeth in 56 series

53

Jordan & Evermann give the teeth as about 50 series in each jaw.

No spines on central line of back and tail behind the head. Largest slightly hooked spines on the anterior extensions of the pectorals (opposite to the eyes); smaller spines are scattered over the upper part of snout, over the eyes and between the spiracles; a triangular patch on the back of head; about two main lines of spines and other subsidiary? Lines of spines on the back and tail, this median line of which is smooth. Small spines are scattered on the pectorals, their [the pectorals] base and extremity being mostly smooth, and two rows of large slightly hooked spines on each pectoral toward outer margin. (i.e. no spines on middle line of back from a little behind head to end of tail)

Colour. Above grayish-brown with numerous obscure round dark spots, 1/8th inch diameter. A translucent area on each side of snout. (No white ocellus, etc., near posterior angle of pectorals.) Claspers slaty-gray above, dark brown at extremity. Underparts bluish-white passing into slaty-white on outer margin of pectorals and ventrals, tail white. A few, irregular scattered, round blackish spots, from ½ (mostly) to 1/4 inch diameter, on various parts of undersides of pectorals and ventrals, and a few on underside of tail

Reference:

Figure 26, Plate 28. Photograph of a line drawing of Little Skate by Harry Piers (Museum No. 4521, Negative No. 12,444).

### Appendix 71: Accession Book No. 2: Page 104. Museum No. 4537

Museum No. 4537

Scientific Name. Clupea harengus, Linn.

Common Name. Common Herring.

Phylum, &c. Fish.

Locality and when collected. From school of these small fish in Hubbards Cove, Hx. Co., N.S.; 31 July 1917.

Collector (c) and Donor (d). E. S. F. Piers (c.d.)

Received. 6 Aug. 1917

No. of Specimens. 9 Young ("bait") doubtless of hatch of 1916.

Remarks. Length from 3.60 ins. (3.05 ins. to base of caudal) to 2.20 inches (1.90 ins. to base of caudal).

Head 3 5/6 times into length to base of caudal.

Lateral line of about 63 scales; dorsal fin with 19 rays.

Peritoneum black.

Vomer apparently with teeth.

## Appendix 72: Accession Book No. 2: Page 104. Museum No. 4538

Museum No. 4538

Scientific Name. Siphostoma fuscum, (Storer)? Or possibly a variety.

Common Name. Common Pipe-fish.

Phylum, &c. Fish.

Locality and when collected. In shallow, brackish water, at head of Hubbard's Cove, near where Hubbard's River enters the cove, Hubbards, Hx. Co., N.S.; 31 July 1917.

Collector (c) and Donor (d). E. S. F. Piers (c.d.) Halifax, N.S.

Received. 6 Aug. 1917

No. of Specimens. 1; Male, (with egg-pouch)

Remarks. On 3rd August 1917, E. S. F. Piers saw another Pipe-fish among eel-grass at same place, but did not secure it.

ala not secure it.	
Total length (snout to end of caudal)	6.38 inches
Length to base of caudal	6.12 inches
Greatest width of body between throat & anus	16 inch
Length of head	.81 inch
Length of snout to anterior edge of eye	.46 inch
Width of head	.14 inch
Snout to anus	2.61 inches
Length of body (posterior part of opercle to anus)	1.80 inches
Length of tail (anus to base of caudal)	3.51 inches
Length of egg-pouch	1.88 inches
Length of pectoral fin	.18 inch
Length of dorsal fin	1.00 inch
Length of caudal fin	.26 inch
Head in length to base of caudal, 7.55 times	
Body rings [including anal ring]-	19

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Caudal rings

37

Fin rays-

Pectoral of 14

Dorsal of 43 rays (verify this number)

Caudal of 7 rays.

Dorsal fin on 3/4 + 10 + 3/4 rings (That is, on 4 3/4 Body rings + 6 3/4 caudal rings)

Egg-pouch extends from last body ring to 19th caudal ring (both inclusive)

Colour- Above olivaceous; browner on tail. Under parts from behind snout (and on under side of gill-cover) to anus, yellow; brightest on under edges of gill-cover and on sides. Egg pouch vellowish-brown.

Dorsal fin banded with brown.

## Appendix 73: Accession Book No. 2: Page 105. Museum No. 4539

Museum No. 4539

Scientific Name. Raja ocellata, Mitchill (or else Raja laevis, Garman).

Common Name. Big Skate (or else Barndoor Skate).

Phylum, &c. Fish.

Locality and when collected. Taken in net or fish-trap by Cyrus Dauphinee, Hubbard's Cove, Hx. Co., N.S.; about 14 July 1917.

Collector (c) and Donor (d). (Bones collected by H. Piers, after they had been cleaned by marine animals, on 2 Aug. 1917.)

Received. 6 Aug. 1917

No. of Specimens. 1: Cartilaginous Skull & Vertebrae.

Remarks. Original length of fish about 50 inches (= 4ft. 2 ins.).

Length of skull 11.50 inches
Length of vertebrae [as here] 37.25 inches
Part of vertebrae missing, probably about 1.50 inches
50.25 inches

The vertebrae were very beautiful and perfect and almost lace-like in appearance and white in colour when taken from the water; but on drying they became exceedingly fragile and difficult to preserve owing to their delicate nature. An attempt was afterwards (during August) made to have them retain their form and not break up, by heavily impregnating them with orange shelac varnish, but with little success. It is a just pity that such a delicate and beautiful structure cannot be satisfactorily preserved.

Cyrus Dauphinee, fisherman of Hubbards had got 2 or 3 of these large skates this season. He says they usually call them Skates; whenever the smaller ones, which roll themselves up when caught (such as Mus. No. 4522), they call "Pot Skates" (*Raja erinacea*). He says they live about Hubbards both the small Skates, and this larger species which later grows to about 3 feet in length.

## Appendix 74: Accession Book No. 2: Page IIO. Museum No. 4545

Museum No. 4545

Scientific Name. Sphyrna zygaena, Linnaeus. Common Name. Hammer-headed Shark.

Phylum, &c. Fish.

Locality and when collected. Taken, tangled in a 3-inch mesh herring-net, about 2 miles off <u>Prospect</u>, Hx. Co., N.S.; 28 August, 1917.

Collector (c) and Donor (d). Peter Hardiman (c.d.) fisherman, Upper Prospect, Hx. Co., N.S. (Per Dominion Public Works Dept., Hx.).

Received. 29 Aug. 1917

No. of Specimens. 1 Young, (male?)

**Remarks.** This is the first specimen of Hammer-headed Shark recorded from Canadian waters. Has been reported as far north as Cape Cod.

Note.- The water in the North West Arm, Halifax, during the past week was very warm, up as high as 71 F.

#### Measurements.-

Total length	22.50 inches
Length, snout to base of caudal	15.50 inches
Snout to posterior part of jaw-bone	3.00 inches
Width of head ("hammer")	6.00 inches
Width of head at posterior part of jaws	2.10 inches
Length of nostril	.37 inch

Narrow groove extends from nostril for 1.10 inches along anterior edge of head.

3 rows of teeth in jaws

Weight, 1 1/4 lb. Without intestine.

<u>Colour</u> (when fresh).- Above Neutral Gray passing through Pale Neutral Gray to White on under parts. Top of head Deep Neutral Gray. Upper anterior edge of head narrowly edged with White. Posterior under surface of lateral extensions of head, bordered, for width of .30 to .40 inch, with Pale Neutral Gray. Anterior edges of 1st. And 2nd Dorsal fins and upper edge of caudal narrowly edged with Black.

See large, full-size drawings of this specimen, on file.

Upper Prospect, Sept. 18, 1917

Mr. Harry Piers Provincial Museum Halifax, N.S.

Dear Sir:

I have received your letter, asking me to write you about the fish (the Hammer-head Shark) which was caught Aug. 28th about two miles off Prospect. It was tangled up in a herring-net (3 inch mesh) when we got it. It was quite a strange looking fish and some who had been fishing in foreign parts and had seen quite a few of the fish mentioned above, said the eyes were too far apart.

I am glad to hear you have had none like it before and shall think of you again if I chance to catch any more interesting fish.

Yours truly,

(Sgn) Peter Hardiman

## Appendix 75: Accession Book No. 2: Page 125. Museum No. 4593

Museum No. 4593

Scientific Name. Salmo salar, Linnaeus.

Common Name. Common Atlantic Salmon ("Grilse").

Phylum, &c. Fish.

Locality and when collected. Taken in North River, near the school house, a few miles from Truro, Col. Co., N.S.; 25 Oct. 1915.

Collector (c) and Donor (d). Purchased from H. S. Cruikshank, Truro, N.S., for \$8.00

Received. 20 April 1918

No. of Specimens. 1 Mounted in case.

Remarks. Weight 4 ½ lbs. Length 20 ins. to base of caudal.

### Appendix 76: Accession Book No. 2: Page 125. Museum No. 4594

Museum No. 4594

Scientific Name. Salvelinus fontinalis (Mitchill).

Common Name. Brook Trout.

Phylum, &c. Fish.

Locality and when collected. Taken at <u>Trout Lake</u>, 2 ½ miles northwest of <u>Middle Stewiacke</u>, & between Brookfield & Smithfield, Col. Co., N.S.; 5 July <u>1917</u> (Trout Lake is 1 1/4 mi. WSW. of Barron Lake).

Collector (c) and Donor (d). H. S. Cruikshank (c.) Truro. Purchased for \$1.25

Received. 20 April 1918

No. of Specimens. 1 Mounted on oval panel.

Remarks. Total length, 9.70 ins.; length to base of caudal, 8.35 ins.

## Appendix 77: Accession Book No. 2: Page 128. Museum No. 4605

Museum No. 4605

Scientific Name. Semotilus corporalis (Mitchill). = Semotilus bullaris (Rafinesque).

Common Name. Fall-fish; Silver Chub.

Phylum, &c. Fish.

Locality and when collected. Taken with hook and worm, immediately below (east of) site of saw-mill (dam), in stream from Marsh Lake to Sackville River, 1 1/8 miles WSW of Lower Sackville, Hx. Co., N.S.; 5 May 1918.

Collector (c) and Donor (d). R. Frank Eager (c.d.) Bedford.

Received. 6 May 1918

No. of Specimens. 1: Young; about ½ adult size (The adult size is 18 inches)

Remarks. Family: Cyprinidae (Carps). "Maritime Provinces" (Halkett)

New Brunswick but not Nova Scotia (P. Cox)

This I believe is first record of this species from Nova Scotia.

Measurements.- Total length, 7.10 ins.; length to base of caudal, 6.0 ins.; greatest depth, 1.35 inch (at front of dorsal) greatest thickness .83 inch; length of head, 1.53 inch; diameter of eye .30 inch. Dorsal fin, front height 1 inch; hinder height .50 inch; base .65 inch. Ventral fin, front height .82 inch; hinder height .47 inch; base .25 inch. Anal, front height .80 in.; hinder height .43 in., base .67 in. Pectoral, length .90 in. Head in length (to base of tail) 4 (head 1.53 ins.); depth in length, 4 ½ (depth 1.35 inch at front of dorsal); eye in length of head 5 (eye .30 inch diameter). Pharyngeal teeth, 5 and 2 on left side, and 4 and 2 on right side; that is "teeth two-rowed, 2,5 - 4,2".

Fin rays.- Dorsal of 9 rays, the last one much closer to the 8th then the others are to each other, & therefore it is possible it may be a ray split right down the base, in which case the dorsal would have been only 8 rays; pectorals 14; ventrals 8; anal 9. First ray of each fin simple, the last branched.

Scales:- 8 from lateral line to front of dorsal (excluding of lat. line), 49 in lat. line, 5 from lat. Line to vent (exclusion of lat. line) That is, scales 8 - 49 - 5. 18 (or 19, not more) scales before dorsal. Scales crossing abdomen behind ventrals. Barbel practically obsolete (probably because a young fish). Dorsal fin inserted midway between nostril and base of caudal, and a little behind ventrals. Caudal fin forked for about half its length. Premaxillaries protractile.

<u>Colour</u> before placing in preservative.- Blackish blue above, darkest on top of head; sides of head & opercle golden-silvery, under part of head slightly rosy white. Sides of body yellowish-silvery, a dark band just behind opercle from front end of lateral line to insertion of pectoral. Underparts silvery, with slight rosy tinge. <u>No</u> black spot at base of dorsal in front; in fact all fins unmarked by dark spots, etc. Iris golden, with a touch reddish on upper part. Peritoneum gray.

Reference:

Figure 27, Plate 29. Sketch of fins of Fallfish by Harry Piers (Museum No. 4605, Negative No. 12,441)

# Appendix 78: Accession Book No. 2: Page I3I. Museum No. 4616

Museum No. 4616

Scientific Name. Siphostoma fuscum (Storer)? variety.

Common Name. Common Pipefish.

Phylum, &c. Fish.

Locality and when collected. Taken with dip-net, close to surface, at wharf of Robt. T. McIllreith, Jollimore, west side of North West Arm, near Halifax, N.S.; 17 June 1918.

Collector (c) and Donor (d). W. B. McIllreith (c.d.) son of R.T. McIllreith, North West Arm, Hx.

Received. 19 Jun. 1918

No. of Specimens. 1 Female (without egg-pouch)

**Remarks.** See also 243, 2169, 3369, 3558, 3559, 4013, 4538

Measurements.- Total length, 7.68 inches; length to base of caudal, 7.39 ins.; tail to base of caudal, 4.17 ins.; tail (to base of caudal) 1.84 times in total length; head length, .92ins.; head 8.35 times in total length; snout, .46 ins.; snout 2 times in length of head; dorsal, length .34 ins.

Fins.- Dorsal, 45 (correct) rays; pectoral, 14 rays; anal, minute; caudal, about 6 rays.

19 body rings + 35 caudal rings.

Dorsal fin covers 5 3/4 body rings + 6 caudal rings (total 11 3/4 rings)

<u>Differs from normal</u> in having more rays (45) in dorsal than maximum normal number (40) mentioned by Jordan & Evermann, and in dorsal being on 11 3/4 rings instead of on only 9 rings. It must be either a variety or else a new species.

Colour.- After being in alcohol one day. Above, pale Wood Brown; sides pale Olive (darker than upper parts); underparts (underpart of snout, throat, belly, and underpart of tail) white tinged with pale Primrose Yellow; lower half of opercle, white tinged with purple. Dorsal fin banded with about 12 pale dark bands, and with about 10 minute black specks irregularly placed.

### Appendix 79: Accession Book No. 2: Page I32. Museum No. 4622

Museum No. 4622

Scientific Name. Notropis cornutus (Mitchill), var. fontalis (Agassiz) = N. megalops (Rafinesque) Jordan & Evermann, no. 456 Jordan's Manual, no. 113.

Common Name. Shiner; Red-fin; Dace.

Phylum, &c. Fish.

Locality and when collected. Taken with artificial fly, at northwestern extremity of Wright's Lake, where North-East River flows out of lake, to south of Pockwock P.O., Hammonds Plains district, Hx. Co., N.S.; about end of June 1918.

Collector (c) and Donor (d). James T Thomson (c.d.) Spring Garden Road, Halifax (per. Jas. Egan). Received. 6 July 1918

No. of Specimens. 2

Remarks. Family: Cyprinidae (Minnows).

Apparently there were a number of this species at this place. Mr. Thomson says they were very pretty when taken out of the water, but the colours faded afterwards. There are still <u>traces of red</u> at base of pectorals and adjacent flesh of belly, of one specimen.

Not noted in Jones's list. Reported by Dr. P. Cox as occurring in N.S.

(N. cornutus).

	Α.	В.
Total Length	5.55 inches	5.50 inches
Length to base of caudal	4.60 inches	4.53 inches
Head, length	1.12 inches	1.10 inches
Eye	.25 inch	.24 inch
Depth of body	1.27 inches	1.23 inches

Eye, 4 ½ times in head. Head 4 1/6 times in length to base of caudal. Depth, 3 2/3 times in length. Scales: 7 or 8 (from lat.[lateral] line to dorsal) - 43 in lat. line - 4 or 5 (from lat. line to vent)

Fin rays: Dorsal, 2 rays (in both specimens)

Pharyngeal teeth: 2.4 - 4.2 (in specimen B) (These teeth are in vial in the jar)

Reference:

Figure 87, Plate 92. Original note by Harry Piers concerning 2 Common Shiner captured at Wright Lake, Halifax Co., N.S. about end of June 1918.

### Appendix 80: Accession Book No. 2: Page 134. Museum No. 4630

Museum No. 4630

Scientific Name. Raja ocellata, Mitchill?

Common Name. Skate.

Phylum, &c. Fish.

Locality and when collected. Hubbards Cove, Hubbards, Hx. Co., N.S.; about 21 July 1918.

Collector (c) and Donor (d). H. Piers (c.).

Received. 7 Aug. 1918

No. of Specimens. 1 Cartilaginous Cranium and anterior Vertebrae of Raja ocellata, Mitchill?

Remarks. Length of cranium, 4:50 inches.

### Appendix 81: Accession Book No. 2: Page I34. Museum No. 4633

Museum No. 4633

Scientific Name. Thunnus thynnus (Linn.).

Common Name. Tunny; Horse Mackerel; Great Albacore.

Phylum, &c. Fish.

Locality and when collected. From fish taken in St. Margaret's Bay, off Hubbards, Hx. Co., N.S.; July 1918.

Collector (c) and Donor (d). Lawson Harnish (c.d.) albacore harpooner, Hubbards, N.S.

Received. Received by H. Piers, 23 July 1918.

No. of Specimens. 1 Adult series of 4 of the last posterior Caudal Vertebrae of *Thunnus thynnus* (Linn.).

Remarks. Shows processes on sides of vertebrae, to support the lateral fleshy keels of tail.

# Appendix 82: Accession Book No. 2: Page I35. Museum No. 4636

Museum No. 4636

Scientific Name. Siphostoma fuscum (Storer)? Variety.

Common Name. Common Pipe-fish. (variety).

Phylum, &c. Fish.

Locality and when collected. At surface of water, alongside of Peter Dauphinee's wharf east side of Hubbards Cove, Hubbards, Hx. Co., N.S.; 25 July 1918.

Collector (c) and Donor (d). E. S. F. Piers (c.d.) Halifax.

Received. 7 Aug. 1918

No. of Specimens. 1 Male (with egg-pouch).

Remarks. Family: Syngnathidae.

Total length, 5.92 inches

Dorsal fin rays, 43. Dorsal fin covers 5 full body-rings + 7 full caudal-rings, total 12 full rings.

Body rings, 19; caudal rings, 36.

Dorsal fin with 11 or 12 obscure dark bands.

Underparts sulphur-yellow in life.

Differs from normal in having 43 dorsal fin rays, instead of the normal maximum of 40. And more markedly in having the dorsal on 12 full rings, instead of the normal maximum of 9 (or possibly 10) as given by Jordan & Evermann.

# Appendix 83: Accession Book No. 2: Page 135. Museum No. 4637

Museum No. 4637

Scientific Name. Siphostoma fuscum (Storer)? Variety.

Common Name. Common Pipe-fish. (variety).

Phylum, &c. Fish.

Locality and when collected. At surface of water, alongside of Peter Dauphinee's wharf east side of Hubbards Cove, Hubbards, Hx. Co., N.S.;25 July 1918.

Collector (c) and Donor (d). E. S. F. Piers (c.d.) Halifax.

Received. 7 Aug. 1918

No. of Specimens. 1 Female (without egg-pouch).

Remarks. Family: Syngnathidae.

Total length, 5.70 inches.

Dorsal fin rays, 43.

Body rings 19; caudal rings 37.

Dorsal fin covers 5 full body-rings + 7 full caudal-rings, total 12 full rings.

Dorsal fin with about 12 blackish bands.

Differs from normal precisely as mentioned above under acc. no. 4636.

(obtained with acc. no. 4636, - doubtless a pair, male & female).

# Appendix 84: Accession Book No. 2: Page I36. Museum No. 4645

Museum No. 4645

Scientific Name. Raja ocellata, Mitchill (?), Probably R. ocellate or less likely R. laevis.

Common Name. Skate.

Phylum, &c. Fish.

Locality and when collected. Hubbards, Hx. Co., N.S.; about July 1918.

Collector (c) and Donor (d). Jeremiah Harnish (c.d.) Hubbards, N.S.

Received. (Received from Jeremiah ("Jery") Harnish, on 4 Aug. 1918).

No. of Specimens. 1 Cartilaginous Cranium of Raja ocellate

Remarks. The fish itself was not seen by H. Piers.

Length of cranium, 12 inches. (Total length of fish, probably about 60 inches).

# Appendix 85: Accession Book No. 2: Page 142. Museum No. 4675

Museum No. 4675

Scientific Name. Pygosteus pungitius (Linnaeus). J. & E. No. 1097.

Common Name. Nine-spined Stickleback.

Phylum, &c. Fish.

Locality and when collected. Taken in small brook (locally known as "Skating Pond Brook" which flows from so-called "Skating Pond"), at Indian Reservation or settlement, 1 mile SE of Elmsdale station, Hx. Co., N.S.; 13 Nov. 1918.

Collector (c) and Donor (d). Jerry Lone-cloud (c.d.), Dartmouth, N.S.

Received. 15 Nov. 1918

No. of Specimens. 1

Remarks. Total length, 1.67 inch; length to base of caudal 1.43 [inch]; head .42 [inch]; depth .25[inch]. Head in length, 3.40 times; depth in length, 5.72 (exclusion of caudal fin).

Fin formula; Dorsal VIII-I, 10 [spines, spine and rays]; pectoral, 10 [rays]; anal, I, 2 [spine, rays]; caudal, 12 [rays].

Ventral spine, length .14 inch (about 1/3rd length of head).

Colour (olive).- Above olivaceous punctuate and blotched and irregularly barred with fuscous.

Underparts silvery, brightest on lower posterior sides of head.

(Seems to show a tendency towards P. pungitius brachypoda (Bean))

Reference:

Figure 88, Plate 93. Original note by Harry Piers concerning one specimen of Ninespine Stickleback captured 1 mile SE of Elmsdale Station, Halifax Co., N.S. On 13 November 1918.

### Appendix 86: Accession Book No. 2: Page 146. Museum No. 4695

Museum No. 4695

Scientific Name. Anguilla chrysypa, Rafinesque.

Common Name. American Eel.

Phylum, &c. Fish.

Locality and when collected. Shubenacadie River, Elmsdale, Hants-Hx. Co., N.S.; 12 Feb. 1919.

Collector (c) and Donor (d). Jerry Lone-cloud (c.) Dartmouth, N.S.

Received. 22 Feb. 1919

No. of Specimens. 1 Skin of Anguilla chrysypa, Rafinesque.

Remarks. (Length of skin, without head, 30 inches)

In ancient times, according to Indian Lone-cloud, the Micmac Indians used thin thongs of eel-skin for hair strings, for tying their hair. The skins were also bound onto parts of the body affected with rheumatism. Strips of eel-skin, an inch wide, make the very best flail strings, or thongs for connecting handles and end of flails for threshing grain.

### Appendix 87: Accession Book No. 2: Page 149. Museum No. 4712

Museum No. 4712

Scientific Name. Xiphias gladius, Linn.

Common Name. Common Swordfish.

Phylum, &c. Fish.

Locality and when collected. Taken off Shag Bay, Hx. Co., N.S.; summer of 1915.

Collector (c) and Donor (d). D. Coolin [Coolen] (c.), Shag [Shad]Bay.

**Received.** 6 Sept. <u>1916</u>.

No. of Specimens. 1 Sword

Remarks.

Sword of Xiphias gladius Linn. which weighed 448 pounds. Present length of sword, 43 inches, but as about 6 or 7 inches of point had been broken off, the original length must have been 49 or 50 inches; the width at base is 4.90 inches. Weight of sword now 3 ½ lbs.

Omitted accessioning this specimen under 1916, when it was received.

This specimen of a large sword of Swordfish was shown in Fisheries Building, at Provincial Exhibition, Halifax, N.S.; 8 Sept. of 1915, and was left there and was taken for the Museum on 6 Sept. 1916. Marked on the sword was Weight of fish 448 lbs.

## Appendix 88: Accession Book No. 2: Page 159. Museum No. 4786

Museum No. 4786

Scientific Name. Gasterosteus gladiunculus, Kendall.

Common Name. [none given]

Phylum, &c. Fish.

Locality and when collected. Mouth of Sissibou River, St. Mary's Bay, Digby Co., N.S.; 30 June 1919.

Collector (c) and Donor (d). Dr. Philip Cox (c.d.), Fredericton, N. B.

Received. 3 Sept. 1919

No. of Specimens. 5

Remarks. Dr. Cox says this species seems to be uncommon there, as he has only seen 9 (nine) specimens during the summer. He considers it to be a good species. (vide his letter of 1 Sept. 1919). (The locality on the original label seems to be "Sissibou River quay" the last word being possibly doubtful). However Dr. Cox says they are "from the mouth of Sissibou River".

Reference:

Figure 101, Plate 106. Original note by Harry Piers on five specimens of Threespine Stickleback collected at St. Marys Bay, Digby Co., N.S. On 30 June 1919 by Philip Cox.

# Appendix 89: Accession Book No. 2: Page 167. Museum No. 4827

Museum No. 4827

Scientific Name. Liopsetta putnami (Gill). Young.

Common Name. Eel-back Flounder.

Phylum, &c. Fish.

Locality and when collected. Near Halifax, N.S.; about 4 Jan. 1920.

Collector (c) and Donor (d). Found among a bunch of smelts purchased by Mrs. H. Piers at Boutiliers fish-market, Halifax, 9 Jan. 1920, and doubtless taken in same of the shallow estuary along our coast near Halifax.

Received. 9 Jan. 1920

No. of Specimens. 1 Young.

Remarks. In the bunch was also a small Sculpin (*L. senpinus groenlandicus*) about 5 inches long.

The length of pectoral fin compressed with length of head shows this to be clearly *L. putnami*, not *L. glacialis*.

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Eyes on right side; lateral line about straight;- colour brownish-gray, spotted with dark; underside white.

Total length

Length to base of caudal

Depth

Head

Pectoral fin

3.10 ins
2.50 ins.
1.18 ins.
1.18 ins.
40 in.

Head in length, 3 5/10 times Depth in length, 2 1/10 times Pectoral in head, 1 8/10 times

D. [dorsal fin] 49 [rays]; V. [ventral fin] 36. Lateral line 69 (normally: D[dorsal]55 [rays], A [anal fin]40 [rays]; lat. [lateral] line, 70; length 10 ins.).

# Appendix 90: Accession Book No. 2: Page 178. Museum No. 4901

Museum No. 4901

Scientific Name. Raja laevis, Mitchill; adult male. Jaws of.

Common Name. Barn-door Skate.

Phylum, &c. Fish.

Locality and when collected. Southeast side of inner cove, off Simon Dauphinee's, Hubbard's Cove, Hx. Co., N.S.; 28 July 1920.

Collector (c) and Donor (d). H. Piers (c.)

Received. [not given]

No. of Specimens. 1 [Jaws of adult male]

Remarks. Male, with claspers

Teeth <u>35</u> in <u>5 to 12 rows</u>

32 6 to 12 rows

Total length of fish, 54.50 inches (= 4 ft. 6 ½ ins); greatest width across pectorals, 40.50 ins. Very few spines on middle of back of head. Row of spines on upper side of "wings" (as indicated in sketch). Middle line of tail above with row of smallish spines; another row near margin of tail. Colour.- above, greyish-brownish. Colour beneath, greyish about underside of head; white on rest of underside of body, with a very few, irregularly scattered dark spots about 3/4 inch diameter.

References:

Figure 28, Plate 30. Rough sketch of Barndoor Skate by Harry Piers (Museum No. 4901, Negative No. 23,464)

Figure 29, Plate 31. Sketch of Barndoor Skate by Harry Piers (Museum No. 4901, Negative No. 12,445)

# Appendix 91: Accession Book No. 2: Page 184. Museum No. 4929

Museum No. 4929

Scientific Name. Catostomus commersonii (Lacepede).

Common Name. Common Sucker.

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Phylum, &c. Fish.

Locality and when collected. Elmsdale, Shubenacadie River, Hx.-Hants Co., N.S.; Aug. 1919.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920

No. of Specimens. 2

Remarks. Total lengths: 4.68 & 5.30 ins.

# Appendix 92: Accession Book No. 2: Page 184. Museum No. 4930

Museum No. 4930

Scientific Name. Chrosomus erythrogaster, Rafinesque.

Common Name. Red-bellied Dace.

Phylum, &c. Fish.

Locality and when collected. Shubenacadie River, Hx.-Hants Co., N.S.; Aug. 1919.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920

No. of Specimens. 6

Remarks. Total length from 1.95 to 2.20 ins.

Exact locality on Shubenacadie River not given, but was either Milford, Elmsdale or Enfield.

#### Appendix 93: Accession Book No. 2: Page 184. Museum No. 4931

Museum No. 4931

Scientific Name. Semotilus atromaculatus (Mitchill).

Common Name. Horned Dace; Creek Chub.

Phylum, &c. Fish.

Locality and when collected. Milford, Shubenacadie River, Hx.-Hants Co., N.S.; Aug. 1919.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920

No. of Specimens. 2

Remarks. This species was numerous at Milford

Total lengths: 5.35 and 5.73 ins.

# Appendix 94: Accession Book No. 2: Page 184. Museum No. 4932

Museum No. 4932

Scientific Name. Notemigonus [Abramis] chrysoleucus (Mitchill).

Common Name. Golden Shiner.

Phylum, &c. Fish.

**Locality and when collected.** Elmsdale, Shubenacadie River, Hx.-Hants Co., N.S.; the 2 smaller specimen, 22 May 1920; the largest one, 7 July 1920.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920

No. of Specimens. 3

Remarks. Total lengths: spec. [specimens] of 22 May, 5.04 and 5.10 ins; spec. [specimen] of 7 July, 5.75 ins.

# Appendix 95: Accession Book No. 2: Page 184. Museum No. 4933

Museum No. 4933

Scientific Name. Notropis cornutus (Mitchill).

Common Name. Shiner; Red-fin.

Phylum, &c. Fish.

Locality and when collected. Elmsdale, Shubenacadie River, Hx.-Hants Co., N.S.; Aug. 1919.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920 No. of Specimens. 2

Remarks. Species abundant at Elmsdale

Total lengths: 4.55 and 4.65 ins.

### Appendix 96: Accession Book No. 2: Page 184. Museum No. 4934

Museum No. 4934

Scientific Name. Couesius plumbeus (Agassiz).

Common Name. [none given]

Phylum, &c. Fish.

Locality and when collected. Enfield, Shubenacadie River, Hx.-Hants Co., N.S.; Aug. 1919.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920.

No. of Specimens. 4

Remarks. Total lengths: 2.50, 2.64, 3.08, and 3.85 ins.

# Appendix 97: Accession Book No. 2: Page 184. Museum No. 4935

Museum No. 4935

Scientific Name. Fundulus diaphanus (LeSueur).

Common Name. Gray-back Minnow; Killifish; Freshwater "Minnow".

Phylum, &c. Fish.

Locality and when collected. Milford, Shubenacadie River, Hx.-Hants Co., N.S.; Aug. 1919.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920.

No. of Specimens. 3

**Remarks.** Total lengths: 2.80, 2.95, & 3.30 ins.

### Appendix 98: Accession Book No. 2: Page 184. Museum No. 4936

Museum No. 4936

Scientific Name. Perca fluviatilis, Linn. (= P. flavescens (Mitchill)).

Common Name. Yellow Perch.

Phylum, &c. Fish.

Locality and when collected. Milford, Shubenacadie River, Hx.- Hants Co., N.S.; Aug. 1919.

Collector (c) and Donor (d). A. H. Leim (c.) Atlantic Biological Station, St. Andrew's, N.B. (d.).

Received. 9 Sept. 1920.

No. of Specimens. 1

Remarks. Total length: 7.50 ins.

Determined as *Perca fluviatilus* by Dr. Philip Cox.

Dr. Philip Cox, in his letter of 3rd Sept, 1920, relating to the forwarding of the above specimens writes, "I cannot find any mature Semotilus billaris. The young perhaps 1 year old, appear in small numbers but are of the peculiar colour pattern on which Storer founded the S. pulchellus which has disappeared from the lists. I am therefore not including them; but after a more extensive study than I could possibly make here (at St. Andrews, N. B.) shall write you and also send specimens."

Reference:

Figure 30, Plate 32. Rough laboratory notes by Harry Piers concerning fishes in Shubenacadie River by A. H. Leim (Museum Nos 4929 to 4936, Negative No. 23,483)

# Appendix 99: Accession Book No. 2: Page 185. Museum No. 4940

Museum No. 4940

Scientific Name. Prionace glauca (Linn.).

Common Name. Great Blue Shark.

Phylum, &c. Fish.

Locality and when collected. Taken with hook, baited with codfish, about 3 miles east of Chebucto Head, entrance of <u>Halifax Harbour</u>, Hx. Co., N.S.; 23 Sept. 1920.

Collector (c) and Donor (d). Pilot Edward V. Renner (c.d.) No. 2 Pilot Boat, Halifax.

Received. 29 Sept. 1920.

No. of Specimens. 1 Jaws, and basal part of Skull (the latter with the snout portion cut off).

Remarks. See also 3778. These sharks apparently first appeared about 15 Aug. 1920, were very abundant about 25 Aug., and by 23 Sept. Only one was seen. Family:

Galeidae Teeth in 27 rows; serrated

26

From an individual which measured about 6 feet from snout to tip of tail. One aspect of the skull has a curious resemblance to the trunk of a female body.

This specimen was the only one seen by No. 2 Pilot Boat during the week it was out on that trip, about 20 to 27 Sept./20. It was caught with a hook attached to a wire mode to prevent the fish biting off the hook, and the bait used was codfish.

It was the same, say the pilots, as the sharks which were very plentiful in the entrance of Halifax Harbour for a period about 25 th August of this year; but the other ones got further in than this one. They "fin" a lot at surface of the water (show the dorsal fin), like a Swordfish. They were extremely voracious, snapping up every morsel thrown to them. Renner says that sometimes they would pierce one through with the iron shaft of a harpoon, and yet it would swim about so pierced, and come and eat scraps thrown to it. Renner says that one of those previously seen was over 20 feet long, a monster, and with it were lots of smaller ones about 10 feet long. (Vide Pilot Renner).

One of the Pilots told me a few weeks ago, that they had taken about 20 of these sharks with harpoons and hooks from the pilot boat. He had never heard of a shark attacking a person on our Nova Scotian coast.

The "Daily Echo" newspaper of Halifax, of Frid., 27 Aug. 1920, had an article about the presence of these voracious sharks off Halifax. It said that during the week of about 15-22 August the pilots noticed a few of the sharks in the water outside; but during the week of about 22-27 Aug. 1920 they were very plentiful. In past our pilot said that he had never seen so many. The pilots captured about a score and destroyed them, yet the waters were fairly swimming with them. It was said that they were what the fishermen call "blue sharks". They travel very fast. Every year a few sharks make their appearances off the coast, but seldom do they come inshore and never in such numbers as now reported. On Tues., 24th Aug. the men on No. 2 Pilot Boat decided to destroy some of them, & on that day they harpooned 7. on Wed., 25 Aug. more were captured. One of the fish taken is said to have measured about 10 feet and weighed between 500 and 600 pounds. The paper said that sharks have been seen in the Harbour and North West Arm before frequently.

# Appendix 100: Accession Book No. 2: Page 185. Museum No. 4941

Museum No. 4941

Scientific Name. Carcharhinus obscurus (LeSueur) or Prionace glauca (Linn.).

Common Name. Dusky Shark or Great Blue Shark.

Phylum, &c. Fish.

Locality and when collected. Caught with hook & line, baited with fish, by crew of No. 2 Pilot Boat (schooner), at entrance of Halifax Harbour, 4 miles southeast of Chebucto Head, Hx. Co., Nova Scotia; about noon, Sun., 10 October 1920.

Collector (c) and Donor (d). Crew of No. 2 Pilot Boat (c.) Pilot James G. Renner, No. 2 Pilot Boat, Halifax (d.)

Received. 11 Oct. 1920.

No. of Specimens. 1

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Remarks. Only shark seen during that trip of the pilot boat 4-10 Oct.

Colour above, dark bluish-grey; below, white.

Attached to the side of the shark had been a sucking-fish, about 7 or 8 inches long, either *Echinis naucrates* L. Sucking-fish, or *Remora remora* (L.) Remora.

Sent to L. A. Purcell, but never returned.

Skin went bad

#### References:

Figure 31, Plate 33. Original sketch of Blue Shark from about 3 miles east of Chebucto Head (Museum No. 4941: Negative No. 23,498)

Figure 32, Plate 33. Sketch of Blue Shark from about 3 miles east of Chebucto Head (Museum No. 4941: Negative No. 12,442)

Figure 33, Plate 34. Correspondence to Harry Piers from H. F. Moore dated 8 October 1920 concerning the identification of shark jaws (Museum No.4941: Negative No. 23,460)

Figure 34 A, Plate 35 and Figure 34 B, Plate 36. Draft of two page correspondence to H. F. Moore by Harry Piers dated 26 October 1920 concerning the identification of shark jaws (Museum No. 4941: Negative No's 23,457 and 23,459)

Figure 35 A, Plate 37 and Figure 35 B, Plate 38. Two page correspondence to Harry Piers from H. F. Moore dated 7 December 1920 concerning the identification of shark jaws (Museum No. 4941: Negative No's 23,453 and 23,454)

#### Appendix IOI: Accession Book No. 2: Page 198. Museum No. 4995

Museum No. 4995

Scientific Name. Salvelinus fontinalis (Mitchill). Male.

Common Name. Brook Trout; Lake Trout.

Phylum, &c. Fish.

Locality and when collected. Caught with minnow, while fishing off Giles Point on east side of middle of Morris (McDonald) Lake, 1/4 mile SE. of the island, and 3 miles ESE of Dartmouth, Hx. Co., N.S.; morning of 5 June, 1921 (was landed 10 minutes after being hooked).

Collector (c) and Donor (d). George Robert Foster (c.d.) Porter of Halifax Hotel, of Portland St., Dartmouth.

Received. 7 June 1921

No. of Specimens. 1

Remarks. This is without doubt an ordinary Lake Trout which had run to sea, and so increased greatly in size (becoming what is called a Sea Trout), and then had returned to the lake again and been long enough (at least one year) in freshwater to re-assume the dark colour and red spots of the normal freshwater trout.

The spot where this trout was taken is 4 1/4 miles from the sea at Cow Bay, and the outlet (southern end) of the lake is 3 1/4 miles from the sea at Cow Bay. The stream from this lake flows for 2 1/4 miles into Cow Bay Pond. The lake is 2 1/4 miles long, and varies in width from 1/8 to nearly ½ mile.

Measurements: Total length, snout to end of caudal fin, 22 inches (21 ½ ins. with lower jaw closed), greatest depth 5.75 inches; greatest width, 4.00 ins.; length of head 4.90 ins.; upper

maxillary 3 ins. long; and extends .80 inch behind posterior margin of eye. Length, snout to base of caudal fin, 19.40 inches. Head in length to base of caudal, 4 times. Depth in length, about 3 ½ times. Dorsal fin of 10 rays; anal fin of 8 or 9 rays.

Weight 5lbs. 13 oz. when taken out of water, and 5 3/4 lbs. (5 lbs. 12 oz.) when Foster got it home. It weighed 5 lbs. 10 oz. when received at Museum on 7 June, some moisture being dried out of it.

<u>Colour.</u>- Was very dark coloured when taken, and had very many <u>red spots</u> on the sides, and also blackish spots. Has since faded to a much lighter colour.

Colour as noted on 8 June:- Colour blackish-brown on back, becoming brownish on sides, and passing into brownish-yellow on lower parts of sides, and white on belly. The brownish sides are spotted with many brownish-yellow spots and some of them somewhat silvery, about .10 to .12 inch diameter, with about 38 distinct dark crimson spots on each side. On the right side there are 33 of these small red spots below the lateral line, and 5 of the red spots above the lateral line (total 38 red spots on right side). The lower fins (pectorals, anal and ventral) are marked with red, mostly towards the outer ends. Compare with Acc. No. 3370

Harold St. Clair Silver says he was with John Y. Payzant when the latter (Payzant) hooked the 7 ½ lb. Sea Trout which is now in this Museum. It was unmistakeably a sea trout, bright and freshly run. It was taken at north end of Salmon Hole, Little Salmon River, Preston, after the first heavy rain in July (1871). Preserved in 8 parts water to 1 part formaldehyde on 8 June 1921. Harold St. Clair Silver and Jos. T. Egan both positively agreed that it is a Lake Trout, and that it has not the larger scales, etc. of real Sea Trout. George Chapman, guide of Waverley, Hx. Co., positively says, that it is a trout which had run to sea, and which had been back in fresh water over winter and again assumed the colour of the Lake Trout. Chapman affirms that trout while in salt water have no teeth on the tongue; while when in freshwater (?) they have teeth on the tongue and on the right side of inner part of jaw far back in mouth. Harold St. C. Silver agrees that the fish had once been to sea but had been sometime back in the lake and regained the colours of a Brook or Lake Trout.

#### Comparative Table of Very Large Brook and Sea Trout

Acc. No.	Name	Sex	Locality	Date	Collector	Caught With	Weight	Total Length	Girth	Remarks
In Prov. Mus.	Sea Trout		Little Salmon River	July 1871	John Payzant	Artificial Minnow	7 ½ lbs.	24 ins.	17 ins.	
3370	Brook Trout	M	Little Salmon River	30 May 1909	Simon Meaden	Minnow	6 3/4 lbs.	23 1/4 ins.	15 1/4 ins.	
	Brook Trout		Little Salmon River	Aug. about 1912	Harold St. C. Silver	Fly	6 1/4 lbs.			Vide H. St. C. Silver
	Brook Trout		Flat Lake	early 80s	Fred Morris	Artificial Fly	About 6 lbs.			Vide Geo. Mullens
4995	Brook Trout	M	Morris Lake	5 June 1921	Geo. R. Foster	Minnow	5 lbs.	22 ins.	14 ins.	

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 Sea Trout	Little Salmon River	July 1871	John Y. Payzant	Artificial Minnow	5 1/4 lbs.	Vide H. St. C. Silver
 Trout	Lake Major	2 May	James Gentles		5 ½ lbs.	Vide Ac. Records

### Appendix 102: Accession Book No. 2: Page 199. Museum No. 4997

Museum No. 4997

Scientific Name. Raja sp.

Common Name. Skate. So-called "Devil's Pocketbook" or "Sea-purse".

Phylum, &c. Fish.

Locality and when collected. Cow Bay, Hx. Co., N.S.

Collector (c) and Donor (d). Mrs. Amelia Reid (c.d.) Bedford, N.S.

Received. 9 June 1921

No. of Specimens. 1 Egg-case of Raja sp.

Remarks. [none given]

#### Appendix 103: Accession Book No. 2: Page 200. Museum No. 5014

Museum No. 5014

Scientific Name. Roccus lineatus (Bloch).

Common Name. Striped Bass.

Phylum, &c. Fish.

Locality and when collected. At mouth of Shubenacadie River, at Black Rock, Col. Co., N.S.; on or about 20 May 1921

Collector (c) and Donor (d). Mr. McNutt (c.) Purchased from H. S. Cruikshank. Truro

Received. 21 July 1921

No. of Specimens. 1

Remarks. Weight of fish, 18 lbs. [see Mus. No. 5015, paper mache cast of Mus. No. 5014]

# Appendix 104: Accession Book No. 2: Page 202. Museum No. 5021

Museum No. 5021

Scientific Name. Hemitripterus americanus (Gmelin) J & E. p. 2023.

Common Name. Sea Raven.

Phylum, &c. Fish.

Locality and when collected. Caught at ferry wharf, at mouth of North West Arm, Halifax County, N.S.; 22 Aug. 1921.

Collector (c) and Donor (d). Charles Allen (c.d.) Halifax.

Received. 23 Aug. 1921.

No. of Specimens. 1

Remarks. Total length 10.40 ins. Head 2 2/3 in length; depth 3 2/3 in length.

Fin rays: D. IV,XII, I, 13; A. 14; V. I,3

(With it was taken *Myoxocephalus octodecimspinosus* (Mitchill), 18 spined sculpin, which was not purchased. Total length 12 ins. Head 2 3/4 [in length]; depth, 5 ½ [in length]. D.[dorsal fin] VIII-15 [spines-rays]; A [anal fin], 13 [rays]; V [ventral fin], I,3 [ spine, rays]).

### Appendix 105: Accession Book No. 2: Page 202. Museum No. 5025

Museum No. 5025

Scientific Name. Egg of Squalus acanthias, Linn.

Common Name. Dog-fish.

Phylum, &c. Fish.

Locality and when collected. From a fish taken off Halifax Harbour, Halifax Co., N.S.; 21 Sept. 1921.

Collector (c) and Donor (d). A fisherman (c.) Jos. Perrin (d.) from McNabs Island, Hx.

Received. 23 sept. 1921.

No. of Specimens. 1

Remarks. The fish was about 3 ½ lbs. in weight, and the eggs were not out of it. Colour of egg, yellowwhite. Size of egg, 1.65 in. X 1.35 in. Weight 26 ½ grams.

# Appendix 106: Accession Book No. 2: Page 203. Museum No. 5029

Museum No. 5029

Scientific Name. Pomolobus pseudoharengus (Wilson). Young.

Common Name. Alewife; Gaspereau.

Phylum, &c. Fish.

Locality and when collected. In Shubenacadie River at Elmsdale Bridge, Elmsdale, Hx-Hants Co., N.S.; 29 Sep. 1921.

Collector (c) and Donor (d). Jerry Lone-cloud (c.d.).

Received. 30 Sept. 1921

No. of Specimens. 4

Remarks. These young Gaspereau have been coming down the Shubenacadie River, trying to get to sea, but have been held there for about a month, owing to the very low water, as result of the excessively dry season. Cannot get to the sea. Immense numbers of them there. Said that Eels which are also going down, are feeding on them. There are more small Gaspereau then the larger, young ones. All of this years hatch according to Lone-cloud. Lone-cloud says that the young Gaspereau usually run down for about a month, starting about middle of August, and that they have usually all gone to sea by 15th to 20th Sept.

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	Total length	Head in length	Depth in length	Eye in head	1st. ray of dorsa	Base of dorsal
(a)	6.30 inches	3 9/10 times	3 2/3 times	4 times	.73 inch	.80 inch
(b)	4.05 inches	4 times	3 4/5 times	3 ½ times	.43 inch	.49 inch
(c)	3.35 inches	4 times	3 4/5 times	3 ½ times	.34 inch	.44 inch
(d)	3.15 inches	4 times	4 times	3 ½ times	.35 inch	.38 inch
Peritoneum of (b), (c) and (d) slightly darker then in (a)						

### Appendix 107: Accession Book No. 2: Page 230. Museum No. 5146

Museum No. 5146

Scientific Name. Germo alalunga (Gmelin). Large adult.

Common Name. Long-finned Albacore.

Phylum, &c. Fish.

Locality and when collected. Taken on a halibut trawl, off Devil's Island, near Halifax Harbour, N. S.; 8 Sep. 1922.

Collector (c) and Donor (d). A fisherman (c.) Boutiliers Ltd. (d.) Halifax.

Received. Examined by Harry Piers on 9 September 1922.

No. of Specimens. 1

Remarks. The trawl hook caught the fish close to the left eye.

Was exhibited as a fish of unknown name, at Boutiliers Ltd. fish market, Bedford Row, Hx., on 9 Sept. when I examined and measured it, and identified it.

Total length (snout to end of caudal)

Length to end of vertebrae (base of caudal)

Pectoral fin (length)

Head 12.50 inches

Head in length, 3.36 times

Finlets yellow

47.75 inches

42.00 inches

17.00 inches

This is the second known occurrence of this species on the coast of Nova Scotia, one having been taken in the summer of 1878 on a trawl-line on Banquereau, to the northward of Sable Island. That specimen was obtained by Capt. William Thompson, of the schooner "Magic" of Gloucester, Mass. at a depth of 300 fathoms. (See Goode & Bean's List of Fishes of Massachusetts Bay, 1879, and included on that authority by J. M. Jones in his List of the Fishes of Nova Scotia, 1879, Trans. N. S. I. N. S., vol.5, p. 88).

This species occurs in tropical seas and is pelagic and widely distributed. It is rarely seen on the Atlantic Coast of America but is very common in the Mediterranean. It is found on the Pacific Coast as far north as San Francisco, & is extremely abundant in the spawning season about the Santa Barbra Islands.

Its occurrence on the Nova Scotia Coast is purely accidental. The usual length is 3 feet.

# Appendix 108: Accession Book No. 2: Page 232. Museum No. 5152

Museum No. 5152

Scientific Name. Photograph of Alopias vulpes (Gmelin).

Common Name. Thresher; Fox-shark.

Phylum, &c. Fish.

Locality and when collected. Captured in Eli James's fish-weir, Horseshoe Cove, Cape d'Or, Minas Channel, Cumberland Co., N. S.; 26 Jul. 1922.

Collector (c) and Donor (d). Eli James (c.) East Advocate, Cumb. Co., N. S.: Miss Bessie James donated the photograph.

Received. 20 Sep. 1922

No. of Specimens. 1

Remarks. This shark was given to a man who skinned it. It was the first of its kind ever seen in those waters. The species is uncommon in the waters of Nova Scotia.

Total length of the shark, 15 feet; tail, 7 ft. 6 ins.

Reference:

Figure 36, Plate 39. Photograph of Thresher Shark from Minas Channel (Museum No. 5152, Negative No. 23,788)

### Appendix 109: Accession Book No. 2: Page 233. Museum No. 5155

Museum No. 5155

Scientific Name. Monacanthus hispidus (Linnaeus).

Common Name. Fool Fish; File Fish.

Phylum, &c. Fish.

Locality and when collected. Taken in a herring net, in about 5 fathoms of water, near Bald Rock, about 1 mile south of Prospect (Upper Prospect), at mouth of Prospect Bay, westward of Halifax, Hx. Co., N. S.; 20 Sep. 1922.

Collector (c) and Donor (d). John & William Hardeman (c.d.), Upper Prospect, N. S.

Received. 21 Sept. 1922.

No. of Specimens. 1

Remarks. Total length, 5.00 ins.; length to base of caudal, 4.00 ins.; depth, 2.25 ins.; head, 1.25 ins. Head in length, 3.2 times; depth in length, 1.77 times.

D. [dorsal fin] I-32, 31 [spine-rays, rays], P. [pectoral fins] 14 [rays].

Dorsal spine single; skin with minute rough sagreen-like scales; pelvic bone present (small, moveable); gill-slit short, nearly vertical.

<u>Colour.</u>- Creamy white, more or less mottled with olivaceous and spotted with brown. Iris olivaceous-yellow-can very rapidly change colour to a strong blotching of olivaceous; or further to a general olivaceous colour, spotted or blotched with dark olivaceous or brown, and also spotted with cream-colour. Two obscure dark bands on caudal. (Description of colour, etc. from specimen while <u>alive</u>).

Accidental occurrence in Nova Scotian waters. Only one previously reported from Nova Scotia, namely by J. Matthew Jones, who noted one specimen taken in St. Margaret's Bay in the autumn of 1861. Rev. John Ambrose had obtained it for Mr. Jones. Ambrose, I think, was then stationed at

Peggys Cove, 6 miles to westward of Prospect (See Jones, Trans. N. S. I. N. S., vol. 1, pt. 1, 1863, p. 53; also Jones, Trans. N. S. I. N. S., vol. 5, 1879, p. 95, no. 85).

It is worthy of note, that very many accidental occurrences of southern fishes taken places along our coast in <u>September</u>. Does the Gulf Stream tend towards our coast at that time of the year? This species ranges from Cape Cod to Brazil.

Reference:

Figure 91, Plate 96. Original note by Harry Piers concerning one specimen of Planehead Filefish, *Monacanthus hispidus*, captured 1 mile south of Prospect on 20 September 1922.

[Piers was probably one of the first persons to suggest southern fishes visit our coast regularly]

# Appendix IIO: Accession Book No. 2: Page 237. Museum No. 5176

Museum No. 5176

Scientific Name. Limanda ferruginea (Storer).

Common Name. Rusty Dab; marketed locally under the name "Sole".

Phylum, &c. Fish.

Locality and when collected. Taken off Halifax Harbour, N. S., said to be fairly deep water; 8 Nov. 1922. Collector (c) and Donor (d). Bought at Boutilier's Fish market, Bedford Row, Halifax for .20 [cents].

Received. 10 Nov. 1922.

No. of Specimens. 1

Remarks. (A number for sale there, and advertised as "Sole").

Measurements.- Total length, 15.00 inches; length to base of caudal, 12.50; depth, 6.60; head, 3.00; height of dorsal, 1.42; height of anal, 1.50; right pectoral, 1.50 ins. long; left pectoral, 1.05 ins. long.

Head 4 1/6 times in length; depth 1 9/10 times in length; eye 5 1/4 times in head.

Fin rays:- D. [dorsal] 81; P. [pectoral] 10 (1st. and last small); Lateral line, 90 scales.

Description:- Eyes on right side. Edge of preopercle free. Ventral fins nearly symmetrical as to position and form. Teeth small, close set, 12 teeth on right side + 33 teeth on left side of lower jaw, being thus mostly on blind side. Eyes 5 1/4 times in head length, the lower eye slightly in advance of the upper one. Scales on right side ctenoid (minutely spinous on posterior edge); those on blind side, smooth. Dorsal inserted over anterior fourth of upper eye; it's middle rays regressed. Pectoral ½ length of head. Caudal fin rounded. Anal spine (in front of anal fin) strong. Lateral line with an arch in front, the depth of which is 2/5 the length of the arch. A concealed spine behind ventrals. Ventral of coloured side partly lateral, the other wholly so.

Colour: Right side gray, with numerous rather small, distant spots of rusty colour; this general colour also applying to the fins and caudal fin. Underside (left or blind side) white, faintly tinged with yellowish; with caudal peduncle, and dorsal and anal fins and adjoining parts, pale lemon yellow.

# Appendix III: Accession Book No. 2: Page 249. Museum No. 5225

Museum No. 5225

Scientific Name. Coregonus labradoricus, Richardson.

Common Name. Sault White-fish.

Phylum, &c. Fish.

Locality and when collected. Caught with bait (worm) in the swift water from the spillway of the dam, outlet of Millipsigate Lake, near the headwaters of Petite Riviere, 4 3/4 miles SW. of Bridgewater, Lun. Co., Nova Scotia; 9 May 1923. That is, in stream between Millipsigate (or Leipsigate) Lake and Hebb's Lake.

Information furnished by S. E. March.

Locality.- This fish was caught at the outlet of Millipsigate Lake, in the swift water from the spillway of the dam.- Minamkie [Manamkeak], Millipsigate and Hebb's Lakes form a chain, in the order named, connected by streams. They are the head-waters of the Petite Riviere, now damned and controlled by the town of Bridgewater as the sources and storage for the town water supply & electric light power. Hebb Lake is shut off from the main stream by an 18 to 20 ft. concrete dam with no fishway; and before the concrete dam existed, a wooden dam of about 14 feet in height. Access to this lake from the sea for fish is entirely out of the question, as with the exception of very high freshets all water from this lake joins the lake below through the flume and turbine of the power- plant under a 25 ft. head.- Any fish in this lake should be able to pass upward into Millipsigate and Manamkeak by way of the gates which open up from the bottom. The writer (Mr. M.[March]) has known of three being transferred inadvertently over the dam at Millipsigate, and has heard of a stray fish being taken below Minamkie [Manamkeak], and also below the Power House but in the latter use where it was a small Salmon (1 1/4 lbs.). The water in which they occur is, of course. Freshwater.

Mr. March says that he only knows of the one place where this fish is taken, although he has had 40 years of angling; but for the reasons stated, it is impossible for it to gain access to the waters above, and as very small fry might make those below.

Collector (c) and Donor (d). S. Edgar March

Received. 11 May 1923

No. of Specimens. 1

Remarks. Mode of Capture. This specimen was taken with hook and worm. Mr. Marsh has personally taken them with worm, small minnow, small artificial fly and with tiny natural flies upon very small common bait hook. The small artificial flies used were dull yellow, gray, and black bodies. The natural flies used had black or gray wings. Bait is usually taken near the surface in swift running water. The fly is taken at from 2 to 6 inches above water and occasionally on the surface. When hooked they almost always leap from the water as a Salmon does, and presume the same tactics until exhausted, are gamey fighters. No great catches have been made. Habits. Seem to be in schools.

Size and weight.- From personal knowledge, 18 inches in length is the greatest length. As usually caught they vary in length from 7 to 16 inches. Two years ago Mr. M. [March] weighed several taken from a more than usual successful catch, and they run from 1 1/4 to 1 ½ lbs. Of the size of this specimen (5225) Mr. M. has not seen more than a half dozen and smaller than that only one. (In a previous letter he gave the weight as from ½ to 1 ½ lbs.) The proportions of the larger fish are practically the same as the specimen sent.

<u>Flesh.</u>- They are an excellent table fish, of which Mr. M. says he would like very much to give a personal demonstration. Flesh when cooked as about the same colour as that of a herring, but the bones are small & seem to be no more evident than those of trout.

Colour:- Back blue-black, with blue reflections; sides silvery with blue reflections, scales punctated with black; belly white with bluish reflections. Upper fins dusky or black; lower fins white with outer ends blackish, caudal dusky. Iris yellow.

Measurements.- Total length, 10.30 ins.; length to base of caudal, 9.15 ins.; greatest depth, 1,90 ins.; head, 1.85 ins.; eye, .40 [ inch]; cleft of mouth, .55 in.; maxillary, .55 in. (Reaches back to below pupil of eye).

<u>Proportions.</u>- Head in length (to base of caudal), 4.94 times; depth in length, 4.81 times; eye in head, 4.60 times; maxillary in head, 3.36 times.

Weight.- 5 ozs. (After being in formaldehyde for 10 days).

<u>Fin rays.</u>- 1st. dorsal, <u>11</u> 1/3; 2nd dorsal, adipose; pectoral, <u>14</u>; anal, <u>12</u> 1/3; ventral, <u>12</u>. <u>Scales.</u>- 9 or 10 between lateral line and front of dorsal; <u>100</u> in lateral line (100 on right side, 101

on left side); 9 between lateral line and vent. i.e. 9 or 10 - 100 - 9.

Lower jaw just included when jaw is shut; but projecting considerably beyond snout when mouth is opened.

Gill rakers, 11 (above)+ 16 (below the angle); largest gill raker, .17 inch long (2.35 times in eye). Dr. Philip Cox's (Fredericton, N. B.) opinion as to species.- It was sent to Dr. Cox, but owing to delay in delivery, the specimen became dry, shrinking and wrinkled, so that little if any use can be made of it for identification. "The supplemental bone of the sup. maxillary is well defined & is of the Coregonus type. The dark fins are suggestive. It resembles Coregonus labradoricus as I found it in the lakes of the Upper St. John. This group is an extremely difficult one to diagnose, as there seems to be much intergradation, and species seem to blend with species. Even Coregonus labradoricus is by some regarded as a variety of C. clupeaformis. I am returning this specimen, expressing my regret at the delay in its receipt, that has made it impossible for me to arrive at a reliable conclusion." (Letter of Dr. P. Cox., 5 Aug. 1923).

References:

Figure 37, Plate 40. Letter to Harry Piers from S. Edgar March dated 27 April 1924 concerning Sault White-fish [Atlantic Whitefish] from Millipsigate Lake (Museum No. 5225, Negative No. 23,449).

Figure 69, Plate 74. Letter to Harry Piers from S. Edgar March dated 14 October 1925 concerning Sault Whitefish [Atlantic Whitefish] from Millipsigate Lake (Negative No. 24,757).

### Appendix II2: Accession Book No. 2: Page 253. Museum No. 5242

Museum No. 5242

Scientific Name. Salvelinus fontinalis (Mitchill). Abnormal specimen, with upper jaw atrophied or greatly shortened, probably by some injury when young.

Common Name. Brook Trout.

Phylum, &c. Fish.

Locality and when collected. Caught with minnow, Square Lake, near headwaters of East River, Chester, to west of upper end of Dauphinee Mill Lake, and 4 3/4 miles NW. of Hubbards, Lun. Co., N.S.; 25 May 1923.

Collector (c) and Donor (d). E. L. McDonald (c.d.) Halifax Hotel, Halifax.

Received. 28 May 1923.

No. of Specimens. 1

Remarks.

Total length, 11.15 ins.; greatest depth, 2.35 ins.; upper jaw is .55 inch shorter than the normal lower jaw. Weight, 8 oz. (½ lb.). Has red spots, seems to be a normal Brook Trout in all other respects except the aborted head in front of the eyes.

George Mullane says he once got a similar trout, about the same size, at Grover's Lake. "Ted" (Edw. W.) Marshall, barber at Halifax Hotel, says he once got a similar fish, about half its size.

# Appendix II3: Accession Book No. 2; Page 275; Museum No. 5347

Museum No. 5347

Scientific Name. Cyclopterus lumpus, Linn. Young.

Common Name. Lumpfish; Lump-sucker.

Phylum, &c. Fish.

Locality and when collected. Northwest Arm, at Jollimores, Hx. Co., N.S.; 11 Oct. 1923.

Collector (c) and Donor (d). Wm. MacIlreith (c.d.) Jollimores, N.W.A., Hx.

Received. 12 Oct. 1923.

No. of Specimens. 1

Remarks. Total length, 1.88 inch; length to base of caudal, 1.53 in.

Dorsal ? [fin], 10 [rays]; Pectoral [fin], [none given]; Anal [fin], 10 [rays]; Caudal [fin], 12 [rays]. 1st dorsal with 4 or 5 posterior rays, not yet absolute.

Colour pale olivaceous, very finely punctated with reddish-brown. Tubercles reddish-brown. Iris, golden-brown.

### Appendix II4: Accession Book No. 3: Page II. Museum No. 5454

Museum No. 5454

Scientific Name. Coregonus labradoricus, Richardson.

Common Name. Sault Whitefish.

Phylum, &c. Fish.

Locality and when collected. Caught at outlet of Millipsigate Lake, near headwater of Petite Riviere, 4 3/4 miles SW of Bridgewater, Lun. Co., N.S.; 5 May 1924. (Same locality as that of acc. no. 5225, which see for fuller information).

Collector (c) and Donor (d). S. Edgar March (c.d.) Bridgewater, N.S.

Received. 6 May 1924.

No. of Specimens. 1

Remarks. Compare acc. No. 5225.

# Appendix II5: Accession Book No. 3: Page II. Museum No. 5455

Museum No. 5455

Scientific Name. Coregonus labradoricus, Richardson.

Common Name. Sault Whitefish.

Phylum, &c. Fish.

Locality and when collected. Caught at outlet of Millipsigate Lake, near headwaters of Petite Riviere, 4 3/4 miles SW of Bridgewater, Lun. Co., N.S.; 5 May 1924.

Collector (c) and Donor (d). S. Edgar March (c.d.) Bridgewater, N.S.

Received. 6 May 1924.

No. of Specimens. 1

Remarks. Description of acc. nos. 5454 & 5455.

Between lateral line & vent

<u>Colour.</u>- Back, bluish-black, with blue reflections; sides <u>silvery</u> with blue reflections; belly silvery with slight bluish reflections; gill covers, yellowish. Sides, etc. punctated with black.

Dorsal fin blackish with black punctations; lower fins white, with outer 2/3rds blackish, with black punctations; caudal blackish. Iris yellowish.

	5454	5455
Measurements-		
Total length	11.25 ins.	10.60 ins
Length to base of caudal	9.90 ins.	9.22 ins.
Greatest depth	2.10 ins.	1.95 ins
Head	2.03 ins.	1.97 ins.
Eye (yellowish iris)	.41 in.	.40 in.
Cleft of mouth	.63 in.	.55 in.
Maxillary	To a trifle behind	To between front
·	front edge of	edge of iris &
	yellow iris	front edge of pupil
Proportions-		
Head in length (to base caudal)	4.87 times	4.63 times
Depth in length	4.71 times	4.73 times
Eye (irris) in head	4.95 times	4.93 times
Maxillary in head	3.22 times	3.58 times
Weight	6 ½ oz.	5 1/4 oz.
Fin rays-		
1st dorsal	10 1/3 last one split	10 1/3 last one split
2nd dorsal	adipose	adipose
Pectoral	16 last one rather short	16 last one rather short
Anal	11	11
Ventral	<u>11</u>	12
Scales-		
Between lateral line & front of he	ead 11	11
In lateral line R. [right side	]100; L. [left] 103	R. 97; L. 98

Gill rakers of 5454 10 above + 14 or 15 below the angle; longest gill raker .20 inch long (2 times into diameter of eye (iris)).

5455 10 above + 15 below the angle; longest gill raker .20 inch long (2 times into diameter of eye (iris))

Back <u>not</u> elevated. Could not detect any teeth on tongue. Lower jaw <u>not</u> projecting beyond upper one. Distance from tip of mouth to occiput about 2 ½ in distance from occiput to origin of dorsal fin. The apparent lack of teeth on the tongue seems to be about the only point in which they seem to differ from *C. labradoricus*, and in having 21 to 24 more scales in the lateral line than that species usually less. It is, however, one species which is quite variable.

#### Appendix II6: Accession Book No. 3: Page I6. Museum No. 5479

Museum No. 5479

Scientific Name. Perca flavescens (Mitchill).

Common Name. Yellow Perch.

Phylum, &c. Fish.

Locality and when collected. Very common, about creeks off <u>Musquodoboit River</u>, near Crawford's Falls, Hx. Co., N.S.; 23 June 1924

Collector (c) and Donor (d). H. St.C. Silver (c.d.) Halifax.

Received. 24 June 1924.

No. of Specimens. 2

Remarks. Fam. [family] Percidae.

Sides light-golden yellow when first taken (faded out in preservation). Orange on ventrals and a spot of orange at front of anal fin. 7 dark cross bars on sides of each

	Α	В
Total length	6.20 ins.	5.50 ins
Length to base of caudal	5.10 ins.	4.65 ins
Head	1.53 ins.	1.48 ins.
Depth	1.50 ins.	1.28 ins.
Head in length to caudal	3.33 times	3.14 times
Depth in length to caudal	3.40 times	3.63 times
Fin Formula:		
Dorsal	XIII-I,14	XIII-I,13
Ventral	I,5	I,5
Anal	II,7	II,7
Scales	6 - 58 - 14	5 - 59 - 13

Reference:

Figure 38, Plate 41. Rough laboratory notes on Yellow Perch from creeks off Musquodoboit River by Harry Piers (Museum No. 5479, Negative No. 23,500)

# Appendix II7: Accession Book No. 3: Page 16. Museum No. 5480

Museum No. 5480

Scientific Name. Morone americana (Gmelin).

Common Name. White Perch.

Phylum, &c. Fish.

Locality and when collected. Very common, about creeks off <u>Musquodoboit River</u>, near Crawford's Falls, Hx. Co., N.S.; 23 June 1924.

Collector (c) and Donor (d). H. St. C. Silver (c.d.) Halifax.

Received. 24 June 1924.

No. of Specimens. 1

Remarks. Fam. [family] Serranidae

Total length, 6.20 ins.; length to base of caudal, 5.10; head, 1.67 ins.; head in length 3.05 times; depth 1.75 ins., depth in length, 2,91 times.

Fin formula: D.[dorsal] IX-I,12; V. [ventral] I, 5 or 6; A. [anal] III,9.

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Dorsal fins joined at base only. 2 nd anal spine about 2 3/4 times in head.

Scales: lat. line, 53

Reference:

Figure 39, Plate 42. Rough laboratory notes on White Perch from creeks off Musquodoboit River

by Harry Piers (Museum No. 5480, Negative No. 23,493)

#### Appendix II8: Accession Book No. 3: Page 17. Museum No. 5481

Museum No. 5481

Scientific Name. Semotilus atromaculatus (Mitchill).

Common Name. Horned Dace or Creek Chub. Called "Chub" at Musquodoboit.

Phylum, &c. Fish.

Locality and when collected. Very common, about creeks off Musquodoboit River, near Crawford's Falls, Hx. Co., N.S.; 23 June 1924.

Collector (c) and Donor (d). H. St. C. Silver (c.d.) Halifax.

Received. 24 June 1924.

No. of Specimens. 1

Remarks. Fam. [family]Cyprinidae

Dorsal inserted midway between pupil of eye and base of caudal. Black spot at base of dorsal fin, at front. No scales on head. Dark lateral band (young).

Total length, 5.10 ins.; length to base of caudal, 4.30 ins.; head 1.20 ins.; in length 3.58 times; depth, 1.00 in.; in length, 4.30 times.

D. [dorsal fin rays] 9 (but one may be split, in which case only 8); V. [ventral fin rays] 8; A. [anal fin rays] 9 (last one may be split, in which case only 8); P. [pectoral fin rays] about 17.

Scales: right side 11 - 57 - 6 to 8

left side 11 - 63 - 7

About 27 scales before dorsal fin.

# Appendix II9: Accession Book No. 3: Page 32. Museum No. 5571

Museum No. 5571

Scientific Name. Jaws of Lamna cornubica (Gmelin).

Common Name. Porbeagle; Mackerel Shark.

Phylum, &c. Fish.

Locality and when collected. Entangled in mackerel net, about 3 miles SE off Devil's Island, off Halifax Harbour, N.S.; 31 October 1924.

Collector (c) and Donor (d). Douglas Henneberry (c.) Devil's Island, Halifax.

Received. 22 Nov. 1924.

No. of Specimens. 1

Remarks.

Colour, bluish-grey; white below

Length from snout to fork of caudal, 7ft. 0in.

3rd tooth on each side in upper jaw, very small.

Teeth <u>14 - 14</u> 13 - 13

References:

Figure 40, Plate 43. Rough sketch of Porbeagle by Harry Piers (Museum No. 5571, Negative No.

23,481)).

Figure 41, Plate 44. Sketch of Porbeagle by Harry Piers (Museum No. 5571, Negative No. 13,533)

### Appendix 120: Accession Book No. 3: Page 34. Museum No. 5582

Museum No. 5582

Scientific Name. Raja laevis or Raja radiata

Jaws & teeth of male.

Common Name. Barn-door Skate; or Starry Skate.

Phylum, &c. Fish.

Locality and when collected. Hunt's Point, Port Mouton, Queens Co., N.S.; 1924

Collector (c) and Donor (d). H. A. Lawrence, C. E. (D.) Halifax, N.S. per Hiram Dunkin

Received. Aug. 1924.

No. of Specimens. 1

Remarks. Teeth

 $\frac{31 + about 3}{31} = \frac{34}{31}$ 

# Appendix 121: Accession Book No. 3: Page 44. Museum No. 5636

Museum No. 5636

Scientific Name. Salmo salar, Linn. Young, parr.

(Is it possible it may be young of the so-called "Grayling" or Land-locked Salmon ?)

Common Name. Atlantic Salmon. "Sand Trout" or "Gudgeon" according to Indian Jerry Lone-cloud.

Phylum, &c. Fish.

Locality and when collected. Caught with hook and worm, at mouth of Nine-mile River where it runs in Shubenacadie River, Elmsdale, Hants Co., N.S.; 25 May 1925.

Collector (c) and Donor (d). Jerry Lonecloud (c.) Halifax.

Received. 26 May 1925.

No. of Specimens. 1

Remarks. Very long for its depth. Teeth on shaft of vomer. Caudal forked.

Colour silvery. Distinct indication of 9 or 10 vertical dark bars on sides (noticeable where scales are off). These are the markings of a "parr". Had some black spots, but no red spots

Weight, 5 1/4 oz.

Total length, snout to end of caudal 12.40 inches Length, snout to base of caudal 10.45 inches Head 2.33 inches Depth 1.88 inches Head in length to base of caudal 4.48 times

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Depth in length to base of caudal

**5.56 times** 

Scale formula: lat. line to front of dorsal, 22 scales

lateral line, 116 scales lat. line to vent, 16 scales

= 22 - 116 - 16

Fin formula: D.[dorsal] 12; V.[ventral] 10; A.[anal] 9.

#### Appendix 122: Accession Book No. 3: Page 45. Museum No. 5638

Museum No. 5638

Scientific Name. Salmo salar sebago (Girard) or S. salar ouananiche. J. & E. 778a.

Common Name. Landlocked Salmon; "Grayling" of Nova Scotia.

Phylum, &c. Fish.

Locality and when collected. Taken with minnow, by trolling, between Grand Lake Station and Laurie place, Oakfield, east side of <u>Grand Lake</u>, Hx. Co., N.S.; 31 May 1925.

Collector (c) and Donor (d). L. E. Sievert (c.d.) Halifax per H. St. C. Silver.

Received. 4 June 1925.

No. of Specimens. 1

Remarks. [ none given, for morphometrics etc. see 5639]

### Appendix 123: Accession Book No. 3: Page 45. Museum No. 5639

Museum No. 5639

Scientific Name. Salmo salar sebago (Girard) or S. salar ouananiche. J. & E. 778a.

Common Name. Landlocked Salmon; "Grayling" of Nova Scotia.

Phylum, &c. Fish.

Locality and when collected. Taken with minnow, by trolling, between Grand Lake Station and Laurie place, Oakfield, east side of <u>Grand Lake</u>, Hx. Co., N.S.; 31 May 1925.

Collector (c) and Donor (d). L. E. Sievert (c.d.) Halifax per H. St. C. Silver.

Received. 4 June 1925.

No. of Specimens. 1

Remarks. Measurements, etc. of Acc. No.	5638 &	5639
Colour - Silvery	•	
Weight	1 lb. 2 oz.	6 3/4 oz
Total length	15.90 ins.	12.50 ins.
Length to base of caudal	14.10 ins.	10.80 ins.
Head	3.18 ins.	2.40 ins.
Depth	3.25 ins.	2.30 ins.
Head in length	4.43 times	4.50 times
Depth in length	4.34 times	4.70 times
Eye, diameter	.52 inch	.40 inch
Caudal emarginate fin	.75 inch	.78 inch
Scales, lat.[lateral] line to front of 1st dorsal	26 scales	25 scales
lat. [lateral] line	117 scales	117 scales

lat. [lateral] line to vent	21 scales	21 scales
Dorsal fin	11 rays	11 rays
Anal fin	9 rays	9 rays

#### Appendix 124: Accession Book No. 3: Page 109. Museum No. 6004

Museum No. 6004

Scientific Name. Osmerus mordax (Mitchill).

Common Name. American Smelt (Land-locked?).

Phylum, &c. Fish.

Locality and when collected. At mouth of Rocky Brook, on west side of <u>Grand Lake</u>, 2 3/4 mi. N. of Wellington Station, Hx. Co., N.S.; 4 April 1927.

Collector (c) and Donor (d). Jerry Lone-cloud (c.) Halifax, N.S. Bought for .25 [cents]

Received. 5 April 1927

No. of Specimens. 4

Remarks. John Bradley, guide, of Wellington Station, says Smelts are in Grand Lake the entire year, and in the winter they can be got through the ice there at any time. The Harbour Seals which used to come up into Grand Lake used to feed on these Smelts. The last Seal seen in Grand Lake was killed by Bradley, off Indian Point, Grand Lake, about 23 years ago (say about 1904).

Lone-cloud got these specimens by sprinkling rolled oatmeal on the water and then dipping them with a landing net. John Bradley takes them by using a bunch of cotton-batting (no hook) on end of line. The teeth of the fish get entangled in the batting, and they are thrown out of the water. H. St. Clair Silver says that these Grand Lake Smelts will take a minnow on a hook or a spoon-bait; but they will not rise to a fly. Lone-cloud also says they will not take bait (although Silver says they take minnow). Of course they are also taken with landing net.

	Α	В	С	D
Total length	9.52 ins.	9.52 ins.	8.22 ins.	8.22 ins.
Length to base of caudal	8.25 ins.	8.25 ins.	6.95 ins.	7.00 ins.
Head	2.18 ins.	2.18 ins.	1.78 ins.	1.80 ins.
Head in length to base of caudal	3.33 times	3.33 times	3.90 times	3.89 times
Depth	1.35 ins.	1.28 ins	1.30 ins.	1.20 ins
Depth in length to base of caudal	6.11 times	6.44 times	5.35 times	5.83 times
Eye	.38 in.	.38 in.	.34 in.	.34 in.
Eye in head	5.74 times	5.74 times	5.23 times	5.30 times
Dorsal rays	10	10	10	10
Anal rays	15	14	<u>16</u>	14
Pectoral rays	13	13	13	13
Scales in lat. line	66	66	64	66
Weight	2 1/4 oz.	2 1/4 oz.	1 ½ oz.	1 ½ oz.

Above particulars noted 26 May/27 after they had been in formaldehyde for over a month.

# Appendix 125: Accession Book No. 3: Page 120. Museum No. 6046

Museum No. 6046

Scientific Name. Newspaper half-tone plate & clipping, relating to the taking of two specimens of *Alepisaurus ferox*, Gill.

Common Name. Lancetfish or Handsawfish.

Phylum, &c. Fish.

Locality and when collected. Taken on the cape on Emerald Bank, 110 miles SE. of Liverpool, Nova Scotia, about 14 July 1927.

Collector (c) and Donor (d). Wm. McKenzie of Schooner "Archie McKenzie".

Received. 16 July 1927.

No. of Specimens. 2

Remarks. Clippings.

The largest one is nearly 5 ft. in length, the other somewhat less. They are now in coll.[collection] of Atlantic Exper. [Experimental]Station for Fisheries, Halifax.

From "Halifax Herald", Hx., 16 July 1927.

A specimen about 6 ft. long was taken off Nova Scotia in August 1910 and a cast of it is in the collection of the Boston Soc. [Society] of Nat. [Natural] Hist. [History] (See Fishes of Gulf of Maine, p. 155).

# Appendix 126: Accession Book No. 3: Page 176. Museum No. 6252

Museum No. 6252

Scientific Name. Salmo salar, Linn. Young (Parr), age about 2 years.

Common Name. Common Salmon; young, "Parr".

Phylum, &c. Fish.

Locality and when collected. A stream at Sheet Harbour, Hx. Co., N.S.; 2 June 1928.

Collector (c) and Donor (d). E. G. Hall (d.) Sheet Harbour, N.S.

Received. 6 June 1928.

No. of Specimens. 1

Remarks. "There are quantities of these fish in the streams here, although not so large as this one; the smaller ones averaging around six or eight inches long" (E. G. Hall).

Total length	12.80 ins.
Length to base of caudal	10.80 ins.
Depth of body	2.68 ins
Depth in length	4.1 times
Head	2.70 ins.
Head in length	4.0 times
Eye	.53 in.
Eye in head	5.1 times
Weight	11 3/4 ozs.

Fin formula: D. 11; P. 13; V. 9; A. 9.

Scales: Lat. line to front of dorsal

26 119

Lateral line Lat. line to vent

22

Tail emarginate

Colour: Above, dark; below, silvery; sides with 8 vertical dark bars on right side and 9 such bars on left side. 6 to 9 dark spots on each side of head and gill-cover; reddish cross-shaped spots on sides of body.

"Parrs" are usually about 6 to 9 inches long. After growing this size, they go to sea, and loose the dark "parr" bands on there sides. There is then a break in the size of the fish, as it comes to my attention, till they come back from the sea when about 5 lbs. in weight. (Vide H.St. C. Silver)

Reference:

Figure 42, Plate 45. Rough laboratory notes on Atlantic Salmon from stream at Sheet Harbour by

Harry Piers (Museum No. 6252, Negative No. 23,484b)

#### Appendix 127: Accession Book No. 4: Page 25. Museum No. 6690

Museum No. 6690

Scientific Name. Ammodytes americanus, DeKay J. & E. p. 833.

Common Name. Sand Lance; Sand Launce; Sand Eel; Lant.

Phylum, &c. Fish.

Locality and when collected. On sandy shore near Mauger's Lighthouse Beach, west side of McNab's Island, Halifax Harbour, N.S.; 13 July 1930.

Collector (c) and Donor (d). Mrs. E. Harrigan (c.d.) McNab's Island, N.S.

Received. 16 Jul. 1930.

No. of Specimens. 1

Remarks. Ammodytidae

Total length	5.33 inches
Length to base of caudal	4.89 inches
Head	.97 inch
Depth	.44 inch
Head in length to base of caudal	5 times
Depth in length	11 times
Dorsal fin, about	55 rays
Anal fin	25 rays

### Appendix 128: Accession Book No. 4: Page II2. Museum No. 7081

Museum No. 7081

Scientific Name. Osmerus mordax (Mitchill).

Common Name. American Smelt.

Phylum, &c. Fish

Locality and when collected. Picked up dead on shore of north end of <u>Grand Lake</u>, Hants Co., N.S.; about spring of 1930.

Collector (c) and Donor (d). Sandy McDonald (c.d.) Enfield, N.S. (Per G. W. Horne, Enfield).

Received. 18 Dec. 1930.

No. of Specimens. 1 specimen (2 fish).

Remarks. American Smelt, which had tried to swallow a Gasterosteus bispinosus cuvieri, Girard,

Northeastern Two-spined Stickleback, the anterior dorsal spine of which had penetrated through the upper jaw of the Smelt, and so caused the latters death.

The Smelt is 3.70 ins. long; and the Stickleback, 1.30 ins.

G. W. Horne says that in Grand Lake, <u>Smelts</u> occur as long as about 12 inches, he having taken them 10 inches long. The <u>Two-spined Stickleback</u> is moderately common there.

#### Appendix 129: Accession Book No. 4: Page 151. Museum No. 7213

Museum No. 7213

Scientific Name. Siphostoma fuscum (Storer) or variety, or related form.

Common Name. Common? Pipe-fish.

Phylum, &c. Fish.

Locality and when collected. Swimming at surface of water in Long Cove, just east of <u>Bedford</u>, Bedford Basin, Hx. Co., N.S.; 15 July 1931.

Collector (c) and Donor (d). David Murray (c.d.) Halifax.

Received. 17 July 1931.

No. of Specimens. 1 Male with pouch containing young.

Remarks.

#### Measurements:

Total length	7.23 ins.
Length to base of caudal	6.92 ins
Length of head	.88 in.
Length of snout	[not given]
Length of head & body (snout to vent)	[not given]
Length of pouch (from vent backwards)	2.15 ins
Greatest width of body	.21 in.
Greatest depth of body	.18 in.
Length of dorsal fin	1.18 ins.
Height of dorsal fin	.30 in.
Length of pectoral fin	.21 in.
Length of caudal fin	.31 in.
Length of ventral fin	(out of sight near vent)

Head 7.86 times in total length.

Fin Formula: Dorsal: about 44 rays, not less: pectoral, rounded, about 10: ventral.

<u>Fin Formula</u>: Dorsal; about 44 rays, not less; pectoral, rounded, about 10; ventral, not counted, minute; caudal, 10.

Body rings: including vent, 19 rings + caudal rings 37.

<u>Dorsal fin covers</u> 5 body rings (including vent) + 7 caudal rings (behind vent).

That is the dorsal covers 12 rings (Jordan & Ever. description says dorsal covering 4 - 5 + 5 - 4 rings, that is a total of only 9 rings, or compared with 12 rings in this specimen).

<u>Colour</u>: olivaceous; yellowish on under part of body, particularly on under part of head and on gill cover. Dorsal with several broken bars or mottlings, obliquely placed.

Young: Many young were in the pouch on underside of body or tail. They were about .45 ins. long; had black eyes, and about 10 black vertical bars on posterior part of body.

#### References:

Figure 43, Plate 46. Rough laboratory notes on Northern Pipefish from Bedford Basin by Harry Piers (Museum No. 7213, Negative No. 23,447)

Figure 44, Plate 47. Sketch of Northern Pipefish from Bedford Basin by Harry Piers (Museum No. 7213, Negative No. 23,844)

### Appendix 130: Accession Book No. 4: Page 152. Museum No. 7214

Museum No. 7214

Scientific Name. Siphostoma fuscum (Storer) or variety, or related form.

Common Name. Common (?) Pipe-fish.

Phylum, &c. Fish.

Locality and when collected. Found in nearly vertical position at surface of water, near Harbour Commission office, south terminal piers, Halifax [Halifax Harbour], N.S.; a. m. 23 July 1931.

Collector (c) and Donor (d). Edward S. F. Piers (c.d.) Halifax, N.S.

Received. 23 July 1931.

No. of Specimens. 1

Male with egg pouch containing eggs

Remarks. Swam by undulating movements of dorsal fin.

#### Measurements:

Total length	7.54 ins. (Shrunk to 7.50 in by next day)
Length to base of caudal	7.29 ins.
Head	.85 in.
Snout to eye	.46 in.
Diameter of eye	.09 in.
Snout to vent	3.08 ins.
Body (operch. to vent)	2.23 ins.
Tail (not to base of caudal)	4.21 ins.
Greatest depth of body (excluding of pouch)	.17 in.
Greatest width	.16 in.
Length of pouch	2.12 ins.
Dorsal inserted behind vent	2.53 ins.
Length of dorsal fin	1.20 ins.
Height of dorsal fin (longest ray)	.28 in.
Length of pectoral fin	.17 in. (rounded)
Length of anal fin	.08 in. (of about 3 rays)
Length of caudal fin	.25 in.
Head in length to base of caudal, goes 8.58 times	mes.

<u>Fin formula</u>: Dorsal, 42 rays (<u>correct</u>); pectoral, 13; ventral, minute, about 3; caudal, <u>10</u>.

<u>Rings</u>: body rings (including vent), <u>19</u> rings + caudal rings <u>36</u>; making a total of 55 rings.

<u>Dorsal fin covering</u> 4 3/4 body rings + 6 caudal rings. That is the dorsal covers a total of <u>10 3/4</u> rings etc. (Jordan & Evermann say Dorsal covering 4-5 + 5-4 rings, that is a total of only 9 rings).

Colour (careful description from living fish, 23 July):

Upper parts, and also under side of tail behind pouch, olivaceous; darker at junction of rings (This olivaceous colour was sprinkled with fine black punctations the day after this specimen was put in formalin). Under part of snout pale. Under parts from anterior end of opercle and including opercle, to vent, "pale greenish-yellow" or light citron-yellow, with a lustrous appearance as if there was a silvery under-colour. Plate at base of pectoral, silvery.

Pouch light clay-colour; the reddish tint probably due to the reddish-yellow colour of the mass of eggs under the skin of the pouch.

Dorsal fin obscurely banded obliquely; and with several (8) fine black dots or punctuations. Pectoral fins pale. Caudal fin dark olivaceous.

Eggs: Pouch filled with eggs arranged in about 6 rows, "staggered" so as to pack closely. Each egg globular, .03 inch diameter; colour reddish-yellow.

#### References:

Figure 45, Plate 48. Rough laboratory notes on Northern Pipefish from Halifax Harbour by Harry Piers (Museum No. 7214, Negative No. 23,448)

Figure 46, Plate 49. Sketch of Northern Pipefish from Halifax Harbour by Harry Piers (Museum No. 7214, Negative No. 23,856)

Figure 47, Plate 50. Table of records of Northern Pipefish in Nova Scotia by Harry Piers (Museum No. 7214, Negative No. 23,858)

### Appendix I31: Accession Book No. 4: Page 197. Museum No. 7370

Museum No. 7370

Scientific Name. Osmerus mordax (Mitchill). J. & E. No. 793.

Common Name. Smelt; "Shiner" of people about Hubbards.

Phylum, &c. Fish.

Locality and when collected. The Trout in which the small Smelts were, was taken with fly or trolling with ordinary "minnow", in small expansion of northwestern section of <u>Dauphinee Mill Lake</u>, near where the passage goes into the southeastern section, near Hubbards, Lun. Co., N.S.; Sat., 7 May 1932

Collector (c) and Donor (d). Edward S. F. Piers (c.d.) 152 Shirley Street, Halifax.

Received. 9 May 1932.

No. of Specimens. 4

Remarks. Young, about 1/3 adult size, <u>from stomach of a Brook Trout</u> (Salvelinus fontinalis) about 13 ins. long. 15 of such small Smelts were in the stomach of this Trout, and about 5 in another one; 4 of the Trout had some in them.

Reference:

Figure 48, Plate 51. Sketch of Rainbow Smelt with map of Dauphinee Mill Lake by Harry Piers (Museum No. 7370, Negative No. 23,859).

### Appendix 132: Accession Book No. 4: Page 210. Museum No. 7428

Museum No. 7428

Scientific Name. Morone americana (Gmelin). Adult. J. & E. No. 1532 (p. 1134).

Common Name. White Perch.

Phylum, &c. Fish.

Locality and when collected. Lake Mattattall, about 4 mi. E of Wentworth Centre, on road to Tatamagouche, eastern Cumb. Co., N.S.; 21 June 1932.

Collector (c) and Donor (d). Dr. C. H. Craig (c.) H. Wyckoff Rogers (d.) Barrister, Amherst, Cumb. Co., N.S.

Received, 22 June 1932.

No. of Specimens. 1

Remarks. This lake is 3 ½ miles long, and moderately narrow.

1st & 2nd dorsals just connected.

Fin Formula: 1st dorsal, IX (the first two[spines]short), 2nd dorsal I+12; pectoral, 15; ventral, I+5; anal, III+9; caudal, 17.

Scales: 8 above lateral line; 54 in lat. line; 12 below lat. line

Head in length, 2.97 times; depth in length 3.25 times

12.45 ins.
10.40 ins
3.17 ins.
3.50 ins.
1.41 ins.
1.08 ins.
1.22 ins

Weight, 10 3/4 ozs.

Many persons think this fish is the Small-mouthed Bass (M. dolomieu).

H. W. Rogers writes (13 July 1932) that he has caught these White Perch weighing 1 3/4 pounds. He says that White and Yellow Perch abound in the following lakes in Cumberland Co., N.S.: Mattattal, Victoria or Big Lake, Killarney, Nappan, Pineo, Angevine, McArthur and McPhersons Lakes.

He says he learns from Prof. H. C. White, government biologist, that Black Bass are caught in Wheatons Lake, Bocabec, near St. Andrews, N. B. But Rogers cannot ascertain that they are taken in any Nova Scotian lakes; though people living near the above mentioned lakes claim they contain Bass (indirectly mistaken)

#### Reference:

[Piers gives a table comparing counts he made from this specimen with those known for Smallmouth Bass, Yellow Perch, Striped Bass, White Perch and Black Sea Bass]

Figure 49 A, Plate 52. Page one of two page letter from H. Wyckoff Rogers to Harry Piers concerning distribution of White Perch and Yellow Perch in Cumberland County (Museum No. 7428, Negative No. 23,496).

Figure 49 B, Plate 53. Page two of two page letter from H. Wyckoff Rogers to Harry Piers concerning distribution of White Perch and Yellow Perch in Cumberland County (Museum No. 7428, Negative No. 23,497).

# Appendix 133: Accession Book No. 4: Page 235. Museum No. 7508

Museum No. 7508

Scientific Name. Upper lateral tooth of Carcharodon carcharias (Linn.).

Common Name. Man-eater Shark.

Phylum, &c. Fish.

Locality and when collected. Found embedded in the wood of the under-water part of a 25 ft. motor-boat belonging to Wilson Munroe, fisherman, and his young son, of Victoria Beach, Ann. Co., which boat had been unprovokedly attacked by the shark while they were tending their trawl in 40 fathoms of water eastern side of Bay of Fundy, about 10 miles northwest of Digby Gut, Ann. Co., Nova Scotia; 2 July 1932.

The locality would be about lat. 44 47' long. 65 51' (as to the date, Capt. Morgan says it was in July. An item about it appeared in a Halifax newspaper, and on 27 July/32, about 10 days or so after the item appeared I wrote to W. Munroe for particulars, so that I think about 10th July is a reasonable date for the occurrence).

Collector (c) and Donor (d). Wilson Munroe, fisherman (c.d.) Victoria Beach, Ann. Co., N.S. Received. 2 Nov. 1932.

No. of Specimens. 1

Remarks. Particulars of the unprovoked attack made by this shark off Victoria Beach, Ann. Co., N.S., July 1932:-

"This shark attacked Wilson Munroe's 25 ft. motor-boat very early in the morning, just after dawn, of a clear day, early in July 1932. At the time it was slack water at low tide, and the sea quite calm. Monroe and his young son, in their 25 ft. motor-boat stopped to overhaul their fishing trawl. The shark at first circled around another boat about a quarter of a mile away. Then, without the slightest provocation it wantonly attacked Munroe's boat, which was suddenly hove-up forward on the starboard (right) side; which pushed the boat down aft to port (left), both Monroe and his son being aft at the time, to tend the trawls. When the boat thus went down aft, water slopped in over the port quarter gunnel. Capt. Elmer Morgan in his report says that Monroe could not get a sight of the fish, and did not know what it was that had disturbed the boat; although Monroe writes me that "as near as I could tell the shark was about thirty feet long". Most likely he did not see it, and merely surmised its length. The fish, with a number of bumps against the boat, worked its way aft, under the starboard (right) bilge; and then got clear of the boat. Some say he renewed the attack more than once, but this is not probable, and is not mentioned by Capt. Morgan. It may have referred to its having been previously about the other boat.- When the Monroes got ashore and examined the boat, they found that the fish had bent the blades of the 3bladed propeller and in doing so had likely been cut by them before getting away. The boat was not particularly damaged, but some of the animals teeth were left in the keel or one of the under strakes (boards); and in one of these is the present specimen (no. 7508). The men suppose that the shark was feeding on fish hooked on the trawls, when the boat came along and interrupted him. (This account is almost entirely based on the verbal account by Capt. Elmer Morgan, fishing inspector, of Bear River, Ann. Co., who was at Victoria Beach a day or two after this incident, and who gave the particulars on 21 Jan./33, to J.W.D.Stevens of the "Spectator", Annapolis, for my information.)

#### Verification of the identification-

H. Piers identified the tooth as belonging to Carcharodon carcharias (Linn.), Man-eater Shark, but owing to the rarity of this species so far north wished to have his determination authoritively

verified, and therefore on 9 Nov./32 sent the tooth to U. S. Bureau of Fisheries, Wash., U.S.A. which referred it to the U. S. National Museum, Wash. On 5 Dec./32, the Nat. Museum reported that the tooth had been examined by Mr. Earl D. Reid, Aid in the Division of Fishes, who sends the following report concerning it. "Mr. Piers is quite correct in identifying the accompanying tooth as that of the 'Man-eater Shark (Carcharodon carcharias (Linn.)). I have compared the specimen with a jaw of this species in our collection and find that the tooth corresponds exactly with the upper lateral teeth near the posterior angle of the jaws of a specimen not more than fifteen feet in length." This report from the Nat. Museum, positively confirms the identification.

Range of Species- Jordan & Everman, Fishes of N. A., 1896 Vol. 1, p. 50:

"Found in all temperate and tropical seas, and is occasionally taken on our coasts, within the Atlantic and the Pacific (Europe)." Bean's cat. of Fishes of New York, 1903, p. 41: "Found in temperate and tropical parts of Atlantic and Pacific oceans, but is rare in New York waters." Refers to the ferocity of one taken at Provincetown, Mass., 16 June, 1848.- Bigelow, Fishes of Gulf of Maine, 1925, p. 39-40: "Cosmopolitan in tropical and warm-temperate seas, straying northward at rare intervals as far as New England and casually to Banquereau Bank off eastern Nova Scotia (Putnam. Bull: Essex Inst., vol. 6, 1874, p. 72). It is apparently rare everywhere. The only shark likely to attack human beings."- Breder, Field Book of Fishes, 1929, p. 22: "A comparatively rare form of tropical and sub-tropical seas on occasion straggling northward on our coast to Nova Scotia.... one of the largest and most powerful of existing fishes.... The first definite and authentic records of shark attacking man all refer to this single species....Feeds on large fishes and sea turtles.... Reaches a length of 40 ft. or more.

This shark no doubt taken 4 months later at Campobello Island, New Brunswick, shortly before 23 Nov./1923.- In the latter part (shortly before 23rd.) of November, of the same year, 1932, a large shark "the first of its kind ever taken in local waters,' and measuring 26 ft. in length, 3,000 lbs. in weight, almost 6 ft. In diameter of thickest part of body, and with a dorsal fin nearly 5 ft. long, was taken in the brush-walls of a "sardine [young herring] weir, at Harbour DE Loutre, Campobello Island (lat. 44 55', long. 66 55'), in Passamaquoddy Bay, New Brunswick. It plunged through the weir and became stranded on the shore. Campobello Isle. is a few miles east of Eastport, Me. (Lat. 44 55'), and about 50 miles, across the Bay of Fundy, westward of Victoria Beach (lat. 44 47') 10 mi. off Digby Gut, N.S., where the above described attack occurred in July. The fish when opened had an enormous liver, "occupying most of the carcass," which yielded seven 50-gallon drums of liver, which exuded great quantities of oil, which was sold to an oil refinery. "It was believed to be the same species of shark which attacked a fisherman's boat in the Bay of Fundy near Digby some months ago." (Vide news item, stated Deer Island [news Compobello Island], N. B., 23 Nov. 1932). I think there can be hardly any doubt that this was the same fish which attacked the Victoria Beach, N.S., boat about 4 months before.

In the Bull. Essox Inst., Salem, meeting of 20 Apr. 1874, Vol. 6, p. 72, "Mr. [F. W.] Putnam also exhibited a large tooth of a shark, presented by Rev. D. P. Noyes of Pigeon Cove, who obtained it from Mr. Andrew Johnson, one of two men who, which in a dory deeply laden with fish, near St. Peter's Bank, had been fiercely attacked by a large shark which hit at the dory, leaving the marks of one jaw on the bottom of the boat and of the other on the side. The boat was tipped by the shark to such an extent as to spill part of the fish and take in water, and was kept afloat only by vigorous bailing. The fragments of small teeth were found in the wood. The perfect specimen was from the front of the under jaw, and was 1.8 inches in length from the centre of its root to the point, and from the extreme end of the root, 2.1. Its extreme width at base, across the root, was 1.5 inches. An impression with specimen of large shark in the Museum of Comparative Zoology, made by Mr.

Garman, it was estimated that a tooth of this size would indicate a total length for the animal of more than thirteen feet. Judging from a single tooth, the shark was probably a specimen of the *Carcharias (Prionodon) lamia*, or a closely allied species, and is a very interesting addition to the fauna of the eastern coast."

[Carcharias lamia = Carcharias lamia (Rafinesque); J & E., p. 38 a man-eating shark of the tropics, apparently not many so far north as this] I Know of no "St. Peters Bank", & of course it cannot be St. Pierre Bank off southern Newfoundland.

Without doubt this is the specimen of Carcharodon carcharias, which Bigelow, Fishes of Gulf of Maine, 1925, p. 40 as one about 13 feet long attacked a fisherman in a dory on Banquereau Bank many years ago, leaving in the sides of the boat fragments of its teeth, by means of which Doctor Garman was able to identify the species to which the shark belonged (Putnam. Bulletin, Essox Institute, vol. 6, 1874, p. 72)" Therefore it must be decided that "St. Peter's Bank of Putnam, was Banquereau Bank, about lat. 45, long 55; NW of Sable Island, N.S.

Unrecorded occurrence in St. Margaret's Bay, 4 miles off Hubbards Cove, N.S.; 27 June 1920.-On 27 June, 1920, a 15 foot shark attacked the boat of Jeremiah Harnish and John Chandler while albacore [tuna] harpooning in St. Margaret's Bay, 4 miles off Hubbards Cove, Hx. Co., and left one of its teeth in the boat. The tooth, however was afterwards lost, but no doubt the fish was of this species. Lat. about 44 35', long, about 64 00'. The newspaper account of this specimen is as follows: "Hubbards man had exciting experience with Sea Monster at St. Margaret's Bay.-Jeremiah Harnish of Hubbards and John Chandler of Liverpool, the former's brother-in-law, had an exciting experience on St. Margaret's Bay on Sunday last [27 June, 1920] while out hunting albacore, that will last them as a moving picture of the kind for some years to come. From the projecting outrigger on the bow of his motor-boat, Jeremiah Harnish, with practiced aim and steady arm, harpooned what he supposed was a large albacore. After the fish was struck, the two men, as is the custom, got into their small boat for the purpose of "drowning" the fish or giving him line to play himself out. An albacore dives deep after being harpooned, but this fish kept only a short distance under the surface and did not attempt to run away. About ten minutes, however, after they struck him, he came near the surface, and when fifteen feet away from the "flat" [boat] he made a dart for the after part of the boat, directly where John Chandler was standing. The impact was so great that he knocked the boat from under Chandler and he went head-first overboard. His aim for Chandler seemed to be like the studied one of a Hun submarine. When this man came to the surface, the boat with Jeremiah Harnish, who happened to be sitting down at the time, was fifteen feet away. In addition to striking the boat the fish grabbed it with his immense jaws and the scars and cuts in the boat were seen by your correspondent today. The spread of the jaws as shown by the marks on the boat, is about twenty-five inches; and on the upper part where his upper jaw struck and just below the gunnels, he left one of his teeth or incisors as bright as ivory, as long as a man's little finger and like the teeth of a saw on both sides. The cut in the upper side of the boat, where the tooth broke off and stuck, is about six inches long and three-quarters of an inch deep.

"Chandler being a good swimmer soon reached his boat and was pulled in by his brother-in-law. Both of the men being in their sixties and Chandler afraid of getting cold after his enforced bath and in wet clothes about four miles from Hubbards, decided to cut the line and let the monster go, about six fathoms of rope and the harpoon went with the escaped fish, which they say was fifteen feet long and very broad across the back.

"Chandler who has been in southern waters, and has seen whales, porpoise, sharks all kinds of marine monsters never saw a fish like this one before and cannot categorically place this sea brute that tried to send him to Davy Jones locker.

"Walter Winters, who was running the motor-boat, and witnessed the whole performance that might have ended fatally, came up to the row boat, took the two men on board and hurried full speed for Hubbards, all thankful for the lucky ending, but regretting not being able to capture the Harnish fish, strange to the coastal water of this part of the world." [This account was offered by Freman Harnish, for H. Piers, 7 Feb. 1933]

The 27 June, 1920, was at Halifax a fine, warm day, with wind from SSW. The tooth was unfortunately lost a few weeks later, in the water at end of Harnish's wharf at Hubbards, before H. Piers had an opportunity to examine it. The fierce attack of the shark, and the serrated edges to the tooth, all point to this fish being also a Man-eater Shark.

#### References:

Figure 50, Plate 54. Sketch of White Shark tooth, which was embedded in motor boat at about 10 miles northeast of Digby Gut, by Harry Piers (Museum No. 7508, Negative No. 23,847).

Figure 51, Plate 55. Letter to Harry Piers from J. W. Dawson, Editor, *The Spectator*, dated 28 Feb. 1933 concerning a shark attack on a row boat near Goat Island (Museum No. 7508, Negative No. 23,435)

#### Appendix 134: Accession Book No. 4: Page 241. Museum No. 7524

Museum No. 7524

Scientific Name. Siphostoma fuscum, (Storer)= Siphostoma fuscus, Storer, probably a variety (?) or related form. Female (with egg pouch).

Common Name. Northern Pipefish.

Phylum, &c. Fish.

Locality and when collected. Found about 4 ft.from shore, on the bottom, alive, at bathing beach, in the Back Harbour, Chester, Lun. Co., N.S.; about 10 Aug. 1932.

Collector (c) and Donor (d). George Macdonald (c.d.) Son of W.J. Macdonald, 20 Preston St., Halifax. Received. 28 Nov. 1932.

N CC 1

No. of Specimens. 1

Remarks. Compared with Acc. No.7213,7214

Also report of Museum for 1930-1 p.14

#### Appendix 135: Accession Book No. 4: Page 264. Museum No. 7600

Museum No. 7600

Scientific Name. Acipenser sturio, Linn. Immature.

Common Name. Common Sturgeon.

Phylum, &c. Fish.

Locality and when collected. Near mouth of Salmon River, about 125 yds. south of the bridge Cole Harbour, Hx. Co., N.S.; 23 May 1933.

Collector (c) and Donor (d). Bought from Samuel Emberly (c.) 4 ½ Fairbanks St., Dartmouth. \$ 1.50 Received. 27 May 1933.

No. of Specimens. 1

Remarks. The boy, Sam. Emberly said that this sturgeon had been caught by the tail by a large "gull", when only about 4 feet from Emberly, and the bird tried to lift this large fish out of the water, but only got it about a quarter way out when it found it was too heavy and had to drop it. Emberly then dipped this fish out with a dip-net. With Emberly was another boy, Henry Brean, Hawthorne St., Dartmouth.

This specimen was 4 days old when received, and went bad, and had to be thrown out on 29 May.

Total length 32.90 in.

Length to base of caudal: 27.00 to end of lateral plates

26.00 to insertion of caudal

Head

7.80 ins.

Snout to nostril

2.65 ins.

Snout to front edge of eyes

3.50

Plates: 10 in dorsal row 27 in each upper lateral row

9 + 2 = 11 in each lower lateral row

#### Appendix 136: Accession Book No. 4: Page 266. Museum No. 7608

Museum No. 7608

Scientific Name. Abramis chrysoleucus (Mitchill) of Pratt's Man. [manuel] of Vert. [vertebrate] Animals, 1923 Notemigonus chrysoleucus (Mitchill) of Jordan, Evermann & Clark's Check List, 1930.

Common Name. Golden Shiner, etc.

Phylum, &c. Fish.

Locality and when collected. Caught in Hubbards River between Dorey's Lake & Hubbards Cove, Hubbards, Hx. Co., N.S.; 18 June 1933.

Collector (c) and Donor (d). E. S. Bringloe (c.) Halifax. Per Edw. S.F.Piers (d.) Halifax

Received. 20 June 1933

No. of Specimens. 1

Remarks. Cyprinidae (Minnows)

N. B. The pharyngeal teeth have been taken out of this fish and cleaned.

This species appears to be common, or at least fairly common, in Nova Scotia. See my fish notes

and J.[Journal] 1934 Measurements and proportions:

Total length 7.75 ins. Length to base of caudal 6.40 ins.

Depth (greatest at front of dorsal) 6.40 ins.

1.88 ins. (about 3

Depth (greatest at front of dorsal)

1.88 ins. (about 3 ½ times in length to base of caudal)

1.37 ins (about 4 ½ times in length to base of caudal)

Eye .35 in. (about 4 times in length of head)

Lower pharyngeal teeth in a single row, 5 on each side (teeth 5-5).

Fin formula: Dorsal, <u>8</u> (with an extra short one, about 1/3rd, in front), olivaceous; Pectoral, about <u>15</u>; Ventrals, <u>9</u> (red, blackish at tips); Anal, <u>13</u> (with an extra, short one, about 1/4 in length, in front), <u>red</u>, blackish at tip.

Lateral line decurved. Scales: 10 scales (front of dorsal to lateral line) - 52 scales in lateral line - 4 scales (lateral line to vent).

Dorsal fin inserted a little behind ventrals. Abdomen from ventrals to vent with a narrow scaleless strip or line somewhat compressed, the scales not passing over it. Lower jaw included. Maxillary small; to about 1/3rd way back from front of eye.

<u>Colour</u>:- Back and dorsal fin, olivaceous; lower part (sides) of head golden, particularly under eyes; sides of body and belly, paler golden; pectorals very slightly reddish near ends, ventrals and anal fins, <u>red</u>, blackish at tips; caudal blackish. (<u>No</u> black spot at base of dorsal; <u>no</u> dark spot behind head. No tubercles. No barbels.)

Acc. No. 3263, in river Antigonish, Ant. Co.; 25 July 1908 Acc. No. 3540, Maynard's Lake, Dartmouth; 19 Apr. 1910 Acc. No. 4932, Elmsdale, Shube. River, N.S.; 22 May 1920 Acc. No. 7608, Hubbards River, Hx. Co.; 18 June 1933

also 3 old specimens without data

Reference:

Figure 52, Plate 56. Sketch of Golden Shiner from Hubbards River by Harry Piers (Museum No. 7608, Negative No. 23,848).

#### Appendix 137: Accession Book No. 4: Page 266. Museum No. 7609

Museum No. 7609

Scientific Name. Morone americana (Gmelin). Young (a little over half of full size).

Common Name. White Perch.

Phylum, &c. Fish.

Locality and when collected. Sawlor's Lake, Hubbards, Hx. Co., N.S.; 19 June 1933.

Collector (c) and Donor (d). Edw. S. F. Piers (c.d.) Halifax, N.S.

Received. 21 June 1933.

No. of Specimens. 1

Remarks. Serranidae

About 23 June E. S. F. Piers got 7 or 8 of these fish, one being about 12 ins. long, an adult. Common in brackish and fresh water in Nova Scotia. An excellent food fish.

Measurements & proportions

Total length 5.48 inches
Length to base of caudal 4.40 inches

Greatest depth 1.50 inches 3 times in length to base of caudal Head 1.50 inches 3 times in length to base of caudal

2nd anal spine .60 inch 2 ½ times in head

Fin formula: D[dorsal fins]. IX [spines] - I [spine],12 [rays]. A [anal fin]. III [spines],9 [ rays].

1st dorsal, IX (4th largest)

2nd dorsal, I,12 (2nd or 3rd soft ray longest

Dorsal fin joined at base only

Pectoral. 15. Ventral. I,5. Anal. III,9

Scales: 7 - 50 - 11. Head scaly

Colour: Above olivaceous, with blue reflections; sides slightly brassy, with very faint indications of paler streaks; under parts purplish white.

#### Appendix 138: Accession Book No. 5: Page 35. Museum No. 7815

Museum No. 7815

Scientific Name. Osmerus mordax (Mitchill). Young.

Common Name. American Smelt; Frost-fish.

Phylum, &c. Fish.

Locality and when collected. Found dead on beach of Sawlor's Lake (between Dauphinee Mill Lake & Hubbards River), <u>Hubbards</u>, St. Margaret's Bay, Hx. Co., N.S.; 17 June 1934.

Collector (c) and Donor (d). Edward S. F. Piers (c.d.) Halifax

Received. 19 June 1934.

No. of Specimens. 1

Remarks. For others from stomach of Trout from Dauphinee Mill Lake, see Acc. No. 7370

Total length, 3.92 ins.; length to base of caudal, 3.26 ins.; depth, .50 in.; head, .78 in.: Head in length, 4.2 times; depth in length, 6.5 times.

1st. D [dorsal] fin, 11 rays; 2nd. D., adipose; P [pectoral]. 12; V [ventral]. 8; A [anal]. 15 Scales, 68 Tongue with strong teeth on it. Silvery stripe, about .12 inch wide, on sides. Black punctations about sides of head, fins etc.

#### Appendix 139: Accession Book No. 5: Page 38. Museum No. 7832

Museum No. 7832

Scientific Name. Cristivomer namaycush (Walbaum).

Common Name. Great Lake Trout; "Hake" or "Grayling" (local, Sherbrooke Lake); "Pickerel" (local, Pockwock Lake, Hx. Co.).

Phylum, &c. Fish

Locality and when collected. Taken by deep trolling, with a Yellow Perch or a "Dace" for bait, with a 4 oz lead sinker, near the narrows at south end of Sherbrooke Lake, Lun. Co., N.S.; Sat. 7 & Sun. 8 July 1934.

The location is 2 3/4 miles eastward of Maplewood, in northwest part of Lunenburg Co. Ed. Grinum is the local guide who has the "camp" there.

Collector (c) and Donor (d). Edward S. F. Piers (c.d.) & Miss Frances Hardy (c.d.) Halifax Received. 9 July 1934.

No. of Specimens. 4

Remarks. Heads of 4 specimens which measured 17.20, 17.30, 20.25, and 22.40 ins. In total length.

Details noted 9 July 1934; as below

	A Taken 8 July (This specimen said by guide to have been an introduced one)	B 7 July	C 8 July	D 8 July
Taken by	E.S.F.Piers	E.S.F.Piers	E.S.F.Piers	Miss F. Handy
WEIGHT, fresh, lbs. MEASUREMENTS: Total length	2 inches 17.20	2 inches 17.30	3 inches 20.25	4 ½ inches 22.40

Length to base of caudal	15.00	15.00	17.40	19.20
Head	4.05	4.15	4.53	5.28
Depth	3.34	3.46	4.07	4.90
Girth				12.00
Snout to front margin of ma			· .	
Length of eye	xillary (Goes tv .65	vice into length o .65	of head) .73	.75
Snout to front margin of ma Length of eye Snout to front of eye Across head, between eyes			· .	.75 1.45

Total length (Length of specimen D, following cleaning 23 1/8 inches). Head in length, A. 3.70 times; B. 3.61; C. 3.84; D. 3.64 average 3.69 times.

Depth in length, A. 4.49 times; B. 4.34; C. 4.27; D. 3.92= average 4.25 times.

Eye in head, A. 6.23; B. 6.4; C. 6.21; D. 7.0 = average 6.46 times.

Scales Lateral line		Number 196	Number 188	Number 189	Number 200 average of 193 1/4 scales
Front of dorsal to					
lateral line		35	33	30	37 average of
					33 3/4 scales
Lateral line to vent		27	26	27	27 average of
					26 3/4 scales
<u>FIN RAYS</u> :					
Dorsal		11 1/4	11 1/4	11 1/4	11 1/4 adipose fin .87 inch long
Pectoral counted on both sides		15	14	14	14
Ventral		9	9	9	9
Anal		10 ½	10 ½	10 ½	10 ½ With a very rudimentary ray in front
BRANCHIOSTEGAL	S	<u>12</u>	13	13	12
GILL RAKERS	<u>above</u> below	<u>5</u> 10	<u>6</u> 10	<u>7</u> 9	7 11

MISCELLANEOUS:- Teeth very strong. Teeth on vomer. Top of head flat. Caudal (tail) forked. COLOUR:- Dark above, with pale, light or grey, spots about .10 inch diameter; lower parts whitish, with minute fleck punctuations about scales. No red spots on body. Upper fins with pale spots; pectorals and lower fins with orange, mostly on their posterior parts. Opercles with bluish, yellow and coppery-coloured tints. Iris yellow.

<u>CONTENTS OF STOMACH</u>:- Specimen A, B and C had in their stomachs remains of ordinary-sized Minnows about 4 ins. Long. Specimen D had hardly anything in it. It's insides were all yellow.

Jordan & Evermann give for this species: Head 4 ½ in length; depth 4 in length; eye 4 ½ in head; maxillary merely ½ in head. Branchiostegals 11 or 12; Dorsal 11, anal 11; lat. line 185-205; length 36 ins.

#### Appendix 140: Accession Book No. 5: Page 50. Museum No. 7901

Museum No. 7901

Scientific Name. Carcharodon carcharias (Linn.).

Common Name. Tooth of Man-eater Shark.

Phylum, &c. Fish.

Locality and when collected. On southernmost side of Pig Island, just to southeast of Big Island, Merigomish, Pict. Co., N.S.; 27 July 1934.

Collector (c) and Donor (d). Bought from the collector Charles Wilmont, Indian (son of late Chief Peter Wilmont) Indian Reservation, Truro, N.S.

**Received.** 24 Aug. 1934.

No. of Specimens. 1

Remarks. Found with the foregoing Indian stone implements, etc., with the Beaver tooth (acc. no. 7902) & some pieces of Moose antlers, in an ancient Indian shell-heap (in a stratum of oyster-shells about 1 ½ to 3 ft. deep) on southeast side of Pig Islands, just to southeast of Big Island Merigomish, Pict. Co., N.S.; collected 27 July, 1934.

References:

Figure 53, Plate 57. Rough sketch of White Shark tooth from Indian midden at Pig Island by Harry Piers (Museum No. 7901, Negative No. 23,466b).

Figure 54, Plate 58. Sketch of White Shark tooth from Indian midden at Pig Island by Harry Piers (Museum No. 7901, Negative No. 23,853).

#### Appendix 141: Accession Book No. 5: Page 52. Museum No. 7913

Museum No. 7913

Scientific Name. Morone americana (Gmelin).

Common Name. White Perch.

Phylum, &c. Fish.

Locality and when collected. Sawler's Lake, Hubbards, Hx. Co., N.S.; Sun. 26 Aug. 1934.

Collector (c) and Donor (d). E. S. F. Piers (c.d.) Halifax, N.S.

**Received.** 27 Aug. 1934.

No. of Specimens. 5

Remarks. Taken with worms as bait. They pull and bore shorewards when hooked (Yellow Perch wriggle).

According to description, *M. americana* should have. Head 2 3/4 to 3; depth 2 ½ to 3. D. IX-I,12; A. III,8 or 9. Scales, 8 - 50 to 55 - 12; 50 to 55 pores.

<u>Measurements</u>	A	<u>B</u> .	<u>C</u>	<u>D</u>	<u>E</u>	average
	ins.	ins	ins	ins.	ins.	_
Total length	8.85	8.15	7.55	7.20	6.68	7.69
Length to base of caudal	7.23	6.80	6.22	5.97	5.58	6.36
Head	2.40	2.22	2.02	2.00	1.80	2.09
Depth	2.25	1.98	1.85	1.88	1.75	1.94
Eye	.50	.49	.47	.45	.43	.47

<u>Proportions</u>	times	times	times	times	times	ave	erage
Head in length to base of caudal	3.01	3.06	3.08	2.98	3.10	3.0	)46
	3.21	3.43	3.20	3.18	3.19	3.2	24
Fin Rays							
1st dorsal	IX	IX	IX	IX	IX		First 2 short
2nd Dorsal, last 2 soft rays close together	I,12	I,12	I,12	I,12	I,12 or	13	4th longest

1st dorsal just connected at base with 2nd dorsal. 1 sharp spine and 1 blunt angle on posterior margin of gill-cover. Upper maxillary (?) nearly to centre of eye. Small teeth on vomer. Colour.- Above olivaceous with blue reflections down the lateral line; grey with bright silvery reflections below lateral line, and very slightly purplish (pearly) along underside. Sides only very obscurely striped. Sides of head slightly brassy (yellowish). Underside of head pale purplish (pearly). Sometimes a few red spots on throat (in D). Ventral fins (but not anal) slightly rosy at base. Outer part of fins blackish.

#### Appendix 142: Accession Book No. 5: Page 54. Museum No. 7921

Museum No. 7921

Scientific Name. Jaws (upper & lower) of Prionace glauca (Linn.) Male, adult.

Common Name. Great Blue Shark.

Phylum, &c. Fish.

Locality and when collected. Taken by James T. Egan of Halifax, in a motor-boat, with a home-made, one-piece, 11 ½ ft. bamboo rod and line, the hook baited with a small codfish, while fishing for large pollock, about 6 miles SSE of Lawrencetown & about 7 miles eastward of Devil's Island, to east of entrance of Halifax Harbour, Hx. Co., N.S.; 11 Sept.1934; and gaffed after a 1 or 1 ½ hour fight. Another one was seen.

Collector (c) and Donor (d). James T. Egan (c.) Halifax, N.S.

Received. 12 Sept. 1934.

No. of Specimens. 1

Remarks. Another one seen

<u>Colour</u>: When <u>wet</u>, <u>blue</u> above, and very light grey to white below. The blue colour of upper parts is very iridescent when the skin is wet, but when dry the skin looses that colour & appears a darkish-grey.

Measured by H. and Edw. S. F. Piers, at Armdale Boathouse, Armdale, Halifax, 10 - 10:40 am, Wed., 12 Sept. 1934.

MEASUREMENTS

	TAIL! TOOLU
Total length (snout to end of upper lobe of caudal fin)	10' 6"
Greatest girth	3' 2 1/2"
Snout to anterior margin of eye	9 1/2"
Snout to anterior margin of pectoral fin	2' 3"
Snout to anterior margin of 1st dorsal fin	3' 9 1/2"
Snout to anterior margin of ventral fin	5' 5 1/2"
Snout to anterior margin of 2nd dorsal fin	6' 7 ½"
<del></del>	

Snout to anterior margin of anal fin	6' 8 1/2"
Anterior length (height) pectoral fin	2' 1 ½"
Anterior length (height) of 1st dorsal fin	1' 1 1/2"
Length of base of 1st dorsal fin	9"
Length of upper lobe of caudal fin, from pit	2' 7 ½"
Length of lower lobe of caudal fin, from pit	1' 4"
Between extremities of upper & lower lobes of caudal fin	2' 6"

Reference:

Figure 55, Plate 59. Rough sketch of Blue Shark by Harry Piers (Museum No. 7921, Negative No.

23,463b)

Figure 56, Plate 60. Sketch of Blue Shark by Harry Piers (Museum No. 7921, Negative No.

23,843)

Figure 57, Plate 61. Sketch of tooth of Blue Shark by Harry Piers (Museum No. 7921, Negative

No. 23,842)

#### Appendix 143: Accession Book No. 5: Page 108. Museum No. 8170

Museum No. 8170

Scientific Name. Notropis cornutus (Mitchill)?

Common Name. Common Shiner.

Phylum, &c. Fish.

Locality and when collected. Crawford's Falls, Musquodoboit River, 1 3/4 mi. SE of Gibraltar

Ry.[railway] Station, & 6 3/4 mi. NNW of Head of Musquodoboit Harbour, Hx. Co., N.S.; Sun., 30 June, 1935.

Collector (c) and Donor (d). E. S. F. Piers (c.d.) Halifax, N.S.

Received. 2 July 1935.

No. of Specimens. 1

**Remarks.** Colour:- Upper parts olivaceous; sides yellowish-silvery; underparts white; Ends of fins & lower part of opercle, reddish; iris golden.

Measurements & Proportions

Length (total)	4.18 inches
Length to base of caudal	3.45 inches
Head	.94 inch
Depth	.95 inch
Eye	.24 inch
Head in length	3.67 times
Depth in length	3.63 times
Eve in head	3.92 times

<u>Fin rays</u>: Dorsal <u>8</u> (or 9) rays (the first one not split); Pectoral, 15; Ventral fins, 8; Anal fin, <u>9</u> Insertion of dorsal fin is over the insertion of the ventral fins.

Scales: - 8? - 38 to 40 (difficult to count accuratly) -5?

Pharyngeal Teeth: Right 2,4 - Left 3,2 (or 4,1?).

Lateral line only very slightly depressed behind opercle. Head not tuberculate.

# Appendix 144: Accession Book No. 5: Page 141. Museum No. 8313

Museum No. 8313

Scientific Name, Balistes carolinensis, Gmelin.

Common Name. Triggerfish; Leather-jacket.

Phylum, &c. Fish.

Locality and when collected. Found dead and dried, with viscera & eyes removed by marine invertebrates, on shore between the Quarantine Station Wharf & this foot-bridge crossing over the track and "Drake's Passage", to McNab's Island, on western side of northern end of <a href="Lawlor's Lsland">Lawlor's Lsland</a> on a beach of Eastern Passage, eastern side of <a href="Halifax Harbour">Halifax Harbour</a>, Hx. Co., N.S.; Thurs., 24 Oct. 1935.

Collector (c) and Donor (d). Samuel Dowinton (c.d.) 93 Agricola St., Halifax.

Received. 25 Oct. 1935.

No. of Specimens. 1

Remarks. Family: Balistidae: Trigger-fishes.

As the skin had a bad odour it had probably not been dead over one or two months, so that probably its occurrence here may be placed at about late August or early Sept. 1935.

Total length, 9.80 ins. (Probably originally 10.00 ins., tips of caudal being eroded off); snout to base of caudal, 8.50; Depth, 4.75; head, 2.80; head in original length, 3.57 times; depth in original length, 2.10 times.

Lateral line complete, though difficult to trace in some spots.

3 stout spines in 1st dorsal. 2nd dorsal (soft) and anal fin eroded or eaten off; caudal fin complete except the extremities of the two lobs. Eyes and interior fleshy parts gone, leaving only the skeleton and skin.

Fishermen of Eastern Passage said they had never seen this species before.

This is evidently the 5th specimen which has been reported as taken in Nova Scotia waters.

Range: Tropical parts of the Atlantic; occasionally northward in gulf-stream to Nova Scotia. Only an accidental straggler from south in Gulf of Maine.

Recorded specimens of B. carolinensis from Nova Scotia.

- (1) Before 1879- St. Margaret's Bay, Hx. Co. in Halifax Museum (Jones, 1879 no. 84, B. capriscus).
- (2) 1901-2- Banquereau, off Canso, 1901-2 (Cornish).
- (3) 25 Aug. 1910.- Taken with a spear, between Woodside Refinery & Fort Clarence, Dartmouth, <u>Hx.Har.</u> 25 Aug. 1910. Prov. Mus. Acc. No. 3601 (see Rept. For 1910, p.9).
- (4) 20 Aug. 1912.- Picked up dead, near <u>Bedford</u>, Bedford Basin, near Halifax, 20 Aug. 1912. Prov. Mus. Acc. No. 4109 (see Report for 1912).
- (5) 24 Aug. 1935.- Picked up dead, with flesh eaten away & no doubt some while since death, on Lawlor's Island, Hx. Har., 24 Aug. 1935. Present specimen, Acc. No. 8313.

## Appendix 145: Accession Book No. 5: Page 176. Museum No. 8437

Museum No. 8437

Scientific Name. Morone americana (Gmelin).

Common Name. White Perch.

Phylum, &c. Fish.

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Locality and when collected. Taken with minnow (will also take worms), Sawlor's Lake, Hubbards, Hx.

Co., N.S.; 3 May 1936.

Collector (c) and Donor (d). Edward S. F. Piers (c.d.) Halifax, N.S.

Received. 4 May 1936.

No. of Specimens. 1

Remarks. It is said that in this lake they will go up to about 3 lbs.

Family: Serranidae, Sea Bass.

<u>Colour</u>: Back olivaceous; sides slightly yellowish-white with 5 faint, paler longitudinal stripes above lateral line; belly white; pinkish about lower part of opercle and on belly at base of ventral fin; fins dusky; iris yellowish.

2.8 times

Fin Rays: Dorsal IX (4th largest)- I,12; pectoral, 15; Ventrals I,5; anal, III,9 (all normal)

Scales: 8 - 53 - 12

Measurements: Total length12.05 inchesLength to base of caudal10.10 inchesHead3.25 inchesDepth3.60 inchesDiameter of eye.64 inchProportions: Head in length3.1 times

Appendix 146: Accession Book No. 5: Page 181. Museum No. 8466

Museum No. 8466

Scientific Name. Christivomer namaycush (Walbaum).

Depth

Common Name. Great Lake Trout.

Phylum, &c. Fish.

Locality and when collected. Taken by trolling with a real minnow, in <u>Wright's Lake</u> which is fed by river which flows from Pockwock Lake (the two lakes are a little over 3/4 mile apart), near <u>Pockwock</u>, in western section of Hammond's Plains, Hx. Co., N.S.; Thurs., 14 May 1936.

Collector (c) and Donor (d). Paul R. DeWolf (c.d.) Bedford, N.S.

**Received.** 18 May 1936.

No. of Specimens. 1

Remarks. Great Lake Trout ("Pickerel") have long been known to occur in Pockwock Lake, but this is the first time I have known one to be taken in the connected Wright's Lake lower down the river.

Total length 26.00 ins. Girth 13.00 ins.

Weight 5 lbs. 15oz. after being out of water about 4 hours

Length to base of tail 21.35 ins

Head 6.18 ins. = 3.46 times in length Depth 5.10 ins. = 4.19 times in length

Eye .70 in.

Scales in lateral line 183 scales

Dorsal to lat. line 27? scales

Lat. line to vent 19 scales

Dorsal fin with 12 rays (10 full length ones, and 2 shorter ones) Anal fin with 10 or 11 rays Strong teeth on ant.[anterior] of vomer.

### Appendix 147: Accession Book No. 5: Page 212. Museum No. 8572

Museum No. 8572

Scientific Name. Pomolobus pseudoharengus (Wilson). Young, on way to sea.

Common Name. Alewife; Gaspereau.

Phylum, &c. Fish.

Locality and when collected. Taken with dip-net in small cove on east side of Sawlor's Lake, Hubbards, Hx. Co., N.S. Sun., 20 Sept., 1936.

Collector (c) and Donor (d). Edward S. F. Piers (c.d.) Halifax, N.S.

**Received.** 23 Sept. 1936.

No. of Specimens. 1

Remarks. Very many there in schools. They no doubt had been hatched in the large Dauphinee Mill Lake, above Sawlor's Lake.

Total length, 3.60 ins.; length to base of caudal, 2.90 ins.; depth, .80 in. (3 5/8th in length); head, .77 in. (3 3/4 in length); eye, .22.

Belly serrated.

Back dark bluish; sides very silvery.

### Appendix 148: Accession Book No. 5: Page 217. Museum No. 8587

Museum No. 8587

Scientific Name. Vomer setipinnis, Mitchill. Young. Common Name. Horse-head; Look-down. Moonfish.

Common Name. Horse-head, Look-dow

Phylum, &c. Fish.

Locality and when collected. Found dead on rocky beach at Stonehurst, 5 miles east from Lunenburg town, & at southwestern side of entrance to Mahone Bay, Lun. Co., N.S.; 27 August, 1936.

Collector (c) and Donor (d). Earl Levy (c.d.) Stonehurst, Lun. Co., N.S.

Received. 16 Oct. 1936

No. of Specimens. 1: Young

Remarks. For full account and description of these two specimens, the one of 1885, and the present one, Acc. No. 8587, see Report for 1935-6, pages 13-15.

References:

Figure 58, Plate 62. Laboratory notes on Atlantic Moonfish from Stonehurst by Harry Piers (Museum No. 8587, Negative No. 23,513b).

Figure 59, Plate 63. Rough sketch and notes on Atlantic Moonfish from Stonehurst by Harry Piers (Museum No. 8587, Negative No. 23,515b).

Figure 60, Plate 64. Rough sketches of Atlantic Moonfish from Stonehurst by Harry Piers, which were never inscribed into his Accession Book (Museum No. 8587, Negative No. 23,465b).

#### Fish-related Items

Harry Piers was interested in everything relating to the fishes found in Nova Scotia including fossil fish, methods of fishing, fish products and statistics. For example included in his catalogue he gives a table of the value per 112 pounds for dried cod for localities all over eastern Canada in 1915 which he obtained at the Nova Scotia Provincial Exhibition (Figure 61, Plate 65). He also includes a description and sketch of a Tyke Net used for catching smelts (Figure 62, Plate 66) and a fisherman's Dory (Figure 63, Plate 67).

## Appendix 149: Accession Book No. 1; Page 3; Museum No. 58 and 59

Museum No. 58

Scientific Name. [none given]

Common Name. Cod sounds

Cod tongues

Phylum, &c. [none given]

Locality and when collected. Nova Scotian coast

Collector (c) and Donor (d). N. and A. Smith (d.)

Received. Aug. 18, 1900 No. of Specimens. 1 bottle

Remarks. Sell for 5 [cents] a pound

## Appendix 150: Accession Book No. I; Page 5; Museum No. 85

Museum No. 85

Scientific Name. Cod-liver Oil

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. [none given]

Collector (c) and Donor (d). Bottled by A. Wilson & Son (d.) Halifax

Received. Oct. 23, 1900

No. of Specimens. 1

Remarks. [none given]

# Appendix I5I: Accession Book No. I; Page 6; Museum No. 97

Museum No. 97

Scientific Name. Rock specimens, &c., illustrating the petrographical features of Post-Triassic formation, supposed by Prof. Haycock to be Cretaceous:

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. [none given]

Collector (c) and Donor (d). [none given]

Received. [none given]

No. of Specimens. 1

Remarks. No. 7 Sandy Limestone, with Fish scales, Post-Triassic

#### Appendix 152: Accession Book No. 1; Page 7; Museum No. 98

Museum No. 98

Scientific Name. Can representing canned Mackerel

Put up by "Hinsdale Packing Co., Hinsdale, Canada." Hinsdale is merely a trade name (no such place)

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Halifax

Collector (c) and Donor (d). M. Neville (d.)

Received. Nov. 24, 1900

No. of Specimens. 1

Remarks. [none given]

#### Appendix I53: Accession Book No. I; Page 7; Museum No. 103

Museum No. 103

Scientific Name. Sample cans of Clams & Shad. Nova Scotia

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Nova Scotia

Collector (c) and Donor (d). Canned by Oscar Fulton (d.) Portaupique [Portapique], Londonderry, N.S.

**Received.** Dec. 24, 1900

No. of Specimens. 2

Remarks. [none given]

# Appendix 154: Accession Book No. 1; Page 8; Museum No. 110

Museum No. 110

Scientific Name. Canned Halibut ("Fresh White Shore Halibut")

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Nova Scotia

Collector (c) and Donor (d). Canned by Matthews & Scott, Queensport, N.S.

Purchased (15 [cents])

Received. Jan. 25, 1901

No. of Specimens. 1

Remarks. [none given]

# Appendix 155: Accession Book No. 1; Page 9; Museum No. 119

Museum No. 119

Scientific Name. Canned Finnan Haddie ("Tiger Brand")

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Margaretville, N.S. (Margaretville Canning Co.)

Collector (c) and Donor (d). Purchased (8 [cents])

Received. Feb. 12, 1901

No. of Specimens. 1

Remarks. [none given]

#### Appendix 156: Accession Book No. 1; Page 9; Museum No. 120

Museum No. 120

Scientific Name. Canned Kippered Herring

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Centreville, Digby Co. (Centreville Canning Co.)

Collector (c) and Donor (d). Purchased (8 [cents])

Received. Feb. 12, 1901

No. of Specimens. 1

Remarks. [none given]

# Appendix 157: Accession Book No. I; Page 9; Museum No. 121

Museum No. 121

Scientific Name. Canned Salmon

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. "Usine a Halifax" (on label)

Collector (c) and Donor (d). Purchased (12 [cents])

Received. Feb. 12, 1901

No. of Specimens. 1

Remarks. [none given]

### Appendix I58: Accession Book No. I; Page 9; Museum No. I33

Museum No. 133

Scientific Name. Canned Cod-fish.

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Lockeport, N.S. (Canadian Atlantic Canning Co.)

Collector (c) and Donor (d). Purchased (15 [cents])

Received. Feb. 12, 1901

No. of Specimens. 1

Remarks. [none given]

## Appendix I59: Accession Book No. I; Page 25; Museum No. 385

Museum No. 385

Scientific Name. Photograph of Tracks of a Fish-like Organism, *Ichthyoidichnites acadicus*, n. sp. (Ami)

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. McArras Brook, Antig. Co., N.S. Original specimen collected Aug. 6, 1886

Collector (c) and Donor (d). T. C. Weston (c); N.S. Inst. Sc. (d)

Received. Sept. 20, 1901

No. of Specimens. 1

Remarks. Siliceous mudstone of Knoydart formation: Eo-Devonish (Ami). See Trans. N.S. Inst. Sc., vol.

x, p. 330 Original specimen in Museum of Geological Survey, Ottawa.

#### Appendix 160: Accession Book No. 1; Page 33; Museum No. 532

Museum No. 532

Scientific Name. Fish scales

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Horton Bluff, Kings Co., N.S. August 12, 1901

Collector (c) and Donor (d). H. Piers (c.)

**Received.** Aug. 15, 1901

No. of Specimens. 2

Remarks. Upper Devonian (Fletcher)

# Appendix 161: Accession Book No. 1; Page 35; Museum No. 555

Museum No. 555

Scientific Name. Fish scale (fossil)

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. "Blue Beach", extension of Horton Bluff, Kings Co., N.S.: Aug. 13, 1901

Collector (c) and Donor (d). H. Piers (c.)

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

**Received.** Aug. 15, 1901

No. of Specimens. 2

Remarks. Very abundant at Horton Bluff "(Arch. Geol., 256, fig. 78)

Order, Gastracoda. Upper Devonian (Fletcher)

#### Appendix 162: Accession Book No. 1; Page 35; Museum No. 556

Museum No. 556

Scientific Name. Fish remains

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. "Blue Beach", extension of Horton Bluff, Kings Co., N.S.: Aug. 13, 1901

Collector (c) and Donor (d). H. Piers

Received. Aug. 15, 1901

No. of Specimens. 1

Remarks. Up. Dev.

#### Appendix 163: Accession Book No. 1; Page 35; Museum No. 565

Museum No. 565

Scientific Name. Limestone (blackish), micaceous; with Fish Scales

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. "Blue Beach" extension of Horton Bluff, Kings Co., N.S.; Aug. 13, 1901

Collector (c) and Donor (d). H. Piers (c)

Received. Aug. 15, 1901

No. of Specimens. 1

Remarks. Up. Dev.

### Appendix 164: Accession Book No. 1; Page 41; Museum No. 683

Museum No. 683

Scientific Name. Fossil Fish

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Albertite region, Albert Co., New Brunswick

Collector (c) and Donor (d). Walter H. Prest (c.d.)

Received. Jan. 3/02

No. of Specimens. 1

Remarks. The Albertite minerals are Lower Carboniferous

## Appendix 165: Accession Book No. 1; Page 56; Museum No. 920

Museum No. 920

Scientific Name. Fish head (dried)

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Indian Harbour Lake, Port Hilford, Guys. Co., N.S.

Collector (c) and Donor (d). C. J. Mackie, Hx. (d.) (of W. B. Arthur Co.)

Received. May 21, 1902

No. of Specimens. 1

Remarks. Reported to be an unusual fish

Indian Harbour Lake is a fresh-water lake with a slight bar separating it from the sea

#### Appendix 166: Accession Book No. 1; Page 100; Museum No. 1609

Museum No. 1609

Scientific Name. Fossil Shark's Tooth; original composition preserved. (Eocene)

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Charlston, N. C., U. S. A.

Collector (c) and Donor (d). Purchased from Geo. (George) B. Frazer, West Medford, Mass., U. S. A.

Received. Apr. 22, 1903

No. of Specimens. 1

Remarks. [none given]

# Appendix 167: Accession Book No. I; Page 201; Museum No. 2957

Museum No. 2957

Scientific Name. Fish remains in blackish bituminous shale.

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. From the "Albert Shales" of Albert Mines, Albert Co., New Brunswick.

Collector (c) and Donor (d). Dr. Henry S. Poole (c.d.)

Received. 10 Feb. 1906

No. of Specimens. 1

Remarks. Devonian (Lower Carboniferous of Dawson)

#### Appendix 168: Accession Book No. 1; Page 212; Museum No. 3110 and 3111

Museum No. 3110 and 3111

Scientific Name. Fossil fish in limestone

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Wyoming, U. S. A.

Collector (c) and Donor (d). J. W. Vidito (d.) Halifax

Received. 15 May 1907

No. of Specimens. 2

Remarks. [none given]

## Appendix 169: Accession Book No. 1; Page 213; Museum No. 3130

Museum No. 3130

Scientific Name.

Fossil Mollusca & Shark's Tooth

Common Name.

[none given]

Phylum, &c. [none given]

Locality and when collected. From the Berton Clay, Upper Eocene, on shore near Christchurch,

Hampshire, England

Collector (c) and Donor (d). Dr. Henry S. Poole (c.d.) Halifax

Received. 27 May 1907

No. of Specimens. 13

Remarks. Mollusca from the "Volute Bed", & Shark's Tooth from below that.

## Appendix 170: Accession Book No. 2; Page 14; Museum No. 3940

Museum No. 3940

Scientific Name. Part of a Ganoid fish (cephalic shield ?of) In gray argillacious Limestone

Common Name.

[none given]

Phylum, &c. [none given]

Locality and when collected. [none given]

Collector (c) and Donor (d). Dr. H. S. Poole (d.)

Received. 29 Jan. 1912

No. of Specimens. 1

Remarks. [none given]

# Appendix 171: Accession Book No. 2; Page 14; Museum No. 3941

Museum No. 3941

Scientific Name. Fish (complete), in concretionary Limestone. Leda Clay: Pleistocene

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Ottawa, Canada

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912

No. of Specimens. 1 (in 2 parts)

Remarks. [none given]

### Appendix 172: Accession Book No. 2; Page 14; Museum No. 3942

Museum No. 3942

Scientific Name. Fish (complete), in light-buffcoloured Limestone

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Colorado, U. S. A.

Collector (c) and Donor (d). Dr. H. S. Poole (d.)

Received. 29 Jan. 1912

No. of Specimens. 1

Remarks. Green River? (Middle Eocene)

## Appendix 173: Accession Book No. 2; Page 14; Museum No. 3943

Museum No. 3943

Scientific Name. Fish (complete), in brownish-gray Shale

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. [none given]

Collector (c) and Donor (d). Dr. H. S. Poole (d.)

Received. 29 Jan. 1912

No. of Specimens. 1 (in 2 parts)

Remarks. [none given]

#### Appendix 174: Accession Book No. 2; Page 14; Museum No. 3950

Museum No. 3950

Scientific Name. Holoptychius, scale of, in Limestone (From a Ganoid fish)

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Windsor Bridge, Windsor, Hants Co., N.S., 1870

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912 No. of Specimens. 1

Remarks. Carb. [Carboniferous] Limestone

#### Appendix 175: Accession Book No. 2; Page 15; Museum No. 3952

Museum No. 3952

Scientific Name. Tooth of Diplodus, in black Shale. (Fish tooth).

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. G. McKays mine, about 3 miles ESE of New Glasgow, Pict. Co., N.S.

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912

No. of Specimens. 1

Remarks. Carb. Limestone

#### Appendix 176: Accession Book No. 2; Page 15; Museum No. 3953

Museum No. 3953

Scientific Name. Tooth of Rhizodus, in black Shale. (Fish tooth).

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. I. McKays mine, near New Glasgow, Pict. Co., N.S.

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912

No. of Specimens. 2

Remarks. Coal Measures (Original & cast of tooth)

### Appendix 177: Accession Book No. 2; Page 15; Museum No. 3954

Museum No. 3954

Scientific Name. Tooth of Ctenoptychius, in black Shale. (Fish tooth).

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. I. McKays mine, near New Glasgow, Pict. Co., N.S.

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912

No. of Specimens. 1 Remarks. Coal Measures

#### Appendix 178: Accession Book No. 2; Page 15; Museum No. 3955

Museum No. 3955

Scientific Name. Fish remains, in blackish Limestone.

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Trial Pit Basin, East River, near New Glasgow, Pict. Co., N.S.

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912 No. of Specimens. 3 Remarks. Coal Measures

#### Appendix 179: Accession Book No. 2; Page 15; Museum No. 3956

Museum No. 3956

Scientific Name. Scale of Haloptychius, in black Shale (Ganoid fish scale).

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. McLennan's Brook, to eastward of New Glasgow, Pict. Co.,

N.S.

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912 No. of Specimens. 1 Remarks. Coal Measures

## Appendix 180: Accession Book No. 2; Page 15; Museum No. 3957

Museum No. 3957

Scientific Name. Fish remains, in black Shale. (Original & cast.)

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. "Pictou Coal Field", Pict. Co., N.S.

Collector (c) and Donor (d). Dr. H. S. Poole

Received. 29 Jan. 1912

No. of Specimens. 2

Remarks. Coal Measures

#### Appendix 181: Accession Book No. 2; Page 16; Museum No. 3974

Museum No. 3974

Scientific Name. Fish remains (scales etc.)

Common Name. [none given]

Phylum, &c. [none given]

Locality and when collected. Below Smelt Brook, north of New Glasgow, Pict. Co., N.S.

Collector (c) and Donor (d). H. Poole (c.) Dr. H. S. Poole (d.)

Received. 29 Jan. 1912

No. of Specimens. 4

Remarks. Permian

#### Appendix 182: Accession Book No. 2: Page 98. Museum No's. 4498 and 4499

Museum No. 4498 and 4499

Scientific Name. Two small bones () [sic] from the lower part of the cranial cavity of Gadus collaris

Common Name. The Cod-fish

Phylum, &c. Fish

Locality and when collected. Fish taken off Shag [Shad] Bay, Hx. Co., N.S.; about 24 April 1917.

Collector (c) and Donor (d). D. Coolin [Coolen] (c) From fish in Boutilier's Fish Market, Halifax, N.S.

Received. 1 May 1917

No. of Specimens. 2

Remarks. The fish was about 20 or 24 ins. Long. The bones seem to be inattached to the cranium. These bones are said to be smaller in Haddock, but they are said to occur in all fish.

### Appendix 183: Accession Book No. 2; Page 200; Museum No. 5013

Museum No. 5013

Scientific Name. Painted papier-mache cast of *Pomolobus pseudoharengus* (Wilson)

Common Name. Alewife; Gaspereau

Phylum, &c. Fish

Locality and when collected. Stewiacke River or else Shubenacadie River, Col. Co., N.S.; 3 May 1921

Collector (c) and Donor (d). Obtained in market in Truro. Purchased from H. S. Cruikshank, Truro.

Received. 21 July 1921

No. of Specimens. 1

Remarks. [none given]

#### Appendix 184: Accession Book No. 2; Page 200; Museum No. 5015

Museum No. 5015

Scientific Name. Papier-mache cast of Roccus lineatus (Bloch)

Common Name. Striped Bass

Phylum, &c. Fish

Locality and when collected. At mouth of Shubenacadie River, at Black Rock, Col. Co., N.S.; on or about 20 May 1921

Collector (c) and Donor (d). Paid \$10.00 for nos. 5013, 5014 and 5015

Received. 21 May 1921

No. of Specimens. 1

Remarks. Taken from the original fish, of which Acc. No. 5014 is the mounted skin Weight of fish, 18 lbs.

#### Appendix 185: Accession Book No. 3: Page 19. Museum No. 5496

Museum No. 5496

Scientific Name. Globular white <u>Quartz Pebble</u> .29 X .27 inch diameter, found in stomach of a 10 inch Brook Trout (Salvelinus fontinalis)

Common Name. Brook Trout

Phylum, &c. Fish

Locality and when collected. Caught in Black Brook, about 200 yards above where it crosses the Old Truro Road, ½ mile south of Elmsdale, Hx. Co., N.S.; 18 June 1924

Collector (c) and Donor (d). Jerry Lonecloud (c) Halifax, N.S. Bought for 50 [cents]

Received. 15 July 1924

No. of Specimens. 1

Remarks. [none given]

## Appendix 186: Accession Book No. 3; Page 268; Museum No. 6556

Museum No. 6556

Scientific Name. Photo. of Salmo salar, Linn. Male. Very large, weight just 55 lbs. length 55 ins., girth 30 ins. It is believed to have been the largest Salmon ever taken on the Fundy coast.

Common Name. Atlantic Salmon

Phylum, &c. Fish

Locality and when collected. Taken in a weir of the North Seine Co. (Sherman Steele, Hardy Corkum, Wyman Shaw) at Scotts Bay, Kings Co., N.S.; in the afternoon of Mon. 3 June 1929.

Collector (c) and Donor (d). It was brought to Canning on 4 June & sold to Lyons Bros., local fish dealers (Data from Miss Ada Reynolds, Canning, N.S.)

**Received.** 19 Oct. 1929

No. of Specimens. 1

Remarks. The quality of the fish is said to have been very fine, its flavour very delicate and colour deep pink. The photo. shows the purchaser Fred Lyons, holding the fish.

### Appendix 187: Accession Book No. 4: Page 249. Museum No. 7547

Museum No. 7547

Scientific Name. "Hardened Plastic" made from the hardened muscle (flesh) of Cod-fish (*Gadus collarias*) at the Laboratory of the Fisheries Experimental Station, Halifax, N.S. In order to test its suitability.

Common Name. Cod-fish

Phylum, &c. Fish

Locality and when collected. [none given]

Collector (c) and Donor (d). Dr. W. W. Johnston (d.) Fisheries Exper. Station, Halifax,

**Received.** 14 Feb. 1933

No. of Specimens. 1

Remarks. See Dr. W. W. Johnston paper on "Hardened Plastic from Fish Muscle" read before N.S. Inst Sc. Hx. 13 Feb. 1933.

This specimen is marked "185" which indicates it was made from the cod.

"Hardened Plastic", is so far made from casein (and) from milk and is used in making electric insulators, umbrella handles, knitting needles, buttons, and many other articles in everyday use. It can be coloured, takes a brilliant polish, and is not inflammable.

There is 20% solid matter in fish muscle, of which 90% is proteins. The process used at the Fish Exp't. Station, is:

- (a) pressed in hydraulic press; (b) immersed in formaldehyde to harden it; and
- (c) dried with heat; but better if dehydrated with alcohol.

This specimen is not perfectly homogeneous and not clear, but yet is commercially useful.

It can be made from either Cod, haddock, dog-fish etc.

#### Appendix 188: Accession Book No. 5: Page 45. Museum No. 7858

Museum No. 7858

Scientific Name. Thunnus secundodorsalus, Storer

Common Name. Albacore

Phylum, &c. Fish

Locality and when collected. Off Hubbards, St. Margaret's Bay, N.S. Photo'd at Hubbards, Lun. Co., N.S. About 15 Aug., 1934.

Collector (c) and Donor (d). Geo. Gannin (c.d.) photographer, Halifax, N.S.

Received. about 22 Aug. 1934

No. of Specimens. 2

Remarks. Photos. of <u>Albacores</u>, *Thunnus secundodorsalus*, Storer, in motion within the large, netted enclosure or "pound" in which the Coolins [Coolens] store alive the Albacore which they have taken in net-traps off Hubbards, St. Margarets Bay, N.S. The pound is located at the Coolins' [Coolens'] wharf, near road to Fox Point, on western side of Hubbard's Cove, opposite to Dauphinee Pt., just inside Lun. Co., N.S. Photo'd at Hubbards, Lun. Co., N.S. Photos taken by G. Gannin about middle of Aug., 1934.

See also acc. No. 7945

### Appendix 189: Accession Book No. 5: Page 59. Museum No. 7945

Museum No. 7945

Scientific Name. Thunnus thynnus, Linn. (T. secundodorsalis Storer)

Common Name. Great Albacore or Tuna

Phylum, &c. Fish

Locality and when collected. Photo'd at Hubbards, N.S.; 16 Sept., 1934; by E. S. F. Piers.

Collector © and Donor (d). Edward S. F. Piers, C. E., photographer, Halifax, N.S.

Received. 25 Sept. 1934

No. of Specimens. 12

Remarks. Photos. (12) showing work of emptying or spilling a netted "pound" or enclosure containing 30 previously-captured <u>Great Albacore</u> or <u>Tuna</u>, <u>Thunnus thynnus</u>, Linn. (*T. secundodorsalis* Storer), and harpooning or otherwise killing the large fish; at Coolin's [Coolen's] albacore pound, on west side of inner cove of Hubbards Cove, the pound actually in Lunenburg County, N.S.; Sunday 16 September, 1934. The captured fish are kept alive in this pound, enclosed by a buoyed net, until they are killed for marketing.

The photos. are arranged in the approximate order in which they were taken, & there fore illustrate the progress of the work.

- (a) Showing the pound net; man in stern of boat at left, has just thrown a harpoon at a fish. Old Dauphinee House, on Dauphinee Head in background. Looking NE.
- (b) Pound reduced in size, and foot-part of pound net being hauled-in; fish breaking surface of water while rushing about. Looking NE.
- (c) Ditto. The corked net of the pound being hauled in. Looking NE.
- (d) Ditto. This realy should be before or after (b). Looking NE.
- (e) Man on end of Coolin's [Coolen's] wharf, with harpoon. Looking NE.
- (f) Ditto. After having struck a fish with the harpoon. Looking NE.
- (g) Four men on wharf, hauling on a harpoon line; the dart of which fast in the body of a fish. Looking NE.
- (h) Man on end of wharf, just as he had hurled a harpoon at a fish. Looking NE.
- (I) Fish at surface, with headless harpoon about to be stuck into it by man on wharf. Looking?
- (j) Fish swimming rapidly at surface, with tail showing. Looking?
- (k) Fish below surface, as seen from above. The dorsal finlets near tail show clearly. Looking?
- (1) Man on shore killing the fish with pickaxes, etc. About 4 fish are seen. Sheds on wharf in background. Looking N.

The inner net was a heavy one with cork buoys

### Appendix 190: Accession Book No. 5: Page 281. Museum No. 8927

Museum No. 8927

Scientific Name. Otoliths (calcareous concretions) from the "ear" of Gadus collarias, L.

Common Name. Cod-fish

Phylum, &c. Fish

Locality and when collected. Locality not stated; but no doubt from off Halifax Co., N.S.

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Collector (c) and Donor (d). Bought from Mrs. R.F.Eagar, 90 ½ Edward St., Halifax

**Received.** 21 Oct. 1937

No. of Specimens. 6 specimens in vial (probably 3 pairs)

Remarks. They are sometimes carried in the pocket as "lucky stones"

See sketch of one otolith

## Appendix 191: Accession Book No. 5: Page 281. Museum No. 8928

Museum No. 8928

Scientific Name. Dried pupils of Fish Eyes

Common Name. [none given]

Phylum, &c. Fish

Locality and when collected. Locality not stated; but no doubt from off Halifax Co., N.S.

Collector (c) and Donor (d). Bought from Mrs. R. F. Eagar, 90 ½ Edward St., Halifax

Received. 21 Oct. 1937

No. of Specimens. 9 (in vial)

Remarks. [none given]

# VI. A CHRONOLOGICAL LIST OF CORRESPONDENCE RECEIVED BY HARRY PIERS

Filed in the Nova Scotia Museum of Natural History Library Under: PIERS PAPERS: V, Science; C, Ichthyology; (a), Correspondence

Harry Piers wrote all his correspondence by hand and therefore, in most cases, there are no copies or drafts of most letters of enquiry or responses to enquiries sent out. The following is a list of correspondence he received that have been catalogued by Susan Whiteside under the above heading.

- 1908 May 6: From Mary T. Dwyer, St. Mary's Boys School, Halifax; to Piers acknowledging information given on a fish specimen sent to him.
- 1912 Feb. 6: From George M. Bowers, Commissioner, Bureau of Fisheries, Washington; to Piers concerning some fish specimens transferred from U. S. National Museum to Nova Scotia Provincial Museum.
  - Feb. 24: From H. M. Smith, Acting Commissioner, Bureau of Fisheries, Washington; to Piers enclosing a list of tagged specimens taken from waters at Halifax (1877-1880). Enclosed Proceedings of United States National Museum, vol.3, 1880.
- 1913 Dec. 30: From R. Rathbun, Assistant Secretary, United States National Museum; indicating that specimens in drawings sent by Piers have been forwarded to Professor Metcalfe, Oberlin College, Ohio for identification.
- 1914 Jan. 5: From Alfred Ogden, Bedford, Nova Scotia; to Piers requesting identification of a fish from Bedford Basin.
  - Jan. 7: From Alfred Ogden, Bedford Fish Hatchery; to Piers giving location and date for above specimen of "Leather jacket" or "Trigger fish".
- Jan. 6: From J. MacDonald of The Glace Bay Gazette; to Piers, sending specimens of a strange fish, commonly known as a red mud-sucker. Also a page of notes written by Piers on the specimen (Jan. 7); and a newspaper article on the 'strange fish'. (Jan. 2, 1915).
  - Feb. 26: From Alfred Ogden of Bedford Fish Hatchery; to Piers concerning the introduction of fish into N.S. waters.
  - Feb. 28: From Philip Cox of Fredericton; to Piers giving notes on various species of Nova Scotia fish. [Acc. Nos. 217, 289, 355, 394, 456, 538, 932, 939, 1097, 1408, 1415, 1532]
  - Feb. 29: From David Starr Jordan, Leland Stanford Junior University, California; to Piers concerning measurements of *Fistularia* [cornetfish].
  - Mar. 4: From Alfred Ogden of Bedford; to Piers giving information on fish introduced to Nova Scotian waters.

- Mar. 6: From Philip Cox of Fredericton; to Piers discussing *Notropis cornutus* and other species of Nova Scotia fishes.
- Mar. 13: From B. A. Bean of U. S. National Museum; to Piers indicating two species of *Fistularia* [cornetfish] on Nova Scotian coast.
- Mar. 25: From Edward E. Prince, Dominion Commissioner of Fisheries, Ottawa; to Piers concerning spawning periods of Nova Scotian food-fishes.
- Apr. 6: From B. A. Bean, Curator, Division of Fishes, United States National Museum, Washington; to Piers concerning a specimen of Scup, Stenotomus chrysops.
- Apr. 10: From David Starr Jordan, Office of the Chancellor, Leland Stanford Junior University, California; to Piers concerning a description of *Fistularia* [cornetfish].
- Apr. 15: From J. Triyder, Dept. Of Zoology, Leland Stanford University, California; to Piers concerning *Fistularia* [cornetfish]
- Apr. 20: From B. A. Bean, U. S. National Museum; to Piers concerning a specimen of Scup.
- Apr. 25: From R. J. Colp of Little Hope, Queens Co.; to Piers concerning description of a fish found on Sept. 5, 1914.
- July 3: From Philip Cox, Biological Station, St. Andrew's, New Brunswick; to Piers concerning Liparis cinesta and Maurolices borealis.
- Aug. 17: From George A. Cornish, Faculty of Education, University Of Toronto; to Piers concerning a specimen of *Lycodes* taken at Canso.
- Aug. 24: From Philip Cox, Fredericton; to Piers concerning M. pennaute, Leipais lineata, Aspidophoroides monopterygius (Block), Mallotus villosus (Capelin). [Acc. No's. 867, 2449 2431, 789 respectively].
- Sept. 16: From G. W. Field, Chairman, Commissioners on Fisheries and Game, Boston; to Piers sending a copy of a publication on the fish of Massachusetts.
- 1916 Jan. 17: From Andrew Halkett, Canadian Fisheries Museum, Ottawa; to Piers concerning *Tarpon atlanticus*.
  - May 2: From Edward E. Prince, Dominion Commissioner on Fisheries, Ottawa; to Piers concerning records of Tarpon in Nova Scotia.
- 1917 Mar. 24: From A. W. Law, Secretary of Abbey and Imbrie, Division of Baker, Murray & Imbrie, Inc., New York; to Piers sending framed plates of flies (fishing tackle). Question as to form of mailing.
  - Mar. 27: From A. W. Law, New York; to Piers, sending flies and catalogue by Parcel Post.

- 1919 May 15: From C. J. Connolly, University of St. Francis Xavier College, Antigonish, Nova Scotia to Piers concerning earstones in a specimen of young angler.
  - Oct. 17: From A. MacEchen, Barrister, Town Hall, Inverness, Nova Scotia; to Piers concerning the preparation of fish for exhibition purposes.
- 1920 Oct. 8: From H. F. Moore, acting commissioner, Bureau of Fisheries, Washington; to Piers concerning a shark jaw specimen.
  - Oct. 26: handwritten draft from Piers to H. F. Moore, Acting Commissioner, Bureau of Fisheries, Washington, D. C.; concerning identification of shark jaws. Sending specimens for examination by Mr. Lewis Radcliffe.
  - Dec. 7: From H. F. Moore, Washington, D. C.; to Piers concerning identification of jaws of sharks and rays.
- 1921 Mar. 31: From W. H. Celease (?), Wolfville, Nova Scotia; to Piers concerning a salmon specimen, its weight, location.
  - Sept. 28: From C. J. Connolly, University of St. Francis Xavier College; to Piers concerning information on *Lophius*.
  - Oct. 12: From C. J. Connolly, St. Francis Xavier College; to Piers concerning a paper on specimen of *Lophius*.
  - Dec. 14: From Miss Florence Daykin, Somerville, Massachusetts; to Piers concerning a species of fish called a Mermaid.
- 1922 Jul. 29: From Philip Cox, Hubbards, Nova Scotia; to Piers concerning several species and specimens of freshwater fish found near Hubbards.
- 1923 Jun. 30: From David Starr Jordan, Stanford University P. O., California; to Piers, sending his "Classification of Fishes".
- 1924 Mar. 10: Gerry P. Brihn (?), Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; to Piers, acknowledging permission to quote the Blue Shark records.
  - Apr. 24: S. Edgar Marsh, Registered Professional Engineer of Nova Scotia Provincial Land Surveyor, Bridgewater, Nova Scotia; to Piers re.: White Fish.
- Jun. 15: From Ada M. D. Reynolds of Canning, Nova Scotia; to Piers concerning a salmon caught at Scott's Bay, Bay Of Fundy, Nova Scotia, 3 June 1929.
  - Oct. 17: From Ada M. D. Reynolds of Canning, Nova Scotia; to Piers enclosing photographs of salmon caught at Scott's Bay, Bay Of Fundy, Nova Scotia.
- 1931 Oct. 7: From Philip Cox, Fredericton, New Brunswick; to Piers concerning specimens of Nova Scotian fish.

#### FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

- Jul. 13: From H. Wyckoff Rogers, Barrister, Amherst, Nova Scotia; to Piers concerning Bass and White Perch (Acc. No. 7428).
- 1933 Feb. 28: From J. W. Dawson Stearns, Editor, "The Spectator", Annapolis Royal, Nova Scotia; to Piers concerning sharks in Basins. (Acc. No. 7508)

## VII. A LIST OF NOTES AND SKETCHES BY HARRY PIERS

Filed in the Nova Scotia Museum of Natural History Library Under: PIERS PAPERS: V, Science; C, Ichthyology; (b), Notes

Harry Piers usually did rough laboratory notes including measurements, scale counts and fin ray counts and sometimes rough sketches before entering the record in his accession books. The following is a list of these notes now on file in the Nova Scotia Museum Of Natural History library.

- 1. Pen sketch of Carcharhinas obscurus (Le Sueur), Dusky Shark or Prionace glauca (Linn.), Great Blue Shark, caught at entrance to Halifax Harbour, 10th. Oct., 1920. (20.5 X 13 cm.) (Acc. No. 4941)
- 2. Note on "Cat Fish". 18 June 1924. (13 X 9.5 cm.)
- 3. Note on White Perch and Yellow Perch. (12.5 X 20 cm.)
- 4. Note on Yellow Perch, received 24 June 1924. (12.5 X 20 cm.) (Acc. No. 5479)
- 5. Note on White Perch, received 24 June 1924. (12.5 X 20 cm.) (Acc. No. 5480)
- 6. Note on Family Salmonidae. (12.5 X 20 cm.)
- 7. Note on unidentified shark, with sketch made by K. G. Dalton, 17 Sept. 1923. (12.5 X 20 cm.)
- 8. Pen sketch of Sword Fish, Cole Harbour, Hfx. Co., Nov. 5, 1902 (18 X 24 cm.) (Acc. No. 1090)
- 9. Sketches and notes of Vomer setipinnis Mitchill 1936. (12 X 20 cm.) 3pp. (Acc. No. 8587)
- 10. Notes on Whitefish, Millipsigate Lake, Lunenburg Co., 5 May 1924. (19.5 X 26.5 cm.) <u>Draft</u> copy. (Acc. Nos. 5225, 5454, 5455)
- 11. Pencil sketch of a shark caught in Halifax Harbour, 31 Oct. 1924. Lamna cornutrica (Gmelin) (13 X 20 cm.) (Acc. No. 5571)
- 12. Note on Salmon. June 1928 (12 X 20 cm.) (Acc. No. 6252)
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- 14. Notes on Common Pipefish, Siphostoma fuscum (Storer) (19.5 X 26.5 cm.) (Acc. No. 7213)
- 15. Notes and chart on Common Pipe Fish, Siphostoma fuscum. 2pp. (19.5 X 26.5cm) a, notes; b, chart. (Acc. No. 7214)
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## **Addendum**

Although much of Harry Piers's original notes were catalogued and stored in boxes in the library, additional material has recently been discovered in the laboratory and in the zoological files at the Nova Scotia Museum Of Natural History after the manuscript was submitted. Some of these documents are significant but could not be included in the report. These letters and notes have been included here.

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- Figure 67. Page one of two page letter dated 2 April 1923 to Harry Piers from Philip Cox concerning Mackerel (Negative No. 24,064).
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- Figure 69. Letter dated 14 October 1925 to Harry Piers from S. Edgar March concerning the capture of Sault Whitefish (Acadian Whitefish, *Coregonus huntsmani*), (Negative No.24,757).
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- Figure 72. Original note by Harry Piers concerning the Halibut catch in Nova Scotia waters 1913 1914 (Negative No.24,766).
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Figure 82.	Original note by Harry Piers concerning Gaspereau, Atlantic Cod, Haddock and Atlantic Herring 27 April 1917 (Negative No. 24,053)					
Figure 83.	Original note by Harry Piers concerning 25 specimens of Banded Killifish, <i>Fundulus diaphanus</i> , captured at inner part of Cole Harbour, Halifax Co., N.S. on 4 May 1917 (Museum No. 4501, Negative No. 24,760).					
Figure 84.	Original note by Harry Piers concerning 48 specimens of Atlantic Silverside, <i>Menidia menidia</i> , captured at Cole Harbour, Halifax Co., N.S. 4 May 1917 (Museum No. 4502, Negative No.24,763).					
Figure 85.	Original note by Harry Piers dated 17 May 1917 concerning the capture of a 4 1/4 lb. Grayling (Landlocked Salmon) at Grand Lake and 42 lb. Striped Bass found dead on shore of Grand Lake, Halifax Co., N.S. (Negative No. 24,052).					

## FISHES OF NOVA SCOTIA...BOOKS OF HARRY PIERS

Figure 86.	Original note by Harry Piers concerning the capture of large Rainbow Smelt, Osmerus mordax, at Wellington, Grand Lake, Halifax Co., N.S. about March 1918 (Negative No. 24,761).
Figure 87.	Original note by Harry Piers concerning 2 Common Shiner captured at Wright Lake, Halifax Co., N.S. About end of June 1918 (Museum No. 4622, Negative No. 24,067).
Figure 88.	Original note by Harry Piers concerning one specimen of Ninespine Stickleback captured 1 mile SE of Elmsdale Station, Halifax Co., N.S. on 13 November 1918 (Museum No. 4675, Negative No. 24,758).
Figure 89.	Original note by Harry Piers concerning Yellowtail Flounder, <i>Pleuronectes</i> ferrugineus, bought at fish market in Halifax 9 January 1920 (Negative No. 24,070).
Figure 90.	Original note by Harry Piers concerning the capture of Rainbow Smelt, <i>Osmerus mordax</i> , near Wellington, Grand Lake, Halifax Co., N.S. About 27 March 1920 (Negative No. 24,759).
Figure 91.	Original note by Harry Piers concerning one specimen of Planehead Filefish, <i>Monacanthus hispidus</i> , captured 1 mile south of Prospect on 20 September 1922 (Museum No. 5155, Negative No.24,756).
Figure 92.	Record of 2 Longnose Lancetfish (Handsaw Fish) from fishing banks off Nova Scotia reported in Halifax Daily Star, 15 July 1927 (Negative No. 24,055).
Figure 93.	Original undated note by Harry Piers concerning "Runs" of Salmon (Negative No. 24,071).
Figure 94.	Original undated note by Harry Piers on Halibut records provided by Joseph Perrin (Negative No.24,762).
Figure 95.	Original undated note on Flyingfish (Negative No. 24,046).
Figure 96.	Original undated note on various freshwater fishes (Negative No. 24,074).
Figure 97.	Title page from Volume I of Harry Piers's Catalogue of Fish of Nova Scotia (Negative No.24,059).
Figure 98.	Table of Contents of Volumes I to IV of Harry Piers's Catalogue of Fish of Nova Scotia. (Negative No. 24,057).
Figure 99.	Letter dated 28 July 1919 to Harry Piers from Philip Cox concerning biological work in St. Marys Bay, Digby Co., N.S. (Negative No. 24,769)
Figure 100.	Letter dated 26 March 1915 to Harry Piers from Philip Cox concerning Fourspine Stickleback from St. Marys Bay, Digby Co., N.S. (Negative No. 24,771)

- Figure 101. Original note by Harry Piers on five specimens of Threespine Stickleback collected at St. Marys Bay, Digby Co., N.S. on 30 June 1919 by Philip Cox (Museum No. 4786, Negative No. 24,768)
- Figure 102. Letter dated 26 April 1915 to Harry Piers from Philip Cox concerning Fourspine Stickleback from St. Marys Bay, Digby Co., N. S (Negative No. 24,770)

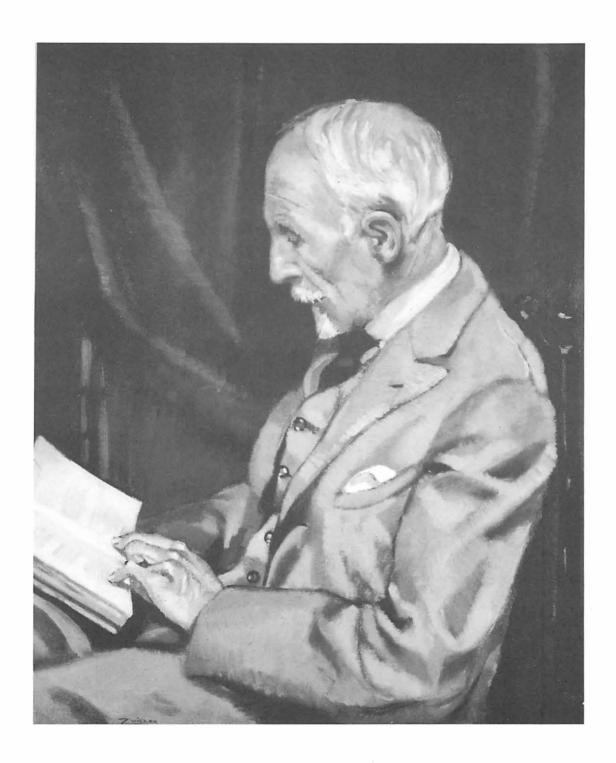


Figure 1. Portrait Harry Piers, 1870 - 1940. Painting by LeRoy Zwicker (Negative No. 9,568)



Figure 2 A. Harry Piers at work, about 1933-1935, Nova Scotia Provincial Museum, Spring Garden Road, Halifax (Negative No. 9,620).

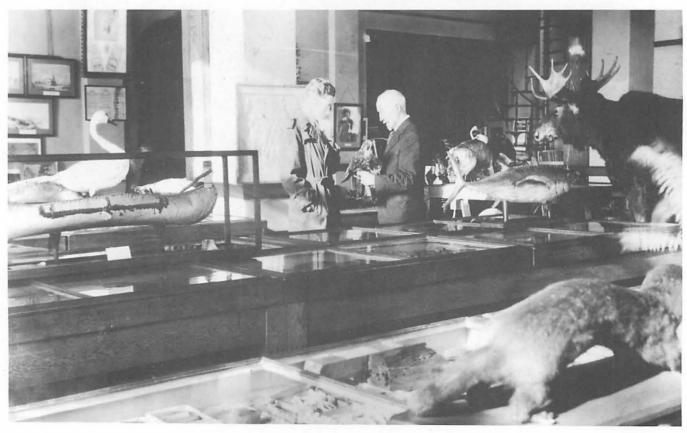


Figure 2 B. Harry Piers at work, about 1933-1935, Nova Scotia Provincial Museum, Spring Garden Road, Halifax (Negative No. 10,786).

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Figure 3 A and B. An example of Harry Piers's urtiing, from Accession Book No. 4, page 235, giving particulars of a White Shark tooth, found embedded in the wood of a 25 foot motor boat after it was attacked (Museum No. 7508, Negative No's. 23,845 and 23,846).

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Figure 4. An example of Harry Piers inserting small sketches within and to the side of paragraphs to illustrate particulars of Lake Trout records from Sherbrooke Lake (Museum No. 7832, Negative No. 23,850).

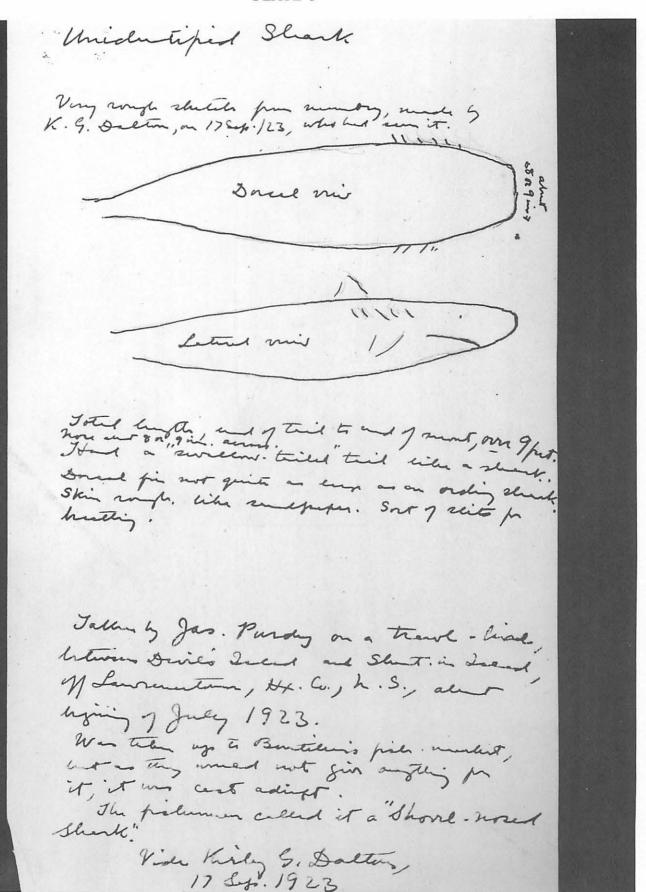


Figure 5. Rough sketch from memory of a "Shovel-nosed Shark" by K. G. Dalton with notes by Harry Piers, but not inscribed in his Accession Book (Negative No. 23,494).

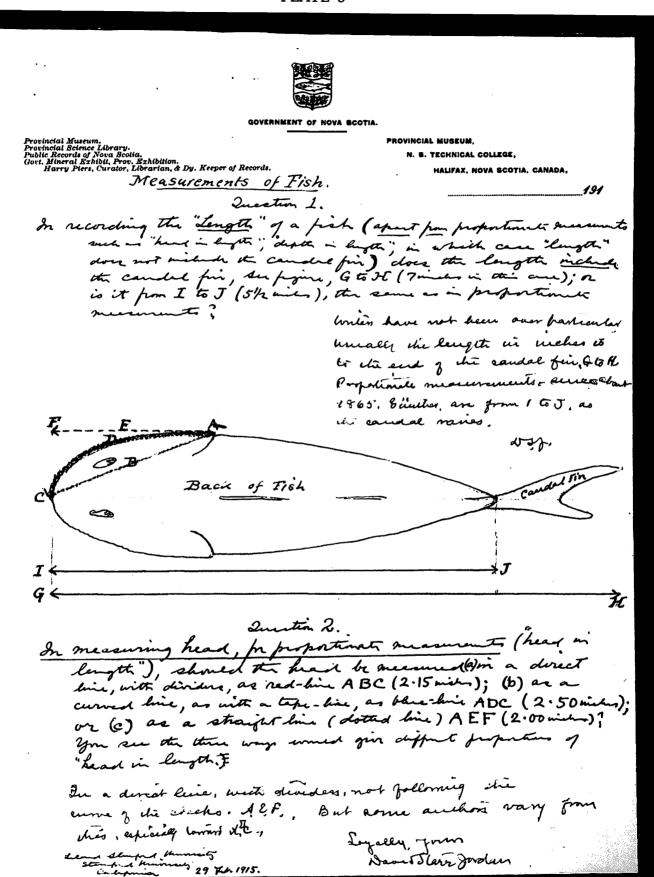


Figure 6. Letter Harry Piers wrote to David Starr Jordan to clarify techniques of measuring fish which Jordan answered 29 February 1915 (Negative No. 23,461).

nu Dear Fiers. Parelon delay in replying to your inquity of 18 - wit, which I was they glove to get may be from use to you in your perese lest of M. S. fishes. I conqualelate you Seel sure will be a success. I hope to secure acopy of it as ason as kublished The delay in reflying was in front sue to the dafficulty of fineing my old feeled book weed hit bis, but It lought his unearthed it and fam gung you fall notes on the species observed. go were. he. Courseus planelieuro. Middleton Ourcepoles 538 River. Mortous Brook. Trebutary of low House, believen new Germany & springfield. A small variety selection expressing st niches in length. Barbel siceut fectorel axilla red. Quite mixely distributed. Semotelus atromacedatees, Horned Dace. 355 Cunapolis Rice, Kindellow. Inortous Brook, La Hove near Breageweles. Springfield Luke. Cloud Luke. Common Abramis chrysoleeces. Toldenthines Waterloox other lakes near Allany Station drained wito the dictory. Low Howe wear Bridgewater, springfield Looke bloud Looke, Duite Course. Catostonus Commersoni. Brook Lucky Aunapolis Beiner near middletow. Junicher's Lacke. Cloud Locke. not uncommon.

Figure 7 A. Page one of two page letter to Harry Piers from Philip Cox dated 28 February 1915 listing fishes he collected in Nova Scotia in August 1890, and which Cox congratulates Piers on his proposed list of Nova Scotian Fishes (Negative No. 23,511).

1415. Perca fluviatelis. Lellow Merch. jolas Eake Digly-small + verydeck specum Bridgeweler, Springfeeld Lacke, Cloud tooks A wrocely distributed species. 939/ Fundulus diaphanus, Fresh-well Kalagish. Aunapolis Keier miscolletow. Mortous Herest La Hare, near Bridgeweler, Springfield Lefte . Coloud Lake . Abundant. 217 Ameiures relulosus. Catfeil. Junicher's Locke, and in one drained by the hickory bake . hot common. 1097 Tygosteus sungetius. Jepinese flickleback. La Hare Rever, hear Bridgewater. Roccus Comericanis. White Perch. Springfield bake, Ea Houre . Hucommon. I have no note of the accurrence of botropies cornuters. F. heteroclitus a peerely well water Kelli fish was not observed, let is certain to seems in your salt & brackers sreces. I did not find Exponetis gibboses, but it would reem wonderful if it were not found in your perounce. There collections were all made between Duy 9+ 23 1870. Very sencerely yours Fredericton M. 15. 1 philip cop HEG. 48/16.

Figure 7 B. Page two of two page letter to Harry Piers from Philip Cox dated 28 February 1915 listing fishes he collected in Nova Scotia in August 1890, and which Cox congratulates Piers on his proposed list of Nova Scotian Fishes (Negative No. 23,510).



Bedford Fish Hutchery

Subject.

Bedfird, N. S. 26 Feby 1915-

In repey to yours of gested by consuming the introduction of species of fish into hove Lection Waters I beg to eay that White girk and Salmon trout from the great lakes hove been hatched at Beafore and planted in really every Lake in hove Vestis, This was hips up for over twenty years, but There fish did not propegate mous water not me haven been been since plented. about 10 years agod want to hew Jul State and pracure some Rambour Goul Eggs which were hatcher here and planted in leveral lakes, come of which were Chordate Lake, Spense Kill Lake, Long Lake und anderson Lake. The mic has club her some for Thin Lakes, and That he mallow Eng. of Lines had lamb planted in his Lapon which green rapidly for two years and then disappeared no doubt they were all caught up. ar

Figure 8 A. Page one of two page letter to Harry Piers from Alfred Ogden dated 26 February in which Ogden provides details of fish introductions in Nova Scotia (Negative No. 23,518).



Rodford Fish Hatchery

Redford, N. J. Subject. 191 as he permitted the public to fish There When they were a gear old. Those planten in Chocolate Lake were all hilled as went to Rea, when Henderson Hater deained totake to line a darn, which was done There months after the fish own planted. I have not heard of there being any Bambows in the other takes in which they our planter ony that there are no find of any kind in our waters which are not indegenous. Olfred Coden. Mary Pean Eng.

Figure 8 B. Page two of two page letter to Harry Piers from Alfred Ogden dated 26 February in which Ogden provides details of fish introductions in Nova Scotia (Negative No. 23,516).

Fish of N.S. Bedford Fish Hatchery. an. 6 hard 1915. Bedford, N. S. 4 Merch 1915 Subject. Dear Me Pins, In reply to your of the street. I find that the countries name of the fish introduced who on on water are so Jeliani, Whilefish ( Coryones Clupisformus) Great Lake trout, Cristisomer homogensh ) Rainbow hout (Salmo laidus) V The Rambour were introduced here in 1899, and 1900, for two years only. The white fish and great to the trans luce intosduced here previous to laking charge of This betaking in 1893. They aren probably intraceer about 1877. I have not any of the Reports prior to 1893. planted in many energ lake in the Posinare but key have not less sun since our Evates are too hot for Man. Jour Jaithfully, Orfus Ogdion. of him, Eng.

Figure 9. Letter to Harry Piers from Alfred Ogden dated 4 March 1915 in which Ogden provides details of fish introductions in Nova Scotia (Negative No. 23,517).

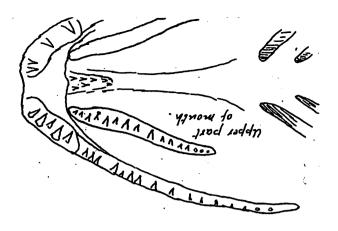


Figure 10. Line drawing of upper part of mouth of Great Lake Trout from Nine Mile Lake, Lun. Co., N. S., by Harry Piers (Museum No. 935, Negative Number 12,439).

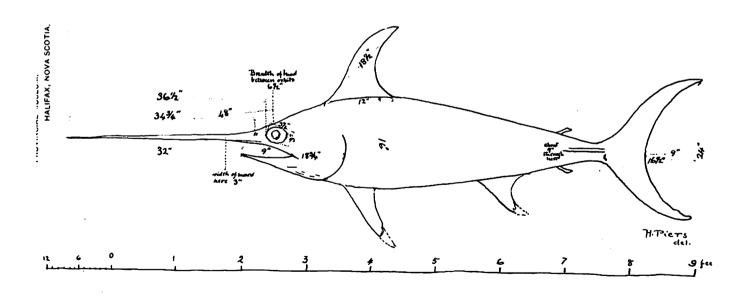


Figure 11. Sketch including measurements of a Swordfish from Cole Harbour by Harry Piers (Museum No. 1090, Neg. No. 23,506).

SWORDFISH

Cole Harbour, Halifax G., N.S.

Niphias gladius, L.

out by wrong on Tutal length 9ft. 8 m.

banadian Fisheries Museum,
Ottawa, 17th January 1916.
Harry Piers Esq.
Curator, Provincial Museum,
Halifax, N. S.

Dear Mr. Piers, Sam to-day in receifet of your letter in regard to Tarpon atlanticus, a specimen of which is recorded in my black. List as having occurred at Isaac's Harbour. There is I believe a published account of this specimen in one of the back numbers of the Ottawa Vaturalist by Prof. Prince, and it I could only lay my hands on the back numbers I would look it up. I can however interview the editor on the in your library. I understood Prof. Prince to say that the specimen was from I saac's Harbour, and I feel sure that he can furnish you with the desired information. Before the Winter last year was hardy over left Ottawa for out-door work, and was gone until the Autumn and I am very sorry indeed that you shouldhave written me before without getting a raply. I have gone over the papers in the office, and find there is such a letter addressed to me,

but as there was no one to act for me in my wiring my absence, it was overlooked. I soul you my absence, it was overlooked. I soul you may apology for the omission which I assure you was unintentional and if I can supply you with fullor information I will be grad to do so.

Yours sincerely,

and and halfelt

Figure 12 B. Page two of two page letter to Harry Piers from Andrew Halkett dated 17 January 1916 concerning Tarpon (Museum No. 3034, Negative No. 23,488).

ADDRESS REPLY TO
DEPUTY MINISTER
AND QUOTE

DEPARTMENT OF THE NAVAL SERVICE

Ollawa, Feby 8th,1916.

No

a... 24 ap. 1910.

J. 3 E. No. 670. Tarpon atlanticus.

Dear Mr. Piers,-

In reply to your letter of the 31st ult., respecting specimens of Tarpon, taken on the Nova Scotia coast, in recent years, I have somewhere a letter which I cannot put my hands on, enclosing scales taken from the second specimen which was taken in the Isaac's Haroour district.

I happened to speak of these fishes to Mr. S.r.Wilson, the fish merchant, Halifax, not long ago, and if I remember correctly, he said that a third specimen had been obtained. I think on the Chester shore. Perhaps you might see Mr. Wilson, and ask him if he could tell you the parties who could give you information about any further specimens, in addition to that which you have in your museum.

I enclose a reprint of a paper on the egg of Myxine, a very interesting egg, and very rarely obtained.

Yours faithfully,

- Colores de Minde

Dominion Commissioner of Fisheries.

Harry Piers, Esq.,

Curator Provincial Museum,

Halifax, N.S.

Figure 13 A. Letter to Harry Piers from Edward E. Prince dated 8 February 1916 concerning Tarpon (Museum No. 3034, Negative No.24,058).

EEP/W.



DEPARTMENT OF THE NAVAL SERVICE

Ottawa May 2nd, 1916.

Fish.

Tarpon in Nova Scotia.

am. 26 2mg 1916.

Dear Mr. Piers,-

In reply to your letter of the 24th ult., I think you are probably wise in expressing doubts as to the occurrence of a second specimen of the tarpon in Nova Scotia, and I regret that I cannot put my hands on any letters or papers which refer this matter. I have an impression that more than one specimen was reported to this Department, and when I was on the coast with the Fisheries Advisory Board, attending the Lunenburg meeting, someone spoke to me about a specimen which I think had been got west of Halifax, but there may be some doubt about this.

Certainly the references which Mr. Halkett gives in his check list 1913, must refer to the same specimen, and I do not know on what grounds he states that the species has been twice recorded, namely from Isaac's Harbour and from Harrigan Cove.

It would be safest therefore to withhold any reference to a second specimen, unless you are able to get more definite information before you publish your list next year.

Harry Piers, Esq.,

Curator Provincial Museum,

Halifax, N.S.

Yours faithfully,

Dominion Commission

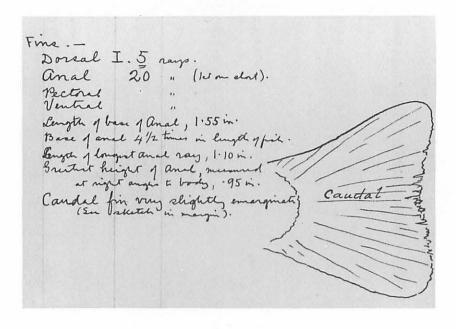


Figure 14. Line drawing of caudal fin of Brown Bullhead by Harry Piers (Museum No. 3560, Negative No. 12,440).

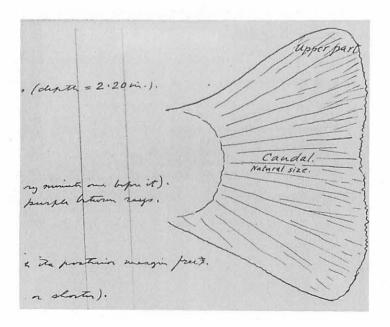


Figure 15. Line drawing of caudal fin of Brown Bullhead by Harry Piers (Museum No. 3570, Negative No. 12,446).

Islifay 6th Jany 1914. Sin In Piers. The fish in this Bong was prished up about a year ago on the show in Desford Basin; It was quite fush, the Crows had picked out the eyes and bowels. I have had it is furnaldalyer, were enio Igot it. Kindly let me know what it is, and its native hater yoblige fores truly alfred Opden, Bedford.

Figure 16. Letter to Harry Piers from Alfred Ogden dated 5 January 1914 concerning a Gray Triggerfish (Museum No. 4109, Negative No. 23,436).

Bedford Fish Halchery. Ce. 12 jan. 1914. B. Sford, A. S. Joneany 7 1914 Subject. Dear Mr Lies, "(Balle or Frigger fish of gave you, was found and about the 20 th august, 1912. by alexander Eisewold, Brojord, on the show, on the East side of the Basin, near admiral Rock, about one mile below the Smooth of the Sackville River. Trusting that the above information mete le datisfactory, Sermai factifaly 3...., farry Viero Eog. Galifay. I think that I nuntioned in my note to you on Georday that The fish was died When found, The Crows were picken out the yes and howels when his Guinnell discount

Figure 17. Letter to Harry Piers from Alfred Ogden dated 7 January 1914 concerning a Gray Triggerfish (Museum No. 4109, Negative No. 23,474).

Per .

Ju-,

GLACE BAY -- THE LARGEST MINING TOWN IN CANADA; POPULATION 19,000. ONE COMPANY'S PAY ROLL 19 \$5,000,000 ANNUALLY.

## THE GLACE BAY GAZETTE

GAZETTE PUBLISHING CO., LTD.

BY FAR THE LARGEST CIR. CULATION IN GLACE BAY AND VICINITY, DAILY AVES-AGE IS 5,800, AND STILL GROWING.

P. O. BOX 290

A. D. MACNEILL MANAGING DIRECTOR

GLACE BAY, N. S.

CANADA

6 Jan. 1915.

Acc. No. 4200. Common Sucky

Catostimus commersonici

mr. Harry Piers,

ans. 12 Jan. 1915.

Curator, Prov. Museum,

Halifax, N. E.

hear Eir:

In answer to your letter of ye sterday, I have secured the fish referred to and send it to you by express. old sea captain, I am told, said that it is commonly known as a red mud-sucker, and that it is often found in fresh water but seldom in salt. It may possibly be common enough in river waters of Nova Scotia, though nobody who saw it here had ever seen one I shall be obliged and interested if you will write and let me know particulars when you have this fish identified, and also to learn if it is considered rare enough to be preserved in the museum.

Yours truly.

## STRANGA FISH BROUGHT TO SHORE BY SEA GULL

James McDonald, of Mira has sent in Bay station, the Glace the most peculiar fish that was ever seen at Mira. The fish is about eighteen inches long and in the widest part is only eight inches in circumference. In color it is like a shad but the mouth is different. there being simply a round hole where the mouth should be. The fish is redblooded and the blood is very plentiful. It was brought to shore by a gull which attacked by crows on the beach. was the birds off and took the fish. Many of the old fishermen viewed it but never saw anything like it before.—Glace Bay Gazette. Echas Hx. 2 Jan.

Figure 19. Copy of report on White Sucker from Mira, in Echo, Halifax, 2 January 1915 (Museum No. 4200, Negative No. 23,441).

4202 Recent 7 Jan. 1915. 4200 Catostomus commersonii (Lacépède) = C. teres (mitches). Boomfort to show by a gull which was attacked by crown on the brack, Mira, C.B.; almo 30 Sec. 1914. games . Macdonald, Mira (c. ) J. S. hudmed, evite, Sun Bay Segreta, Elan Bay (d). Total length, \_\_\_\_ 16.40 ms. Length, smith her of cander, - 13.75 in There \_\_\_\_\_\_ 3.00 mi. Head in length \_\_\_\_ 41/2 times. Dorsel, 12 (last 2 ray close together) Ventre, 10 anal about 8 (lest two, although split to the base, away to actually a single ray at the mention ). Scales in lat. him a let tie to fort of done e mt. 1 specinin. man demm, 11. 178

Figure 20. Rough notes on White Sucker from Mira by Harry Piers (Museum No. 4200, Negative No. 23,440).

# SMITHSONIAN INSTITUTION UNITED STATES NATIONAL MUSEUM WASHINGTON, D. C.

March 13, 1915.

Harry Piers , Curator,
Provincial Museum
Halifax, Nova Scotia, Canada,

Dear Sir:

In answer to your letter of the 25th ultimo, I would say that we have been recognizing on our North Atlantic Coast two species of Fistularia, the common form tabacaria and the rather uncommon form serrata.

I shall take pleasure in going over this matter carefully for you next week, Providence permitting, and I may be able to think up a few additional "rangers" to your shores.

Kindly pardon my delay in this matter, but if you have ever had La Grippe as I have had it for the past several weeks, you will know how excusable such delay is.

Yours truly,

Pr.a. Bean

## LELAND STANFORD JUNIOR UNIVERSITY

OFFICE OF THE CHANCELLOR

Stanford University, Cal., April 10th, 1915.

Mr. Harry Piers ,

Provincial Museum,

Halifax, N.S.

Dear Mr. Fiers:

I thank you for your description of your specimen, Fistularia. I will ask Prof. Snyder to compare it carefully with the Pacific specimens of the same species.

wery truly yours,

Danislan Jordan.

Figure 22. Letter to Harry Piers from David Starr Jordan dated 10 April 1915 concerning Coronetfish, Fistularia (Museum No. 4227, Negative No. 23,478).

LELAND - STANFORD - JUNIOR - UNIVERSITY

DEPARTMENT · OF · ZOOLOGY

ans. 5 kg 1915-

Stanford University California Apr. 15, '15.

Mr. Harry Piers.

Curator Provincial Museum.

Halifax.

Pear Sir:

Doctor Jordan asked me to continue the correspondence with you regarding the identity of a specimen of <u>Fistularia</u> which you have.

I am not able to identify it from the very good description which you give, and I am afraid that I should not be able to do any better if the specimen were at hand, as we have no examples of the genus from the Atlantic in our collection.

You remark that it is not <u>F</u>. <u>TEBacaria</u>, and you have also noted that the other species are from the Pacific, except as noted by Poey and Jones. Possibly these authors are right in their identification of the Atlantic species, and possibly examples from the Atlantic may prove to belong to another form, that is one different from <u>F</u>. <u>tabacaria</u>. If you could get some specimens in a good state of preservation perhaps they would settle the question beyond doubt.

Sincerely yours,

Johnyder

Figure 23. Letter to Harry Piers from J. O. Snyder dated 15 April 1915 concerning Coronetfish, Fistularia (Museum No. 4227, Negative No. 23,447).

Name of Station Latter Confe OTE.—Only one sub-ject to be referred to in one letter. Write on one side of the paper only. Post Office Address Calhanini aire am. 4 km 1915. wear sir I got your letter of branch 223 ad. on the 22rd is paid it omest it been delayed some where conserving that fish on got on the of light- ardish brown shiney almost-like glass fins shade darker here and there were dark spots on telley part of fish nose of fish light-yellowish arren long hairs in Lork of tail black.

do not hum y any think onore. I ram ain your .W. J. Stolp.

Figure 24. Letter to Harry Piers from R. J. Colp dated 25 April 1915 concerning Coronetfish, Fistularia (Museum No. 4227, Negative No. 23,433).

5,000 Pds. 100 cach-9311.

FISHES Of M.S.

UNITED STATES NATIONAL MUSEUM

WASHINGTON, D. C.

a. 9 april 1915.

April 6, 1915.

J. & E. 1718. W

Harry Piers, Curator,
Provincial Museum,
Halifax, Nova Scotia, Canada,

Dear Sir:

I thought you might be interested in the capture of a scup (Stenotomus chrysops), which was taken in Hall's Harbor, Bay of Fundy, Nova Scotia, August 21, 1911.

Mr. Frank Wiltshire who sent it here for identification, with a statement that it was an unknown fish to the local fishermen. Total length of specimen,  $9\frac{1}{2}$  inches.

This seems to be an unusual occurrence; I think, in fact, an extension of the known range of this species.

Sincerely yours,

B.a.Bean,

Barton a Bean of Frich, construction, Division of Friches, W. S. Mat Moran, Westingston

#### SMITHSONIAN INSTITUTION

#### UNITED STATES NATIONAL MUSEUM

WASHINGTON, D. C.

April 20, 1915.

Harry Piers, "sq., Curator, Librarian, & Dy. Keener of Records, Provincial Museum, Halifax, Nova Scotla, Canada.

Dear Mr. Piers:

In answer to yours of April 9, I would say that it is extremely doubtful that this Museum would relinquish the ownership of the Seun.

I feel sure, however, that you could obtain specimens by hook-and-line fishing around any old sunken wrecks that may possibly be found in Hall's Harbour.

Let me know what linek, if any,

Cordineer yours, Brassean

May 20, 1915. X Found Whis one month old sheet under other papers this a. m. Sorry.

yours. Bass.

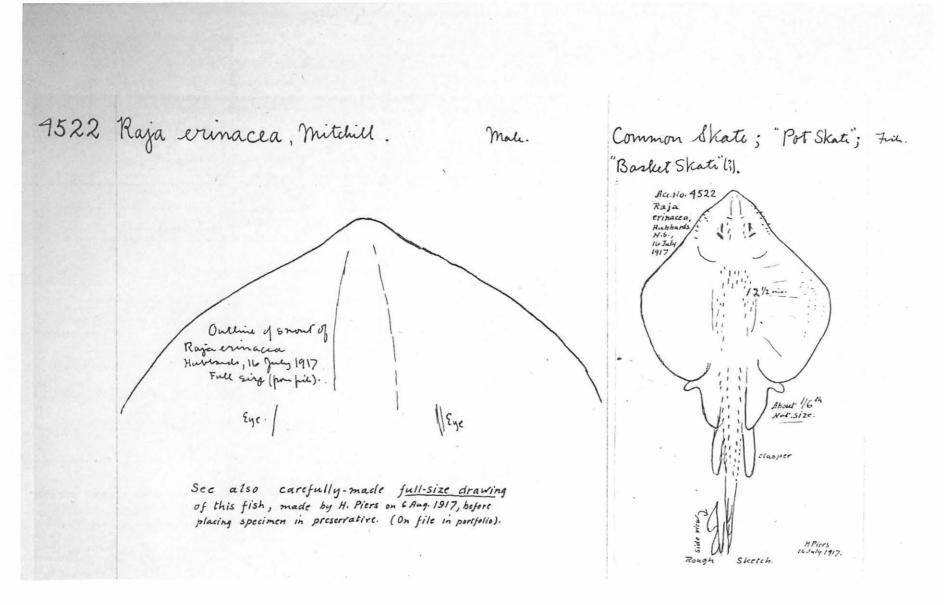


Figure 26. Line drawing of Little Skate from Hubbards Cove by Harry Piers (Museum No. 4521, Negative No. 12,444).

Scales: - 8 fm leters him to punt of desert (exclusion of late. him), 49

in letters line, 5 fm letters him to vent (exclusion of late. him).

That is, acades 8-49-5. 18 (n. 19, not more) acceles

the desert. Scales covering abolium helicit methods.

Banks prestricted obsolets (probably because a going pich).

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sheef its length. Premarilaries protectile.

Measurements. - Jotel length, 7.10 min; length to bee of

Canadal, 6.0 min; quester depath, 1.35 min (at pint of denel);

quester thickness .83 mint; laught of lavet, 1.53 mint;

alianter of eye, .30 mint. Dones pin, fourthinger 1 min;

limited higher. 50 mint; bree .65 min. Venture fin, fourthinger. 82

min, hinder leight .47 min; bree .25 min. Pectoral

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Son.

Pectoral

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182"

Figure 27. Sketch of fins of Fallfish by Harry Piers (Museum No. 4605, Negative No. 12,441).

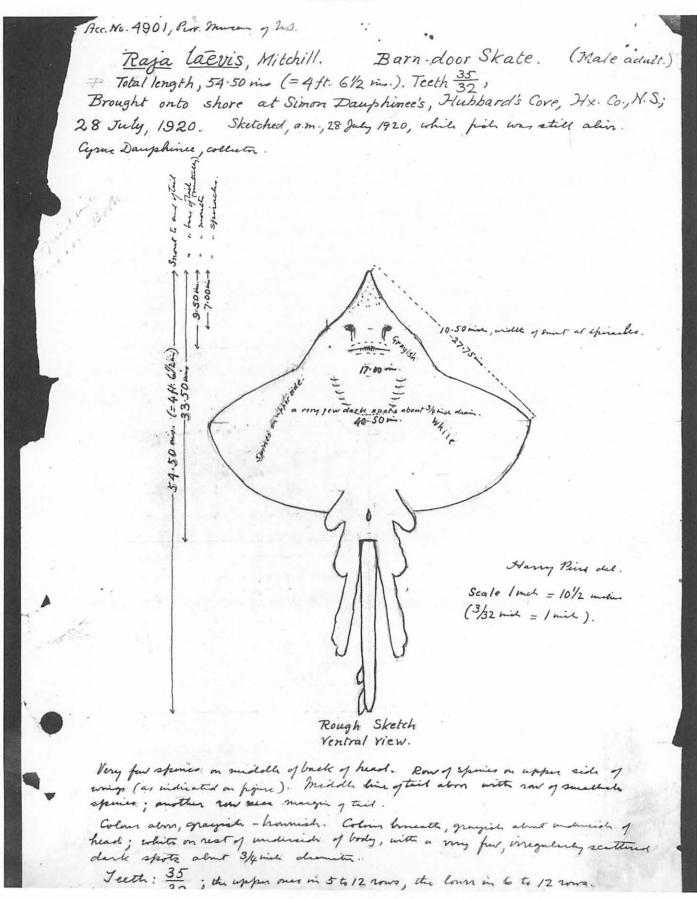


Figure 28. Rough sketch of Barndoor Skate from Hubbards Cove by Harry Piers (Museum No. 4901, Negative No. 23,464).

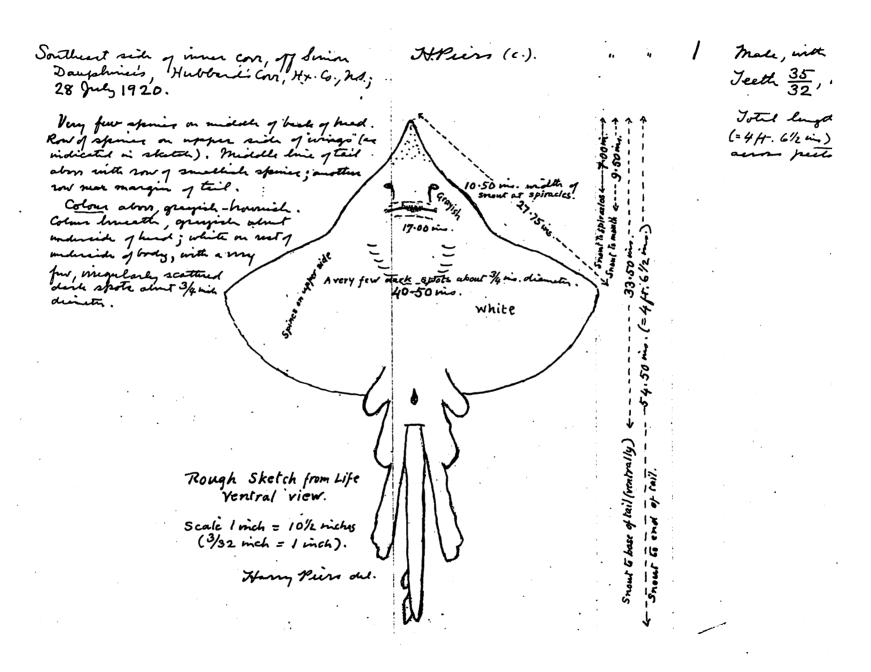
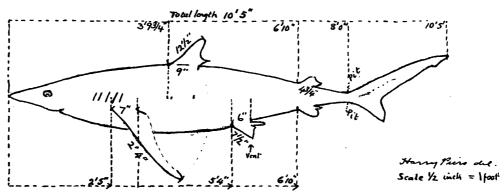


Figure 29. Sketch of Barndoor Skate from Hubbards Cove by Harry Piers (Museum No. 4901, Negative No.12,445).

a. H. Lein (c.) Elmedah St. 4.68 - 5.30 m. , any 1919 Grante erything a de l'appe line ationacitation / history . K., ang. 1919 onus, chrysolececer ( Miteles) fler latilie 4,113 2 (smil 5,6,7,8 cm Zw 23 Spenn

Figure 30. Rough laboratory notes by Harry Piers concerning fishes collected in Shubenacadie River by A. H. Leim (Museum No's. 4929 to 4936, Negative No. 23,483).



or Prionace glanca (Linn), Grow Plan Strack

Total length, 10ft. 5ms.

Casualt with hook & line, bailed with fish, by crew of No. 2 Pilot Boat (schooner), at entronce of Halifax Harbour, 4 miles southeast of Chebucto Head, Hx. Co., Hora Scotia; about nown, Sun., 10th Oct. 1920 (Only one sun during that taip, 4-110st.). Presented by Pilot James G. Renner, No. 2 Pilot Boat, Halifax. Examined of measured by Harry Piers, 11001. 1920.

Colour above, dark bluich gray; below, white.

attached to sich of the shorts had been a suctaing-fiel, about 700 8 miles long, estern Echemois panerates he suckery-fish, or Romora remove (L), Remora.

Figure 31. Original sketch of Blue Shark from about 3 miles east of Chebucto Head (Museum No. 4941, Negative No. 23,498).

Figure 32. Sketch of Blue Shark from about 3 miles east of Chebucto Head (Museum No. 4941, Negative No. 12,442).

J.R.

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#### DEPARTMENT OF COMMERCE

### BUREAU OF FISHERIES

WASHINGTON

IN REPLY REFER TO FILE

ADDRESS ALL CONSUMICATIONS TO COMMISSIONER OF FISHERIES WASHINGTON, D. C

October 8, 1920.

a--- 16 crt. 1920.

Ur. Harry Piers,

Carator, Provincial Museum,

H. S. Technical College,

Halifax, Nova Scotia, Canada.

Dear Sir:

In reply to your letter of October 4, you are informed that Mr. Radcliffe is leaving this office for an absence of about six weeks. If you will forward the shark jaws to this office, the Bureau will be pleased to have an examination made of them on his return. Mr. Radcliffe's work was mainly with forms occurring farther southward and the Bureau can not promise you that he will be able to make positive identification in each case. The material will be returned to you in due season.

Mr. Radcliffe is sending you a personal copy of his report on the sharks and rays of Beaufort, N. C., as requested.

Very truly yours.

Acting Commissioner.

Figure 33. Correspondence to Harry Piers from H. F. Moore dated 8 October 1920 concerning the identification of shark jaws (Museum No.4941, Negative No. 23,460).



#### GOVERNMENT OF NOVA SCOTIA.

Provincial Museum.
Provincial Science Library.
Provincial Science Library.
Public Records of Nova Scotia.
Govt. Mineral Exhibit, Prov. Exhibition.
Harry Piers, Curator, Librarian, & Dy. Keeper of Records.

PROVINCIAL MUSEUM,

N. S. TECHNICAL COLLEGE,

HALIFAX, NOVA SCOTIA. CANADA,

26 October 1920.

N. 7. Moore, Esque acting Commissioner, Bureau of Fisheries, Washington, D.C., User.

Dear Sin,

In purther represent to your of the 8th inst. in which you may knidly say that your Bureau with a pleased to her m. Inviso Rolliffe examine of determine identify, as for as printe, several gave of Shorter which like her in this Duneau, at out where identify we are not some; I has to say that I am this day sending to you, by express, propaid, a box contains & Shorte Jours, to which I have adoled 7 general Rays.

We would be daply obeyed to you at he.

Rodeliffe if the later armed examine three me his return, and let as here his opinion in the return, and let as here his opinion.

There are you then are then on the cover of how Lestin, but as most of them were not seen how Lestin, but as most of them were not seen by me in the flesh, or are denoted in to the

Figure 34 A. Page one of draft correspondence to H. F. Moore by Harry Piers dated 26 October 1920 concerning the identification of shark jaws (Museum No. 4941, Negative No.23,459).

openie They represent. I also welve, a drawing, with measureto, of a Shork, probably either Carcharhine observes (L. Lucur) in Primace glanca (Linn.) while was In all to definite duice to which the specie blogg from the position of the pist dorsel, as on him no other species is demand published primes with m. 4940) are in the lox of joins. The shorter were very common of their this autime. no donet m. Receipt will andies to abe t mergings it for my drawing, while is to seek. again their you wat mindy for your the the appending to what to us ofthe Bucin m 63, gram puttings Harry Burs

Figure 34 B. Page two of draft correspondence to H. F. Moore by Harry Piers dated 26 October 1920 concerning the identification of shark jaws (Museum No. 4941, Negative No. 23,457).

D

#### DEPARTMENT OF COMMERCE

#### BUREAU OF FISHERIES

#### WASHINGTON

IN REPLY REFER TO FILE

ADDRESS ALL COMMUNICATIONS TO

COMMISSIONER OF FISHERIES
WASHINGTON, D. C

December 7, 1920

Shairs & Rays

a. 16 Dec. 1920.

Mr. Harry Piers, Curator, Provincial Museum,

N. S. Technical College, Halifax, Nova Scotia.

Dear Sir:

Referring to previous correspondence regarding the identification of the shark and skate jaws which you sent in for examination, I have to advise you that they have been identified, with the exception of No. 6. of the shark series, as follows:

#### Shark Jaws.

- 1. Lamma cornubica. Garman uses the name Isurus nasus (Bonnaterre).
- 2. Probably <u>Isurus</u>; it corresponds closely with Garman's description of <u>Isurus punctatus</u> (Storer). The teeth are rather more curved than those shown in Garman's illustration.
- 3, 4, 5. Prionace glauca (Linnaeus). Garman uses the tame Galeus glaucus Rondelet.
- 6. Cannot identify.

Concerning Nos. 7 and 8, Mr. Radcliffe says that he has never acquired a sufficiently large series of the jaws of Carcharhinus obscurus, milberti, and commersonii to be able to identify those species with certainty on the characters of the teeth alone. In his opinion those submitted by you, particularly the smaller, do not conform closely to milberti as it is known to him. Geographically, he would expect them to be obscurus, but the smaller very closely resembles specimens of commersonii examined by him.

#### Skate Jaws.

- No. 4521. Correctly identified as <u>Raja ocellata Mitchill</u>, but Garman uses the name <u>R. diaphanus Mitchell</u>, as the former name was preoccupied for another species, <u>R. ocellata Pussell</u>, 1803.
- No. 4901. Correctly identified as Raja laevis Mitchill, but Garman uses the name Raja stabuliformis Garman, as R. laevis applies to a closely allied but distinct European species. This example is a male.

Figure 35 A . Page one of two page letter to Harry Piers from H. F. Moore dated 7 December 1920 concerning the identification of shark jaws (Museum No. 4941, Negative No. 23,454).

2

Two other jaws, and three specimens detached from the jaws, all unlabelled, appear to be females of the same species (Raja laevis).

The specimens are being returned to you by parcel post.

Very truly yours,

J.T. Morres.
Deputy Commissioner.

WW



Figure~36.~Photograph~of~Thresher~Shark~from~Minas~Channel~(Museum~No.~5152,~Negative~No.~23,788).

Mus m S. E. MARCH, C. E. REGISTERED PROF. ENGINEER OF N.S. PROVINCIAL LAND SURVEYOR TOWN AND MUNICIPAL ENGINEERING, HYDRAULIC DEVEL-OPMENTS, DRAFTING AND BLUE PRINTING, Etc. OFFICE AND RESIDENCE: ALEXANDRA AVE BRIDGEWATER, N. S. along this line, present indications are that that fishing season this year is going, to be do late as last Friday) I sfound I feel a sware and in the woods in places with the pleases high and my cold

Figure 37. Letter to Harry Piers from S. E. March dated 27 April 1924 concerning Atlantic Whitefish from Millipsigate Lake (Museum No. 5225, Negative No. 23,449).

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Van commercia	w Perch.	Jun 124.	
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Hear in light	1.50 in. 3.40 time; 1	· 28 - 3.63 ham	
Zin punch D.	XIII-I,14	XIII- I,13 I,5	
A	I,5	<b>亚</b> , 7	
Sam	6-58-14	5-59-13	
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a spot of own	ten you	yes.	
Sies hight of (france intime 2 spining. 10. I		pir titen	
1.53) 6.20 (3.33	1.48) 5.10 3		
459	1.50) 5.10 (3.40		
150 1.65 (31	1.48) 4.65 (3.14)	1.28) 4.65 (3.63 -8/0 -8/0 -8/0 -8/0	

Figure 38. Rough laboratory notes by Harry Piers on Yellow Perch from creeks off Musquodoboit River (Museum No. 5479, Negative No. 23,500).

Rec. 24 June /24 5480. Surranidae. morone americana (3 melin). Vong comment of inter off mangendent Rim, som Compació Face, Hx. G., as; 23 June/24. Jote legte 6.20; legt = he C. 5.10 Here i legte, 3.05 tis; dest i legte, 2.91 ti Fi pue: DIX-I, 12; VI,506; AII, 9 2nd and spin and 23/4 min is head. Sals. Car. Line 53 1.75) 5.10 (2.91 1600 1 8him N. Stc. Sim

Figure 39. Rough laboratory notes by Harry Piers on White Perch from creeks off Musquodoboit River (Museum No. 5480, Negative No. 23,493).

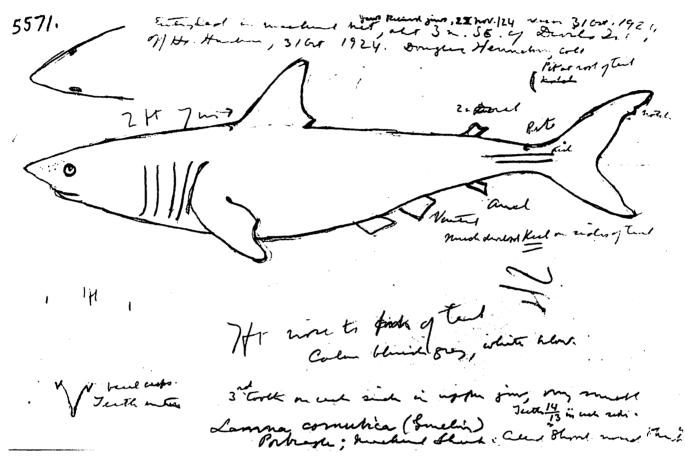


Figure 40. Rough sketch of Porbeagle from about 3 miles southeast off Devil's Island by Harry Piers (Museum No. 5571, Negative No. 23,481).

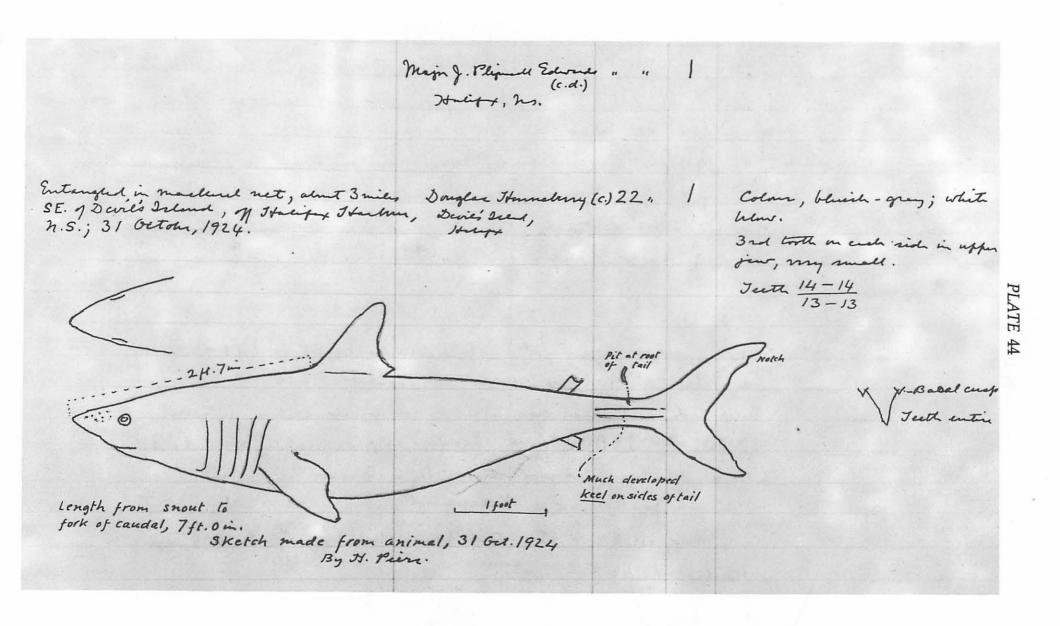


Figure 41. Sketch of Porbeagle from about 3 miles southeast off Devil's Island by Harry Piers (Museum No. 5571, Negative No. 13,533).

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Figure 42. Rough notes on Atlantic Salmon from stream at Sheet Harbour by Harry Piers (Museum No. 6252, Negative No. 23,484b).

acc. no. Carried in any Book 1. 52. 24. 1130? 7213 r770. Sephostonia furcum (stores)? Common Pipe - pick. much nicht fouch conty may you. Fred simming it surprise of well, in Long Core, just to ent of Bedper to. Co. his.; 15 July 1931. Daniel muney collector, 10 Carterer St., Hx. Munut: I the light -Lungth to tree of combil \_\_\_\_\_ 6.92 Luxue of head . brog (mont mer) - : 88 gluste of mont? Lungth of could fine - . 31 .. pedare pi - 21 Switch of metal pin (me gright men met). 31 dipith .. .. There 7.86 times in total length -Lunget of purch -- 2.15 (from med heliands Fin frame: Donel 44 rays; pretonel, about 10 rays; venture , comment, 10 Body migs, including mut, 19 mings + southed mings 37. Incel for me attend coming 5 body might 7 mings halmer met - deared army a total of 12 rings (5+7). [J.v E.'s accomption says " Source carry 4-5+5-4.] Colon: - Olivacione; yellowith on under part of body, perticularly on men part of head and an gill come. Incel with several broken darker bare a mottlings, obliquely please Height of langest ray Dorsal Fin. Candal fin ( J. 2 cale) young . - henry young are sure in the porch . They save along · 45 mil long; had black ups, and about 10 black mitted back on postering hely of body.

Figure 43. Rough notes on Northern Pipefish from Bedford Basin by Harry Piers (Museum No. 7213, Negative No. 23,447).

Swimming it surface of water, in David Munay (c.d) 17 July 1 doing Cove, just to cut of Bedford, Cartair Str., Bedford Basin, Hx. Co., No.; Strupper, 15 July 1931.

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Caudal fin.

Figure 44. Sketch of Northern Pipefish from Bedford Basin by Harry Piers (Museum No. 7213, Negative No. 23,844).

au. no. 7214 Syphostoma precum (Story)? Common (?) Pipe - feit. male with pouch piled with eggs. Found in more noticel position at surper of water, man Harlow Commission's opin, south terminel pieces, Halifax, us; a.m., 23 July 1931. Sain by undulating morning of docel fin. merements: Total length . \_\_\_\_\_\_ 7.54 ( storant to 7.50 in by next day ). 7.29 . 85 Snows I erge - . 46 hunt to mer -- 3.08 Body ( peach to mit) -- 2.23 Jail 15 han y candel) - 4.21 High " " (Compray) . 28 Lugte of pectus fri - 17 (rounded)

" and fri - 08 (of alms: - .08 ( g alm 3 rugs) Ventel, almo 3; Fin formula: Sneed, 42 rays (count); pectoral, 13; candel, 10 Court shape of the Body migs (include mut), 19 mings + canded mings 36; muling a true of 55 rings. Some pin corning 43/4 body sings + 6 mings believe mut, = a told of 100/4 migs. [ Jude v love my some com 4-5+5-4] Colour: apper fects, or also under side of this being punch, olivaciones; durles ar junction of rings. (This direct colon and spinked with fine beach punctations the day after by pur into prematine.) men pur y mont pele. Under dents pour antimin and of operale and including specele, to met, " pul quemish - yeller" a light cition-yellow, with a lustime appearance as y thing in a selling wader-colour. Plate is here of pectual, selving. Pand light clay- colon; the meditative protes due to the colons of the man of eggs under the skin of the bouch. Insul fir obscurely banded obeigney; at with severe (8) his beach dots or punctations. " Rectout pins pels. Candel fire duck obincion. Eggs. - Paul piers with egg = ment many ananyd in elect 6 rave, "staggeted". Each egg globuler, "03" in dimeter;

Figure 45. Rough notes on Northern Pipefish from Halifax Harbour by Harry Piers (Museum No. 7214, Negative No. 23,448).

colone reddish . yellow.

hilled with eager Eggs: Pouch



Figure 46. Sketch of Northern Pipefish from Halifax Harbour by Harry Piers (Museum No. 7214, Negative No. 23,856).

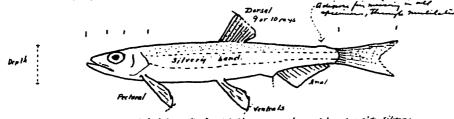
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od in nearly noticel position or Edward S. F. Pierel . 10. 28 July
                                                                         J. v.S. 1770 14 1/30?
surface of water, new Harbon Commercial Halifax, no.
   a, south terminal piers, Halifax,
 h.s.; a.m. 23 july 1931.
  Swam by undulating normate of drue fin
   DATA REGARDING SPECIMENS IN PROV. MUSEUM OF N.S. -
                 Locality & date
    no. Sex
                                       243a M Con Bay, Hr. G.; 17 Aug 1901.
                                      5.60 19+38 7+33/10/442 .....
     2436 M
    2169 F Whysermage, Inc. 6., July 1903. 6.95 19+35 4/4+5/39# 39 13? 3:
    3369 F Medica Seen Kon, Hy. 11 May 1909 7.32 19+36 5+63113 40 14 5 10. 10 10 10 10
    3558 F Dertura Con, H.C. 162mg/1910 8.35 19 +36 5+68 11/3 43 ... ...
                             16 2-19/0, 5.87 19 + 38 5+7 12 43 .. ..
   3559 F Dartmord Gra, H.G.
 7 4013 M Hand g Parteur am, Nr. 7 June 1913. 7-44 19+38 5+7 12 42 ...
                             31 3-4, 1917 6.38 19 + 37 44+64114 43 14 ... 7
                             17 1918 7-68 19+35 534+6114 45 14 .. 6
            Dollingis, 7. W. au, He.
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                                 $7068-25 14+354 38 476-376 31045 13-14 3-5 7-10
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8 who taken: May, 11,16,16,17; June 7,17; July ..., 15 ( with yung), 23 ( with egye), 25, 25, 31; aug. 3 ( un or Hallande).

Figure 47. Table of records of Northern Pipefish in Nova Scotia by Harry Piers (Museum No. 7214, Negative No. 23,858).

The Jant in which the much smalls were, we taken with fly a trolling with redining "minimum," in small approximate mill fake, mus where the section of Dauphiness Mill fake, must where the purey gove into the southern section, must purely gove into the southern section, many 1932. Hubbarde, Lim. Co., N.S.; Set., 7 May 1932.

Edward S. F. Bire (c.d.) 152, Shirty St., Dury, ks.



Back olivaceous, punctaled (also fine) with black; operale and bandon side, silvery.

Talal kngth, 3-25 min; langth to base of candal, 2-63 min; head, -65; eye, -16 min; depth, -40.

Head in langth, 4 times; depth in taggh, 612 times; eye in head, 4 times.

Scales, 67.

Dorsal, 9 or 10 rays.

All about same size.



Figure 48. Sketch of Rainbow Smelt with map of Dauphinee Mill Lake by Harry Piers (Museum No. 7370, Negative No. 23,859).

OFFICE OF

H. WYCKOFF ROGERS
BARRISTER, &c.

AGENT FOR LEADING
LIFE, FIRE AND ACCIDENT INSURANCE
COMPANIES
LOANS NEGOTIATED

OFFICES: ROOMS 1 & 2. MARITIME BLOCK

AMHERST, N. S.

July 13th. 1932.

am. 18 mg/32

Feil

Re White Perch, are . 20. 7428.

Harry Piers, Esq., Curator Provincial Museum, Halifax, N.S.

Dear Sir:-

- RE: Bass -

I have delayed answering your favour of the 22nd ult. expecting to get another specimen a man premised to send to me when caught.

I wish to thank you for your information. have caught these white perch weighing one and three-quarters about all our lakes outside the mountain lakes (which contain speckled trout) produce both white and yellow They are not fighters like the trout and black bass (small mouth and large mouth). The striped bass is more of a salt water fish which enter some of our rivers, but do not enter our lakes. The black bass is a lake fish and a great fighter, ra cannabal, and trout do not flourism in the same water. I enclose some cuts which show this bass to be very similar to the white perch, and have no longtitudinal stripes. White and yellow perch abound in the following lakes in this County: Hattetall, Victoria and Big Lake killarney, Nappan, Pi Neo and Angevine, McArthur and McPnersons. I learn from Prof. H. O. White, Government Eiologist, that black bass are cau ht in Wheaton's Lake, Bocabec, near St. Andrews, N. B., but I cannot ascertain that they are taken in any Nova Scotian lakes though people living near the above mentioned lakes claim they contain bass. (evidently mistaken).

DIFFICE OF

## H WYCKOFF ROGERS BARRISTER, &c.

LIFE, FIRE AND ACCIDENT INSURANCE
COMPANIES
LOANS NEGOTIATED

OFFICES: ROOMS 1 & 2. MARITIME BLOTA

AMHERST, N. S.

- 2 -

I am enclosing a letter published in the "Oxford Journal" on August 6th. I93I by Mr. Charles McNab. I have lately written him asking his reason s forand how he verified that the fish he refers to are bass. So far, I have received no reply.

Thanking you for the interest you have taken in the matter.

Youra faithfully,

HWR/CMM

ENCLS - C.L.

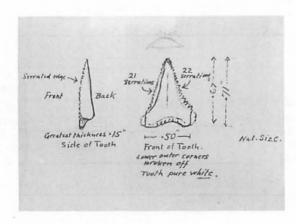


Figure 50. Sketch of White Shark tooth, which was embedded in motor boat at about 10 miles northeast of Digby Gut, by Harry Piers. (Museum No. 7508, Negative No.23,847).

Are 7358

Established 1882

Phone 19

## The Spectator

Published every Thursday at Annapolis Royal, the Finest seaport of Western Nova Scotia and circulating among the Prosperous Apple Growers, Farmers, Shipbuilders and Fishermen of the Oldest Settled Town and Country-side in North America (Founded 1604) the Original Capital of the Province.

Connected by Steel Bridge (1921) with Granville.

Population—According to the Official Census of 1921: within a radius of two miles of The Spectator Office 2680. County population 18,153.

The Spectator Office fronts on the oldest street in North America.

J. W. DAWSON STEARNS, Editor

St Anthony Street and Drury Lane

JOB PRINTING OF ALL KINDS

ANNAPOLIS ROYAL, Nova Scotia Feb. 28, 1933

an. 1 much /33.

Dear Mr. Piers,

Further in re Sharks, etc., I am told that a good many years ago a man living at Karsdale, near Fort Wade, went off early one morning at low water in a row boat to overhaul his weir near coat Island, where he found an abundant catch of herring that loaded the boat to the gunwales. He had 2 or 3 miles to row home, but it being perfectly calm, he did not hesitate. A short distance on his way however the boat was bumped by a big shark that nearly capsized it, and it was only by threwing fish overboard to feed the shark every few minutes that the man eventually reached home in safety. This was in landlocked waters, quite inside the Basin. The incident shows that the Basin is not proof against sharks and perhaps the creature may have been the same as in later years attacked Munre.

Yours very truly,

J. W. Dawson Stearns.

JWDS/JC

# PROVINCIAL MUSEUM, HALIFAX, N. S.

Locality and When Collected	Collector (c) Donor (d)	Received 933	No. of Speci- mens
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Pharangeal teeth 5-5.		•	

Figure 52. Sketch of Golden Shiner from Hubbards River by Harry Piers (Museum No. 7608, Negative No. 23,848).

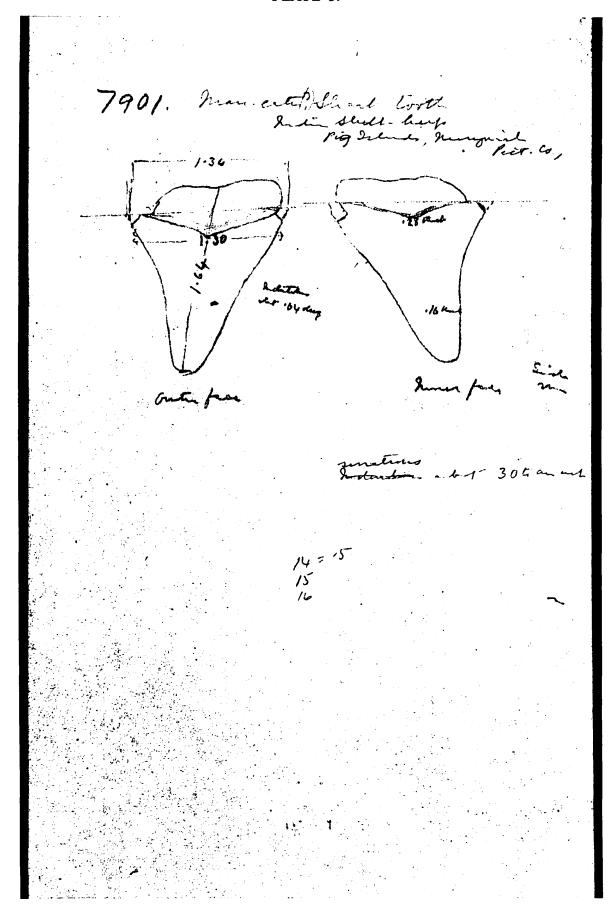


Figure 53. Rough sketch of White Shark from Indian midden at Pig Island by Harry Piers (Museum No. 7901, Negative No. 23,466b).

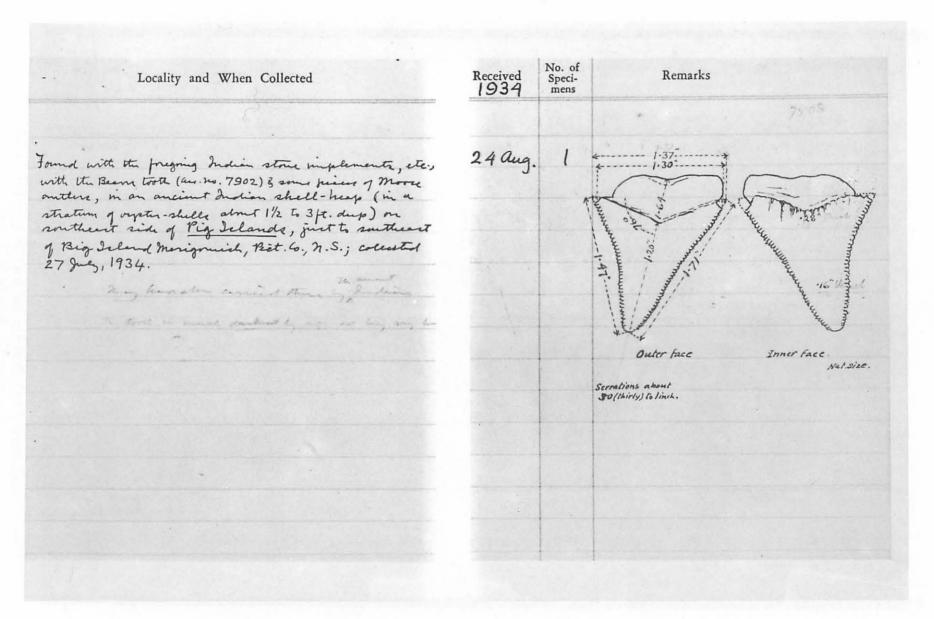


Figure 54. Sketch of White Shark tooth from Indian midden at Pig Island by Harry Piers (Museum No.7901, Negative No., 23,853).

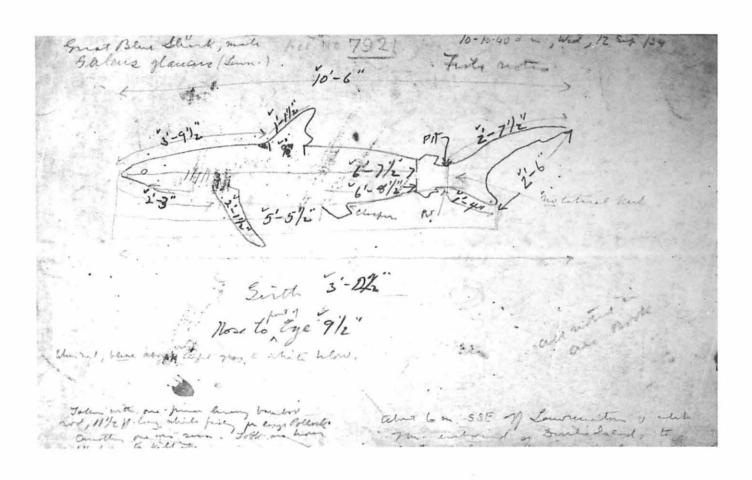


Figure 55. Rough sketch and measurements of a Blue Shark, from about 7 miles eastward of Devil's Island, by Harry Piers (Museum No. 7921, Negative No. 23,463).

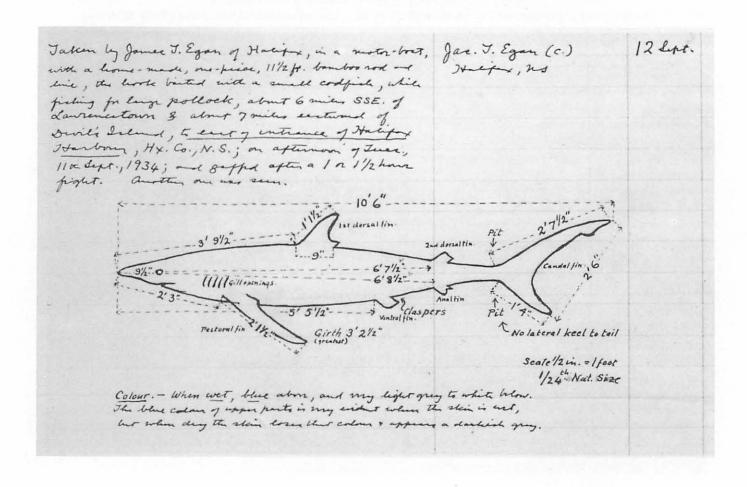


Figure 56. Sketch and measurements of Blue Shark from about 7 miles eastward of Devil's Island inscribed by Harry Piers in Accession Book No. 5, page 54 (Museum No. 7921, Negative No. 23,843).

7921 Jave (upper & lown) of Prionace glauca (Linn) Sreat Blue Shark.

Male; adult.

2nd Tooth, close to front of upper right jave.

Full size

70

3rd Tooth, clase to front of lower right jaw
Full size

Directed stightly pasteriorly

Very finely serrated

Figure 57. Sketch of tooth of Blue Shark from about 7 miles eastward of Devil's Island (Museum No. 7921, Negative No. 23,842).

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Figure 58. Laboratory notes on Atlantic Moonfish from Stonehurst by Harry Piers (Museum No. 8587, Negative No. 23,513b).

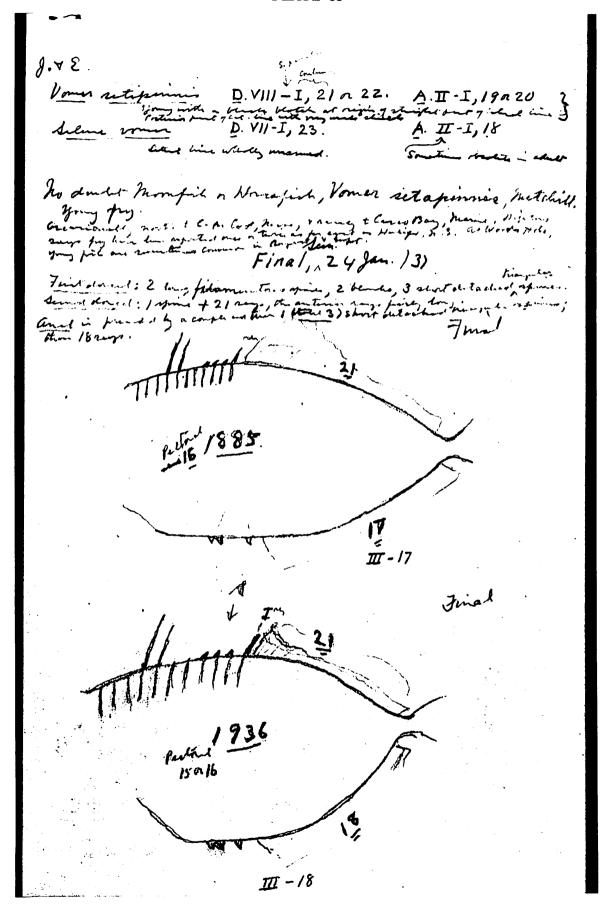


Figure 59. Rough sketches and notes on Atlantic Moonfish from Stonehurst by Harry Piers (Museum No. 8587, Negative No. 23,515b).

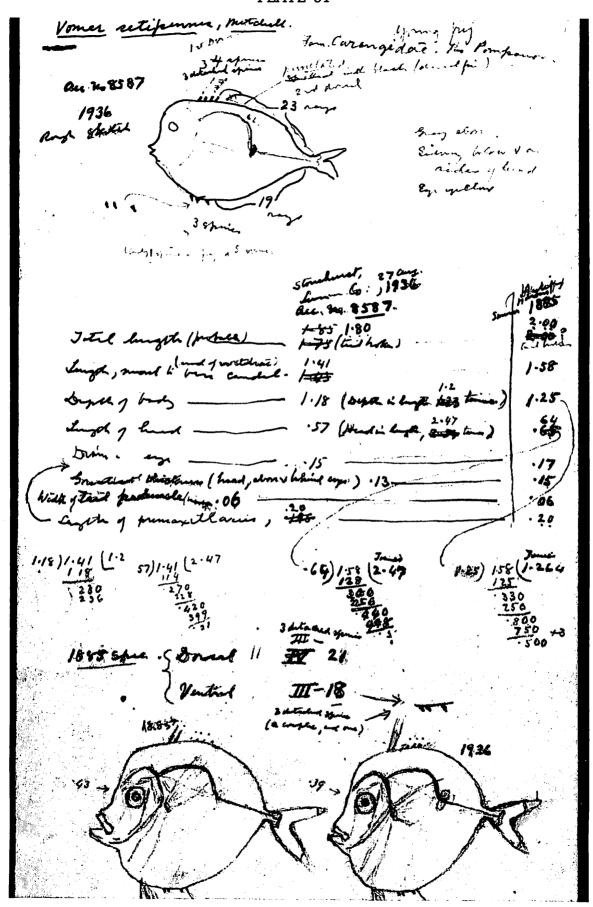


Figure 60. Rough sketches of Atlantic Moonfish from Stonehurst by Harry Piers, which were never inscribed into his Accession Book, (Museum No. 8587, Negative No. 23,465b).

FLATE 65
Dried Fish
( aundi to Rolin Jones & Whitman's exhibit
Wast sich of Exhibit (8-16 Sept. 1915), Value per
Value per
Garaquet (New Bonnswick) Codfish ( up 5 28 in) 6 00 Gaspe Show Codfish ( up 5 25 mis) - 6 25
Cape Breton Shore Codpies ( up & 25 mis) - 625
Canadia Late 1 0 1111
for dead shore todpick ( us t. 3/ min) 6 00
1 200 to scotta those worksh (17/2 up to 24 ins) - 5 75
these such worksh ( uset 25 ms). 600
dementing Bank Codpsh (26/2 mg to 32 in) 550
South and.
Magdaline Isla of Codpil ( up to 4/mi, of 600
Lunenburg Bank Codpiel ( up 5 34 in) 5 50
Gaspe Shore Codpin ( up 5 25 min) - 6 25
Shore Hake (20 mg to 261/2 mi) 450
Bank Hake (231/2 up t 3/1.) - 4 00
Cush (18 up 5 27 ms.) 3 75
Shore Haddock (2019 mp t 19/2 is) 4 75
Bank Traddock (18 up to 19 mi) 4 25
Bank Pollock ( up to 3/ms) 400
Show Pollock ( up to 30 mis.) 425
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magdalin Isle Codpie 600
and the hundres lots light from napse (a) to end of couldn't fin (b).
fin (h).
memo and 11 Lep. 1915.

Figure 61. List of dried Codfish, Hake, Cusk, Pollock and Haddock values per 112 pond weight for localities in Nova Scotia, New Brunswick, Gaspe, Magdalen Islands and Newfoundland according to Robins, Jones and Whitemans exhibit at Provincial Exhibition, Halifax, 8-16 September 1915 (Negative No. 24,069).

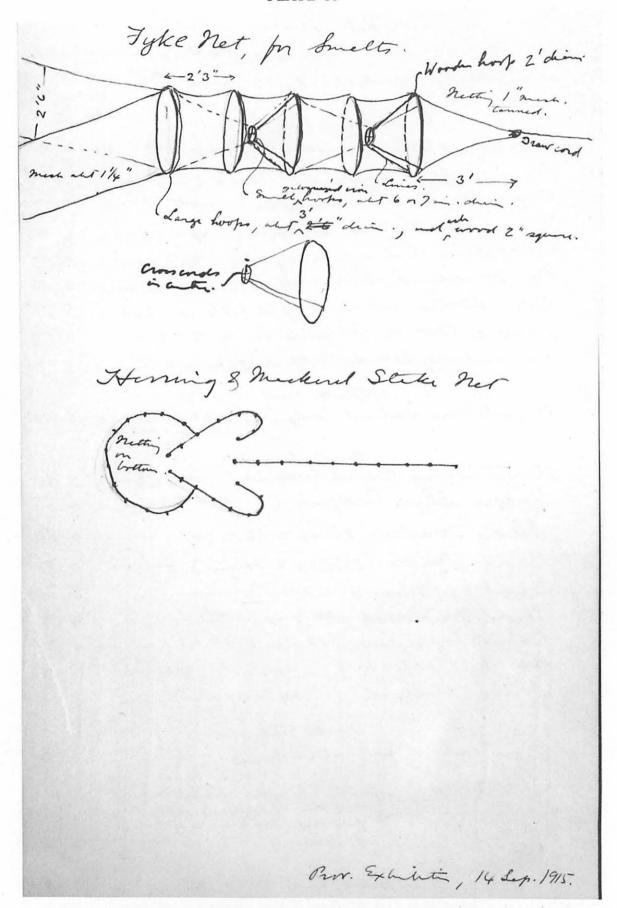


Figure 62. Sketch of a Tyke Net used for catching Smelts and a Herring and Mackerel Stake Net by Harry Piers at the Provincial Exhibition, Halifax, 14 September 1915 (Negative No.24,049).

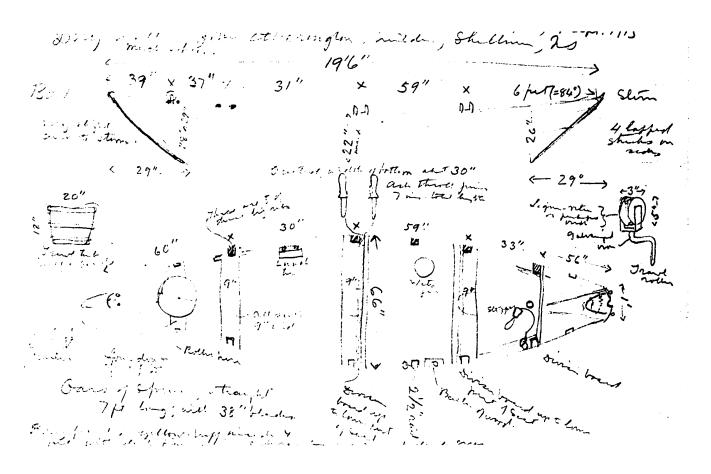


Figure 63. Sketch of a fishermans dory including dimensions built by John Etherington, builder, Shelburne, Nova Scotia at Provincial Exhibition, Halifax, 17 September 1915 (Negative No. 24,048).

THE HONORABLE J. D. HAZEN, Minister of Marine and Fisheries, Ottawa.

PROFESSOR E. E. PRINCE, LL.D.

Dominion Commissioner of Fisheries.

Chairman of the Board, Ottawa.

PROFSSOR A. B. MACALLUM, Sc. D., F. R.S. Secretary Treasurer of the Board. The University, Toronto.

ans. 19 any. 1915

Havry Piers Ety Prainceal Museum

Halefore N.S.

Fish.
Cod Spewig.

PACIFIC COAST STATION, Nanatimo, B. Great Lakes Station,

tieorgian Bay, Ont.

ATLANTIC STATION, St. Andrews, N.B.

July 16th 1915

BIOLOGICAL BOARD OF CANADA.

Biological Hatron St. andrews N.B.

Dear M. Piers.

Your letter of the 30th alt. was sent on here to award my down letter of the 30th alt. was sent on here to award my liso award.

Super of classy transparency indicating the approach of spanning time.

Super of classy transparency indicating the approach of spanning time.

Super of classy transparency indicating the approach of spanning time.

Which to the discovers did not know of this Deapros is so kittle being known of spanning of sea fishes.

Dr. Hjort has been straying the cook recently + you might write him do Fishery officer heavys the cook recently + you might write him do Fishery officer heavys asking if his observations this season would support a spring or as "Aug. to Now spanning season as available information up to him your faittyll & E. Prince

Figure 64. Letter dated 16 July 1915 to Harry Piers from Edward E. Prince, Biological Board of Canada, St. Andrews, New Brunswick concerning Cod (Negative No. 24,047).

Entired in my books of Fish hour. May dear Mr. Piers. I am correcting for peeblecation an article or contribution on the Lumpfish C. bemper, in which I refer to f. m. Jones & the Revol John Ambrose, two prominent members of your lustetite long ago, but have not at hand the latters reference to the fest in question. He published notes from It has garets Boup from terne to teme in the proceedings & made mente on of the benefitesh. Well you be is knice as to pure me the Vol., dotte & page, as the publishers desire every detoel of this kind. Love well be subjected to know that on July 4th last seemmer I obtained at Cheticoup, before Bretow, an Arctec Bempfesh, le spinosus, now Ecemicrotremus epenosus, found achering to the check of a cod pulled up by a fesherman in 28 faltiones. It was 5.8cm long. A few days ago, over book operating about half way between Rout Exceening & 16. S., took another in the beam trans. I also rown at Cheticoup a steerge on A. steeres var. Oxy . three feet long taken in a colmon net. It was the second one coeptered that ecenner. are you accure

Figure 65A. Page one of two page letter dated 18 July 1918 to Harry Piers from Philip Cox concerning fish captured at Cheticamp, Cape Breton Island, in summer of 1917 (Negative No. 24,764).

aware that the latter spoures augustiere in norther Coepe Bretowa H. A. P. Solice not know it brece in this area of the Geelf, sense was ruclined to regress the Mersenedu or Resteroccale. Gr it in the Course poles and perhaps in some of your revelle meramioli

Figure 65B. Page two of two page letter dated 18 July 1918 to Harry Piers from Philip Cox concerning fish captured at Cheticamp, Cape Breton Island, in summer of 1917 (Negative No.24,765)

University of St. Francis Xavier's College Antigonish Neva Geotia

Dec 12,1918.

Mr Harry Preis

Curator, Provincial Museum,

Halifax, n. S.

Dear mr Piers, -

I received your Seller of the 10" mit. I shall not injure any of the Rughius specimens, dent merely tate measurements. I elivida the fager owhich Jones moto was hased on a study of the very small speceme, which is still in the museum. This specimen was in a very lead emdition and I did not take it will me. The small afecunien, I referred to in my letter, is about three inches long and is the smallest of the three speiner which I horrowed. This is fastially injured, I should like very much to obtain in the heard region. the dates of captive of the very small angler in the museum and also of the three specimens I have borrowed. Perhaps there are records of this in the museum! Thanking you for your drieble, & remain Very sincerely yours P. J. Domolly

Figure 66. Letter dated 12 December 1918 to Harry Piers from C. J. Connolly, St. Francis Xavier's College, Antigonish, concerning Goosefish (Negative No. 24,767).

Deur Peers Here I am agreen bottoreno y you must pay the usual fendly - Van asked lands being an authorit. Aunteman for an article on the shel as observed at St. high lay, Well I did not find there any wedence of for conful listating nor ben of aprecing toxy extent to larvel young were nor die ne capture auffry - noue sund levelous the your old file-15 to 18 CM M lough. how for the point: -(4) Hove you met with the lawal forest Jayfon 4.6 - 7.00 MM Polone you any for laticeau 10-20 m ou! If co where werd the found? Have you any knowledge of the fry of the receiou being seen in grant deleals in any fite letterel waters of 5.5 In how selevals person some it is alleged in St. Migt line mode of fish 2-3 makes long. I am incertie impression the

Figure 67. Page one of two page letter dated 2 April 1923 to Harry Piers from Philip Cox concerning Mackerel (Negative No. 24,064).

A privar mestook) theme - they were probe-

steeplebacks that sweens deusely, it is Euseon at that time. please voite me at your comen Lovers student 329 St Joliust. \* Spl 2/23. Micheles I RJ. I didn't learn augting farther he is fully recovered.

Figure 68. Page two of two page letter dated 2 April 1923 to Harry Piers from Philip Cox concerning Mackerel (Negative No. 24,063).

S. E. MARCH. C. E. REGISTERED PROF. ENGINEER OF N.S PROVINCIAL LAND SURVEYOR TOWN AND MUNICIPAL ENGINEERING, HYDRAULIC DEVEL-OPMENTS, DRAFTING AND BLUE PRINTING, ET OFFICE AND RESIDENCE: ALEXANDRA AVE. au : 16 Oct. 125. BRDIGEWATER. N.S. Och 14th 1925 Harry Piers Eg. Sault Whitepsh Galifor N.S. Coregonus labradorieus Dear Sir, yours of the 13th inst re White Fish to hand. you have gusted me correlly and the statement as written is cornet. Stickes on day fly were in the majority of easis made before the fly conched the water Last offing I had one very mice days aport with There fish I my youngest son Sand myself Secured 2day of May I about half were caken on grimmon and the balance on a key small silver line dangled just above the water. The number were baken from 1 fort to 12' below the surface in plong current. I have never known them to be caught in still or slowly moving water, though I have frequently seen them breaking and leaping there. I should like very much to mut you personally) A mumber of years ago I began making water coller speleties of show Somethy plates of Stora Sertia berido drawn mostly from life but being spliged to husthe for the whow withal to feed and clothe a growing family It has not progressed as rapidity as I obtill wish. The matter which I would like to division with you or has this field then fully covered. I cam a bird lover but not an ornthologist, should 30 - labortis colour painting has been my bobby, ( though the bray often stands edly in the stall for a desiduable number of grass. you let me know what you think about this, the idea in the book of my mind would take too long to set down in a letter SEdgar March

Figure 69. Letter dated 14 October 1925 to Harry Piers from S. Edgar March concerning the capture of Sault Whitefish (Atlantic Whitefish, Coregonus huntsmani), (Negative No.24,757).

ans. 9 Dec. 125 Dear Pions Have you records of the occurrence of purdyfresh water file in Cope Breton ? The maller of their destilation in lands bougering the Gulf has come sep. I found, only one in 1.6% -A. chrysolewes - It may have been introcured; know quare from N. F. L. If nouse are known from 6.13., let me have a few of the most lande racords for the ourenland of N.S. I am examing a lot of motoriolected in the amapolier rome bounder during the Court two years and shall be glad to give you at + De suples if progrected. Hop pyou are very well. Sencerely Hoop 19 st plus ft. 25.

Figure 70. Letter dated 7 December 1925 to Harry Piers from Philip Cox concerning freshwater fish in Cape Breton (Negative No.24,065).

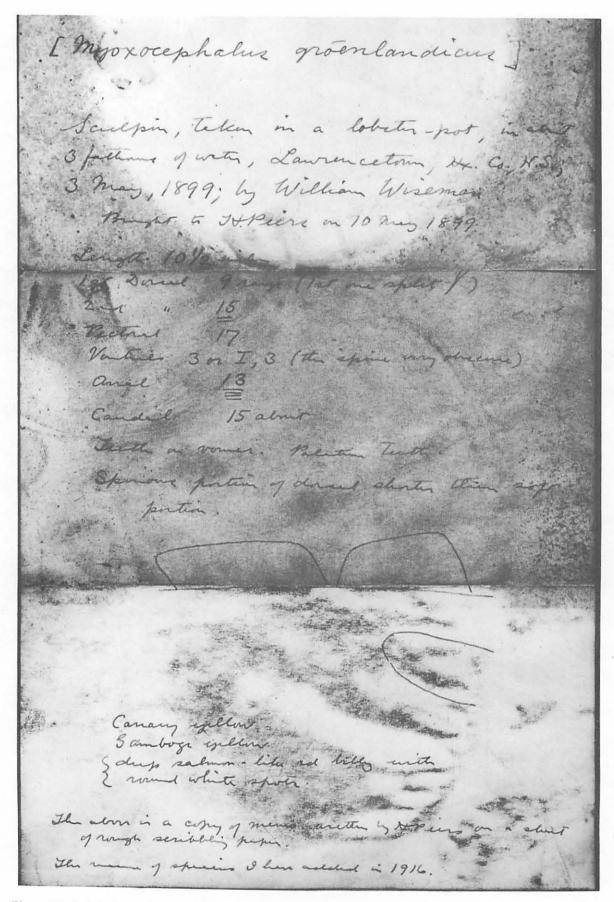


Figure 71. Original note by Harry Piers concerning Sculpins from Lawrencetown, Halifax Co., N. S., 3 May 1899 (Negative No. 24,056).

art. = 100 chs. Think. 1913-14 Ruchel W. any cont. 102ast. Caps Brute. East wast & Lite Brus, Victoria. Lynch & By St. Low. 240 at horners. hut con tollen Thy. 8ast. From when the it oppers as Think in 1913-14 we the (level). of one court he pany quiting in mi and v min Bain for apredla to Eemmy, Col. Co., at on state stone grang of duty is med quain in King Go.

Le Sucis By wreard, I in find your of any among any or story to. as the so of the autiens 1 h. S., with how quities along in cast west of apr But Dund and and hat 5 Phat By, har. Co. 1). And we was a sery in more on the harine St. show of action to Priction, Colorente, or anulas to, un in chiquet Buy, huy Cought Bay, we such sin y him Bari.

Figure 72. Original note by Harry Piers concerning the Halibut catch in Nova Scotia waters 1913 - 1914 (Negative No.24,766).

an. no. 4266.

Received 9 aug. 1915

Fundalus diaphanux (Le bien).

Think Wilipit; Furture human.

Berch, Hubbands, Hx. Co., N.S.; 26 July, 1915.

E. S. F. Priers Coll. 200 specimes.

Jotes lingth 1.45 & 2.90 mil. (array ale 7 2.00 m.).

Stand in lingth, 31/3 times; dupth in lingth 41/4 (&

This formula: D. 13 on 14 (14 count) all); A.12. V.?;

Scale: 40 to 53 in let. him; 8 from lat. him

to donal [dumption say for 12 & 15).

There durk on tops. 14 to 18 durk transment bere

on sinder, sometime say absence or almost want;

Dennel minutes lefty and.

Figure 73. Original note by Harry Piers concerning Banded Killifish, Fundulus diaphanus, at Dauphinee Beach, Hubbards 26 July 1915 (Museum No. 4266, Negative No. 24,054).

15 lept. 1915.

"Tinker Mackerel", in helf-band. 13 mis. in total lingth. Opened down the back

"no. 1 alwiver", 200, are 12 mis. in

Sund of Sund-fit is 4 ft. 0 1/2 in. long.

"Turbot" in Fangulinis exhibit. " What fil is the?

Four lapped strucks in sides; lagte from love to stom out 18 ft. If Throll-pris with string amount lower ands, 20 th, count and

Just fisher in vil. skin v sur-hust, v men borts, v mitte (white). Just pein of spring ones. I travel- when at put bow-grownel. Prolly 6 in dimes; granges vin strop v support.

I tim for bunch on sion bounds of day.

I Earth-work with juy.

I Worden bailer:

I til of time ( heaf time) in hour.

Figure 74. Original note by Harry Piers concerning Tinker Mackerel at Provincial Exhibition, 14 and 15 September 1915 (Negative No. 24,051).

Plymonth Conden Co., 1824. Plymonth, mens., use Plymonth manila, not timed. 6tha. 9thd. 12thd. 1/4 cir. 1/8 1/4 5/6 3/8 7/6 \$1/2 9/2 up 5 4/2 ii. cin = 1/2 ii. approxima duite Prov. Exhiring, 14 dept. 1915.

Figure 75. Original note by Harry Piers concerning Rope at Provincial Exhibition, 14 and 15 September 1915 (Negative No. 24,050).

Wit am is comy and extiring Provided, 1164.1915. anot a six with think the while want George House ( Bartras) und auteman annem mand is min with our Tyle duts on war i den derte fr in dept a size & dopling to - h much up per the ohute a mo 2 your (gove) olup. wound on a 10 polar lang at the shorts (months onto) and Snest Eise mery in of 1/2 in men. Through Ese nets is of 21/4 to 3 is. may Tracken Eigh Rething in of 3 E 4 min inis wat "mash" to pich. of my. of cother. This sign on Cod Tresp deting is of 4/2 in mus intern of our. alup. Hadden Esce our pushing long as our 30 moch the and thouse out 75 Haddock Eick dut, bir. much, som en and on trading, more given peak Cost Eich dut, and bir (i. water.) Line Three Co., Mind good, No.

Cod Trap Retting: White. Depth 100 miles. much 4; twine 15; S.S. selvage. [Wier not much Copie]

Haddork (Sies) net white. 6 mis. much. With

Minimal 3m. Lordine. Cour fort 5 min 5 2 min

Macking & Herring. Siel Net Shute, White

much 3 1/4 or 3 1/2 min.

Herring Sill Net; numet. Farmed. Hand 30; deep 150; much 3 mi.; 20. 8 ply 14.

Smeet Siel Net Shute. White. See Island. no. 30/3 cord; to hang 90 pt.; 4 pt. dup; 11/2 in much; D.S. selven.

Cod Lines (Burnhamis)

Steam-timed Cotton.

40 lb. line (humist) is  $\frac{5}{16}$  inch almine

9 lb. " is  $\frac{1}{8}$  inch almine

21/2 lb. "  $\frac{3}{37}$  " "

Prov. Exhibita, 14 Sep. 1915

Figure 77. Original note by Harry Piers concerning Fish Netting at Provincial Exhibition, 14 and 15 September 1915 (Negative No. 24,066).

Fish Trund- lines (of steam - torred cotton hime). Ground-lines Gangings Hooks Ttalbut 24 lb. 9 lb. Haitur. Cod, Hake & Cush 18 W. 5 lb. #12 5 (dup pin). I taddock , (Various 12 to 14 lb. 21/2 to 31/24. # 16hop signed gur is wand. Light gun is required together, so as together as prosible. The might of him give aform, is the weight (suy 24 lbs.) of one dozen himse of 25 fethous each. Extende manie in double him lugthen ]. Vide an wist an hur vieni Ci's extist at Prov. Extist. 11 dept. 1915

Figure 78. Original note by Harry Piers concerning Fish Trawl Lines at Provincial Exhibition, 14 and 15 September 1915 (Negative No. 24,068).

muchul. Fish; and 1916, theme of the Benich to so south the series operated to so south to him operations. On certain start down would.

The Lummy bending feut were purposes & start provery aut une 20 march, 1916.

The hing fity sum in the boys, on west contry ages. we over that 128 head 1916.

The Aped sucy flut set out for the sucy grands and 6 head.
1916.

Figure 79. Original note by Harry Piers concerning the 1916 Mackerel, Cod and Herring fishery (Negative No. 24,077).

Trust which with 43/4 bh.

with med on hely, pris v me show

(not a sea-me trust).

horris's Lea, Banner, Ar. Co.

ant 12 on 15 year - go, i'

and

The Reader (Horris)

Told in 23 20.1916.

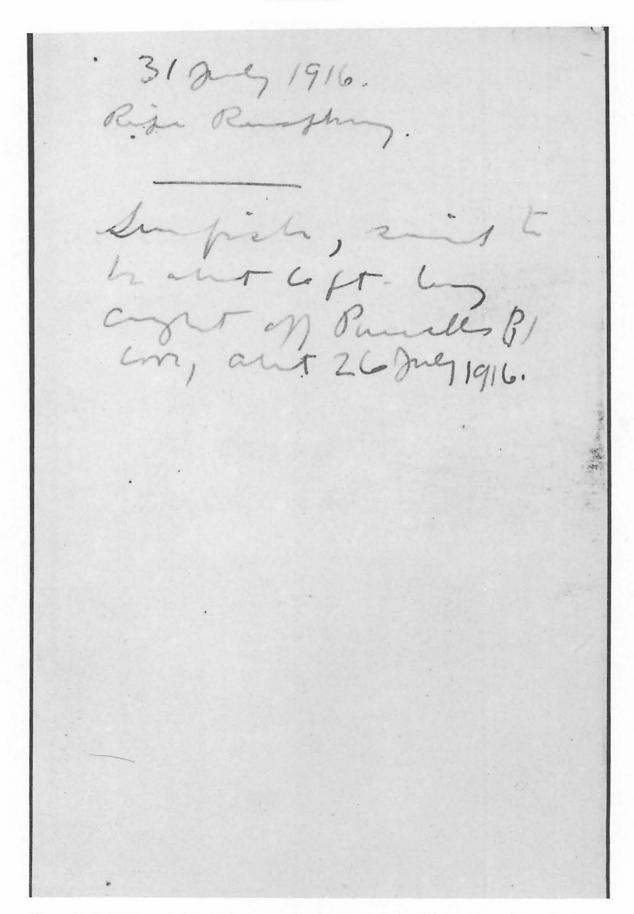


Figure 81. Original note by Harry Piers concerning the capture of a Sunfish 6 feet long off Purcells Cove, Halifax Co., N. S. 26 July 1916 (Negative No. 24,075).

Fish. Gasperian, Lone Clare sugs (27 ap. /17) the Fastin home teten at Ehundely frist all a unk and ( any out 22 april 1917). The showed in a tody he got cut mytor at Element. He sugs they were tithe by diffing (dupt mt) in the boy of mitted aut a pringer ogo ( seg out 14 april.). Cooling Thed By, un their sugations gaspenen her. not her taken the get, but ther they will strick in in and a untitime. Cookin had Codpile for Shed Bay. It says Haddock will stike in at Shed Bay is alas 2 write time from It says my 2 or 3 Herring hun huntelan then your frost enough for buit). Gaspereau . - Boutelin / ponly of It. hunto Buy Roll) anys that he has some Baspecian coming down 9. mil Romer after him spermed, very thing & poor, in our dept. or out. The says they will them take any attent they aprove in Junior the value on for as they are for to Cox's deler men Hammed's Planis. If two amed water in running, They sunting print it differed to account obstructions & also if it mater is too love.

Figure 82. Original note by Harry Piers concerning Gaspereau, Atlantic Cod, Haddock and Atlantic Herring 27 April 1917 (Negative No. 24,053)

Juning she Sunning she Brackersh  4 Day 1:	tulus of minow; water journey, con 17.	traphan trachente actes come	Kille .	hieur).
1	Scalinia.	depot 1 body into layte to bour gament	Donal rup.	and
(42,	46,46,48.	5	<u>"</u>	10
Smilest sprem	: Yoully	u of condel	- 1.67 min	

Figure 83. Original note by Harry Piers concerning 25 specimens of Banded Killifish, Fundulus diaphanus, captured at inner part of Cole Harbour, Halifax Co., N. S. on 4 May 1917 (Museum No. 4501, Negative No. 24,760).

Recovered 5 may 1917. nenidia menidia notata (miteliee). Common Silveride ( cours "Sprat" by man who had them). On souly spots in shellow dants of channels, in brackish with, Cole Harling, Hx. Co., hs.; 4 may 1917. First appeared ant 21 stapies, and runing and a month at livet [ brokery to spawn]. Purchased for men is mucht. . . M. 204. (54. a dos.) 48 speemin. 5.5240 4.04 00 Total lugth 3.42 4.70 Lugth to have of condel -145/6 = 10 4/4 5 S412 Finds. Trens -Eye (longitud drawing) . 22 Bepter of body .80 .65 1V, 4 14,4 les soncel mes SI,8 2 rd 4 Pectoral Vantrel -6 6 and I,22. I,20 Scens in lastral him 48 47 Back grapic obviocens, protected with precons; had durker on top I alest month, all appreciated with piecens; derbest our up. Latered Thipe (1/2 lookgitund dismeter of eye of aut 1/14 wieth of purplied blurich silving many this is but I seek with. It shows as a death him when fit is bold up to light. Openche and brelly from throat to went, silvery with billient colonier, green the yellowish - Leturn. Entered in my Frak Paper.

Figure 84. Original note by Harry Piers concerning 48 specimens of Atlantic Silverside, Menidia menidia, captured at Cole Harbour, Halifax Co., N. S. 4 May 1917 (Museum No. 4502, Negative No.24,763).

Grayling, aht hand Lake, hs.

aby 12 huy 1917, D. L. Sweldown got a grayly, length 27 vis, vinght 4/4 lbs., at Propride at "Scotchmenia Camp"; Shuhumandhi, a with helow where the rain lunes Grand Lake.

The surg Greyly are cought through the ice is write in Grand Lake.

Something out word will have to let him suit to print departs, as fish may be low, as top with is cold. The surge the hat grayly pish; is later than now, in the lake.

Says Greyly are find in Dantath Lakes for Face their law warmly) to Grand Lakela.

Ulso in Long Lake man Guel Lake; and win lake war Kinseck (hi Bean Bunk distar).

Bass. In handaline, U.S.

Said this archie Home once found a Bace
which wrighed 42 lbs. on there of head

Lake; also said that archie Home caught

one (alin), in not probably, which wrighed 39 lbs.

Donelden once got a Bac which wright 17 lbs,

Best time to pile for them (has) to four what

125 to chet 20 to July, he times would be took

Boes with a hand line, trailing with a furnished

6 on 7 winder long, or spoon tout, tr. For short

was salum guer, with minour, trailing. As

soon as struck, they got to right to the bottom.

Last your a man get 4 baces, our gusting wright

8 Us at amount 4 lbs. I builts they have

less taken through the line.

Figure 85. Original note by Harry Piers dated 17 May 1917 concerning the capture of a 4 1/4 lb. Grayling (Landlocked Salmon) at Grand Lake and 42 lb. Striped Bass found dead on shore of Grand Lake, Halifax Co., N. S. (Negative No. 24,052).

Smelta of how of home Lear. about huch 1918, a good many extre lup Swells um withed in Sime Lake, at Kings plum, Wellington, Kx. Co., 200. Oct Breely quie got some, I Low Clove had some and assume my they arm smell wither any duct. They had now hand of Swelts by the hope. nich Jung Luc Cloud, Inch 15 nov. 1915

4622 me variant no. 456. In anis and, no. 113. notropis commute (mitalies), ver. funtalia (agasing). = n. megalops (Ropingue) Shiner; Red-pri; Dace. Laker when north East River flows on I gthe laker, to supply of Pockwork to Manner of Planis Dichier, Halife G., n.S., and one of Co., h.S., and one of James J. Thousan (call, Homa) Spring Garden Road, Hy. per Jas. Egen . 2 spermins. Eye 4 /2 in head. I head 4 1/6 in engle (5 man y cules); Sand 36/9 in ength. Scale 7 08 (let. l. 5 daral) - 43 in lat. lini - 407 5 ( Cer. l. 4 met). 1/11/2 such lyne doesl. Dorsel, 9 (introtapini) Phanyagual text 2, 4-4,2 ( spin B) Four hour 5.55 B 5.50 Light to bree of amount 4.60 4.53 That -1.12 1.10 .25 .24. 1.27 1.23 Dept appends the une a much of the file there. Her. Thursen says they were very frutty when take out of the water, but faded afterme. There is start them of red as been of pretries at adjust flack of hely, of our straining.

Figure 87. Original note by Harry Piers concerning 2 Common Shiner captured at Wright Lake, Halifax Co., N. S. About end of June 1918 (Museum No. 4622, Negative No. 24,067).

Frich. Recurid 15 nov. 1918. A 675. g. 52. 26. 1097. Pygosteus pungitius (Liman): June- spined Stickelback Taken in small book ( known as Skating Paul Brost, which flows for so ween Skating Part") at I die reservation or extrement, I mile SE. of Elmedale station, Hx. Co. hs., 13 hor. 1918. girry Love - cloud (c.d.) Sachment 1 spremi. Total eight, 1.67; lugte to have of condel 1.43; head \$2; Here i legt, 3:40 ; deste i legt, 5:72 (applierin of condally) Jin francle: Dosal VIII-I, \$10; Pectone, 10; and, I, 9; cardel, 12.) ( & Visited existe, high # 5 fals 1/3 light of lued ) Colour (alivi). - Olivaciones abon; punchulate and blotches and insighting barred with precione. Under parter silving, brightest on lower posterior sides of hund. Sums & slim a turney towned of principling brackypoda (Pecan)

Figure 88. Original note by Harry Piers concerning one specimen of Ninespine Stickleback captured 1 mile SE of Elmsdale Station, Halifax Co., N. S. on 13 November 1918 (Museum No. 4675, Negative No. 24,758).

Fish no. 3013 of Jarole V Em Limanda ferruginea (Storer) · Rusty Dab; "Sole" (1 th, fil went) Bright or Boutelin pil. mar, High, and -9 \$ Jan. 1920. Total Lugar ut 15 miles. Proposed obscump? ) by rule. Eiger on right side month Twisted a little to blair ende, Teeth fromt, many with an both with. Vontrees similer. Letter hie arched in pant. Done, 85 rugs. and, 61 rays. Colom grazin spotted into red-horn; and white . I tad roc in it. Spean not presid.

Figure 89. Original note by Harry Piers concerning Yellowtail Flounder, Pleuronectes ferrugineus, bought at fish market in Halifax 9 January 1920 (Negative No. 24,070).

Fish. Smelto une compo aut 27 merch 1920, aut Kings plus at herd of Grand Lake, wen Willigton state, 14.60. They are my hig ( meg as his as a himing"). Coupt pist though ice at now (our 17 apris) in mets. a men who told functioned cut them, claims they are there all winty. Livedly his not get runs thing. Vice drucked, Ending 17 april 1920 are the maly fruits?

Figure 90. Original note by Harry Piers concerning the capture of Rainbow Smelt, Osmerus mordax, near Wellington, Grand Lake, Halifax Co., N. S. About 27 March 1920 (Negative No. 24,759).

5155: Recd. 21 Syr. 1922 huma canthus histaidure ( Li mens) Balester carolocores Fort Fish; Tile Fish Losto yacket Jagge April Sheet adult Taken in herring mut, in all of 5 fection of with, near Bald Rock, at I wie sind of Prospect (Upper P. Prospect), as himot of Prospect Bay H. Co., U.S.; 20 Sept. 1922. John & Wm. Hardeman (c. d.) upper Pringert, Us D. I-32, 31, P. 14. 12 homes accidentes occument, (5g. m. Junes) I Crely me upout of home Lety upre, many in St. In the Bay, i autum of 1861 ( See Junes, Tu. M.S. 1.11.5.) 201.1, M1, 1863, J. 53). Rev. Jeh alex Done the sigh; skin with mint rough segrem - like cales; putic line prent (meet, month); gill - seit sent, muly nitible. Forte with, 5.00 in; happen and of northweigh.00; depter, 2.253 breed, 1.25. Hand in later 3.2 time; depth 1:77.

Colon creen white, more or less modeled with aboverne of
sportly with home. Ini observer, peters, - Can my repidly change
colone to a strong betricking of observer; or putting to a private
observer colone expetted in blotched with dark abirecome or home
value sportly with creen. Two strange about one and alien

Figure 91. Original note by Harry Piers concerning one specimen of Planehead Filefish, Monacanthus hispidus, captured 1 mile south of Prospect on 20 September 1922 (Museum No. 5155, Negative No.24,756).



Figure 92. Record of 2 Longnose Lancetfish (Handsaw Fish) from fishing banks off Nova Scotia reported in Halifax Daily Star, 15 July 1927 (Negative No. 24,055).

Solmon Runs of Salum. a men of seems in a min, see 5 industriation the three when someon will sive to a fly. Salum may " in many is a river, when they is my Mast run, to dayed on state of with, It wanith. with, Selm will not vie while the water is vising. Whe it stope viery they will vice. Heat also some to stops then for insig. The re-would Show new, etr., in money that a rimpell writer, take, pen them, I who the with eligible sing, the pich any he taken.

Figure 93. Original undated note by Harry Piers concerning "Runs" of Salmon (Negative No. 24,071).

Trains.

ann mud Butter, sind high - I show the sind 's Just - much denie's 1917.

Vise J. Paris.

A mon frank Latin for Thing loon, said his father always were & he was to get a Hickor n 20 m a sand spot, summerly hte Thun cap or hunging Beach Lighten.

There is or won git ments.

a sorbier guns of fortile become.

via J. Paris.

Figure 94. Original undated note by Harry Piers on Halibut records provided by Joseph Perrin (Negative No.24,762).

Large specimen is doubtlery Exocochie tahieneix, Romzani. (Which is communent of Flying - pich in topuil sur note I Cuba). Specimen Juned along hely in Exococting rondeletii (Curin V Valama) ( which is not menum in the met I dies). The unopened smelly specing is appently eith Exococtus heterurus a E. lutheni, attend I am not satisfied with the contigut. It agrees with the two dried spening is an Immen. The bear of the and pin is just hay lugte of bace of donal; attimurice I amed the it with E. walitars; action I VE: pring rolling shows the base of anal one aut light which will so 11/2 time in bace of donard.

Figure 95. Original undated note on Flyingfish (Negative No. 24,046).

ameuric rubulosus, Humed Port Donte It. Lake, Catoeterme commercanie Com Surley. and Help. mie, C. B. G., acr 30 dec. 1914 (ms. mrs of the). Simothlux corporacio. Fall-pot man Suchritte, no S. ahrmaculatus - House Brie cos. ann, Sun; milford, atrames orypoleucare. Soul shin. Imputs Loh, Dent 9 miles out tide with, in win, auty lo. notropie commuter. Red-pri Elmidely, Show a Ring no

Figure 96. Original undated note on various freshwater fishes (Negative No. 24,074).

This copy, compies for my card-data, we look at april 1915.

and finished on 12 July 1915.

CATALOGUE OF FISHES OF NOVA SCOTIA.

> By Harry Piers

> > Vol. 1.

(nos. 6-902)

```
Rough Contato of Volumes.
Voe. 1, nos. 6 - 902.
   147. Shingin
  355. Carps (apprinidate).
   574. Ell
  685 Thring
  691. alwing
  693. Shed
  778-783. Selm V Jur.
   793. Smelt.
Vol. 2, nos. 932-1985.
  1252. Mechand 932 Welger (Junes)
                  1130 Paperis
  1257. albacore.
  1282. Sundpik
  1368. Dollar-pil."
1415. Bers.
  1984. Cuma.
Vol. 3, no. 3#6 2116 - 2937.
  2174. "homy statick".
  2903. Pollack
  2908. Jourcod.
  2909. Codpic
  2912. Haddock
  2924-2929. Coding & Dec.
  2937. Turk or ding"
Vol. 4, us. 2976 - ene.
  2976-7. Hunts.
  3017. Common Helper.
```

Figure 98. Table of Contents of Volumes I to IV of Harry Piers's Catalogue of Fish of Nova Scotia. (Negative No. 24,057).

Fish.

am. 19 ang. 1919.

Dear Riers.

We are doing beological work this seemes in St. mary's Boy, and I know the you may stand in need of some material occurring in these waters. Are there culain teshes leable to be found in I. S. areas which you have not yet obtained? If so, please give me Their names and I'll be very gend to feerwish you well samples should they come over un sureno the secures Have you wet with Gasterotters gladiunculy. Hendell? In ratisfied myself et is a good species a con send you come should you need them, for I am meeting with it lave How are you getteres ou well your bit I wish you could take a few down & reen do here. he have a lab. + over book is courted watering observations & collections Lover very breed. Cittle Receive Dans Co Helif

hus. J. & E. 1102. aprette quadracus (mitches) Form. spined Stikeback an. 31 and 1915. Dear Reers. After bing land up three weeks with grippes I am also to get about a lette but will not perine work before next monday. Inchas a I saw a specemen of apelles of which was taken by one of the ste marine kio Station of et anoueus, re August 1913. I wentefied et for him. De capture servial in a weedy to mean Lettle Rever St. Marys not be amiss to let you ke not have take it seems very local in its questiluteous. Court find it about Ross. Kay and I know leut ou station or two in h ! B. yours my beet bully, lules

Figure 100. Letter dated 26 March 1915 to Harry Piers from Philip Cox concerning Fourspine Stickleback from St. Marys Bay, Digby Co., N. S. (Negative No. 24,771)

4786. Recend 3 Sept-1919 Garterosteux gladimenters, Kurul Month of Sissister Rim, St. har Bey, Dights Co. nor Sisting, 30 June 1919, Dr. Philip Cox (c.d.) 5 Specini. Cox my this spin sum & 4 human There, as he had my Ir comices it to be a good theme. ( Vin ais with of 1 Sept. 1919). The dructy or viril tall am I be Sissilin River query " 1th out and his prince, de cept) som · Cox may it is for the month of the Sienter Peri. "

Figure 101. Original note by Harry Piers on five specimens of Threespine Stickleback collected at St. Marys Bay, Digby Co., N. S. on 30 June 1919 by Philip Cox (Museum No .4786, Negative No. 24,768)

The apelles quadrocces v Kever, St. Mary's Boy,