

Historical Fish Specimens Collected from the Tohoku District by the Saito Ho-on Kai Museum of Natural History

Keiichi Matsuura¹, Gento Shinohara² and Masanori Nakae¹

¹ Collection Center, National Museum of Nature and Science,
3–23–1 Hyakunin-cho, Shinjuku-ku, Tokyo, 169–0073 Japan
E-mail: matsuura@kahaku.go.jp; nakae@kahaku.go.jp

² Department of Zoology, National Museum of Nature and Science,
3–23–1 Hyakunin-cho, Shinjuku-ku, Tokyo, 169–0073 Japan
E-mail: s-gento@kahaku.go.jp

Abstract The fish collection of the Saito Ho-on Kai Museum of Natural History was transferred to the National Museum of Nature and Science, Tokyo in February 2006. Ninety percent of the fish collection contains specimens collected from the Tohoku District during the period from 1930 to 1933 when natural environments of Japan were in good condition for various groups of fishes. The fish specimens from the Tohoku District were classified into 361 species/subspecies of 273 genera belonging to 131 families of 31 orders. A list of the species is shown with remarks on distribution.

Key words: Fish specimens, Saito Ho-on Kai Museum, Tohoku District, inventory.

Introduction

The Saito Ho-on Kai Museum was established in November 1933 in Sendai City, Miyagi Prefecture, Japan. The first director of the museum, Prof. Shinkishi Hatai, was a renowned taxonomist of the Oligochaeta who was also a professor at the Tohoku University and served as the first director of the Palau Tropical Biological Station. In the early days of the museum, staff made broad surveys in the Tohoku District to collect many groups of living organisms, fossils, minerals and rocks, representing the wide and diverse nature of in the northern part of Honshu Island. Unfortunately, the museum suffered a terrible fire caused by an air raid during World War II, which resulted in the loss of the entire botanical collection as well as significant amounts of literature and other documents. However, other natural history collections fortunately survived the fire. After World War II, the museum changed its name in 1976 from the Saito Ho-on Kai Museum to the Saito Ho-on Kai Museum of Natural History, indicating its focus on natural history in-

stead of natural science. The museum has tried to keep its activity at the level before the war, but it failed to do so because of financial difficulties. In 2005, the Saito Ho-on Kai Museum of Natural History decided to donate its entire collection to the National Museum of Nature and Science, Tokyo. In February 2006 this historically important collection left its home for Tokyo.

The transferred fish collection of the Saito Ho-on Kai Museum of Natural History included 7449 specimens of 1932 lots collected from Japan and foreign countries. Many specimens in the collection came from the Tohoku District (Aomori, Akita, Iwate, Miyagi, Yamagata and Fukushima prefectures) in the period from 1930 to 1933. These specimens occupied 90 % of the fish collection.

The specimens of this fish collection were studied by major Japanese ichthyologists including Masamitsu Oshima, Yaichiro Okada, Kiyomatsu Matsubara, and Hyoji Ikeda. Of these authors, Okada and Ikeda (1938) reported 45 species of freshwater and brackish water fishes from the collection of the Saito Ho-on Kai Museum.

However, marine fishes of the collection have not been studied in depth by ichthyologists.

The freshwater fish specimens of the Saito Ho-on Kai Museum of Natural History well represent the freshwater fish fauna of the Tohoku District when aquatic environments of the district were still in good condition. As in other areas in Japan, the Tohoku District is not an exception in terms of economic development involving many construction projects in river systems, lakes, ponds and wetlands. In the late 1950s through mid-1970s, many aquatic environments in Japan suffered from huge development and construction pressures resulting in significant degradation of habitats for freshwater inhabitants. For example, Shinai-numa Pond, the type locality of a cyprinid fish *Pseudorasbora pumila pumila*, was lost and turned into paddy fields and railroads.

Examination of the fish collection of the Saito Ho-on Kai Museum of Natural History revealed that the specimens collected from the Tohoku District are classified into 361 species of 273 genera belonging to 131 families of 31 orders. A list of the fishes is shown below with some remarks.

Materials and Methods

Systematic arrangement of taxa follows Nelson (1994). Scientific names generally follow the Catalog of Fishes on the website of the California Academy of Sciences, USA (<http://research.calacademy.org/research/Ichthyology/catalog/fishcatsearch.html>). Standard Japanese names follow Nakabo (2000) except for Japanese names including discriminatory words for human beings (see Amendments of discriminatory Japanese fish names by the Ichthyological Society of Japan, 2007). We also follow Arai *et al.* (2007: *Acheilognathus*), Kai and Nakabo (2008: *Sebastes*), Katafuchi and Nakabo (2007: *Ditrema*) and Yoshino and Kishimoto (2008: *Plotosus*) in taxonomic treatments of species in those genera. Number of specimens and size(s) are indicated in parentheses just after each catalog number. Standard length and total length are abbreviated as

SL and TL, respectively. The specimens from the Tohoku District were collected in 6 prefectures: Aomori, Akita, Iwate, Miyagi, Yamagata, and Fukushima (Figs. 1–2). Some specimens could not be identified to species level because of poor condition. The species reported by Okada and Ikeda (1938) are shown with an asterisk. All specimens are deposited in the National Museum of Nature and Science, Tokyo (NSMT-P). The species-group names of the cyprinid fish genus *Carassius* follow the ruling (Opinion 2027, March 2003) by the International Commission on Zoological Nomenclature (see also Gentry *et al.*, 2004)

Species List

Order Myxiniiformes

Family Myxinidae

Eptatretus atami (Dean, 1904) [Japanese name: Kuro-nuta-unagi]

Akita: Yurihonjo City, off Honjo, NSMT-P 74972 (4, 29.5–43 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74358 (1, 46.1 cm TL), 74808 (1, 43 cm TL).

Eptatretus burgeri (Girard, 1855) [Japanese name: Nuta-unagi]

Akita: Yurihonjo City, off Honjo, NSMT-P 74913 (1, 38.5 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74486 (1, 43 cm TL), 74829 (3, 36.3–43.5 cm TL), 74902 (1, 44 cm TL).

Eptatretus okinoseanus (Dean, 1904) [Japanese name: Murasaki-nuta-unagi]

Fukushima: Iwaki City, Onahama, NSMT-P 75025 (2, 59.5–62 cm TL).

Myxine sp.

Fukushima: Iwaki City, Onahama, NSMT-P 74811 (1, 45 cm TL), 74878 (1, 54.8 cm TL).

Family Petromyzontidae

Lampetra tridentatus (Richardson, 1836) [Japanese name: Mitsuba-yatsume]

Miyagi: Natori City, Natori-gawa River, NSMT-P 74580 (1, 37.2 cm TL).

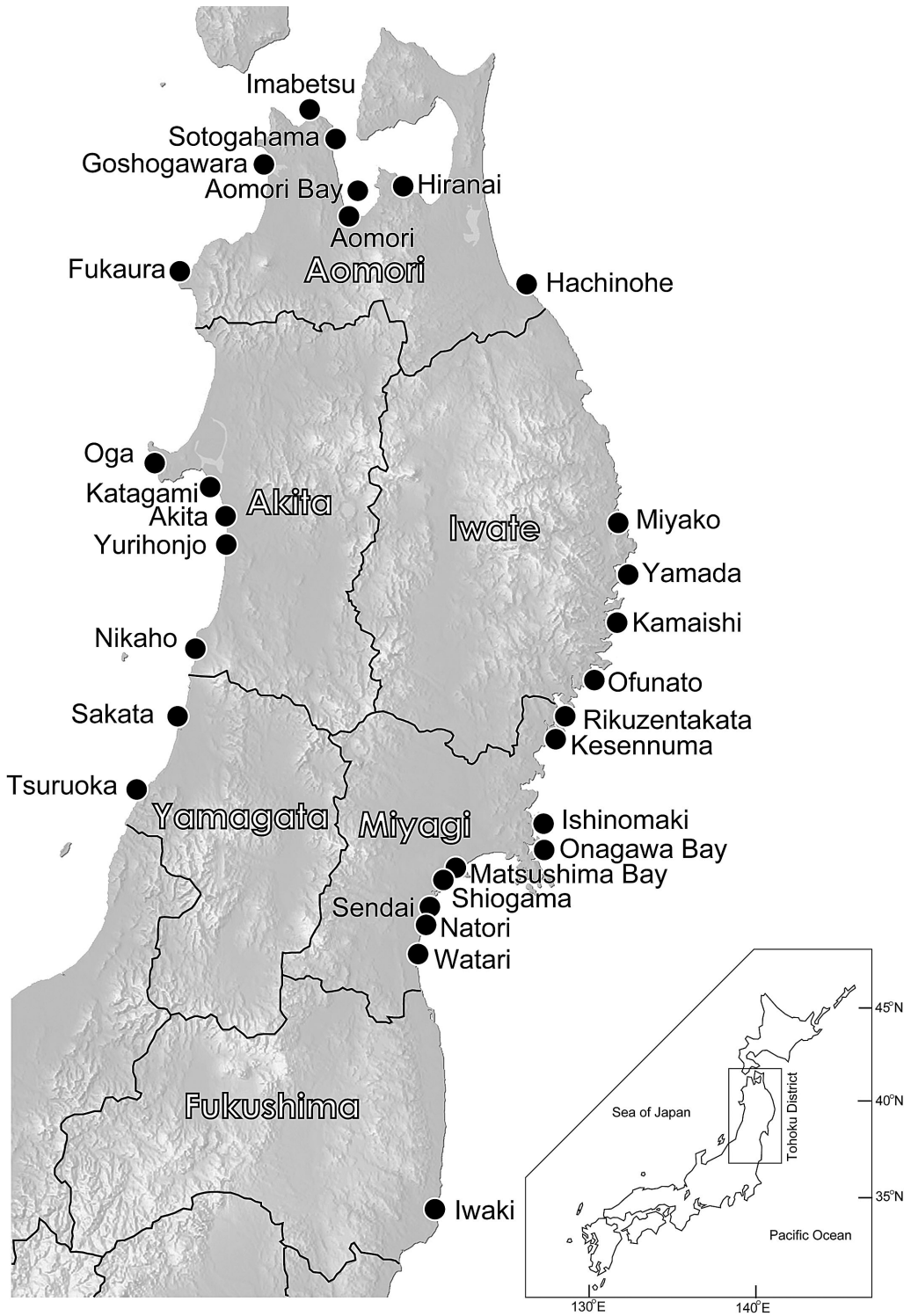


Fig. 1. Collection localities of marine fishes from the Tohoku District, Japan.

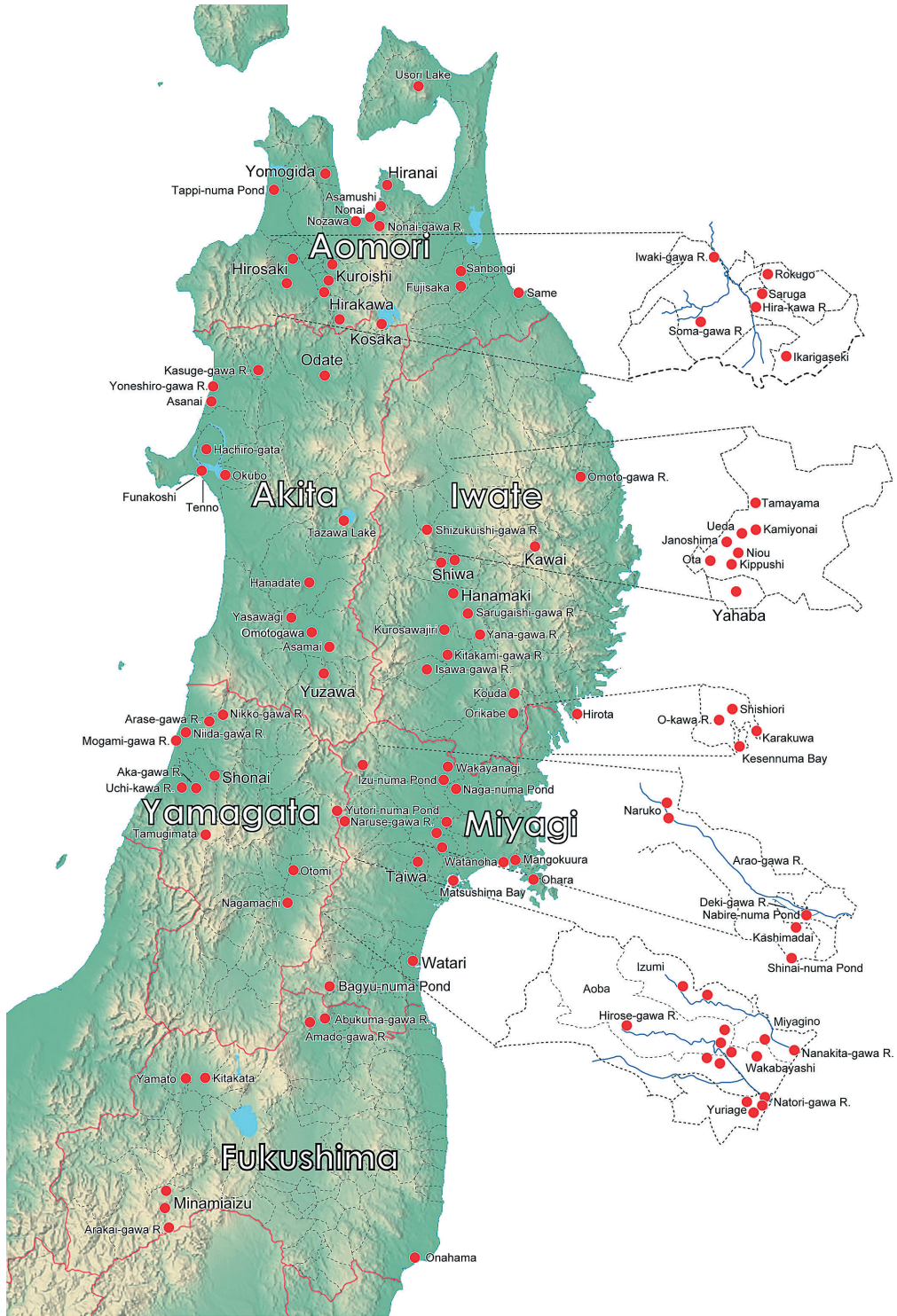


Fig. 2. Collection localities of freshwater and brackish water fishes from the Tohoku District, Japan.

* *Lethenteron camtschaticum* (Tilesius, 1811)
[Japanese name: Kawa-yatsume]

Aomori: Kuroishi City, Rokugo, NSMT-P 74341 (3, 33.8–36.9 cm TL).

Akita: Kazuno County, Kosaka Town, NSMT-P 73716 (8, 4.5–12.5 cm TL); Noshiro City, Asanai, NSMT-P 74581 (2, 41.2–41.8 cm TL).

Yamagata: Tsuruoka City, NSMT-P 73712 (2, 14.2–16.5 cm TL).

* *Lethenteron reissneri* (Dybowski, 1869)
[Japanese name: Suna-yatsume]

Akita: Yokote City, Asamai, NSMT-P 73883 (3, 8.4–11.4 cm TL), 74029 (1, 8.1–8.7 cm TL).

Iwate: Shiwa County, Shiwa Town, NSMT-P 73368 (3, 9.8–10.7 cm TL).

Miyagi: boundary between Miyagi County and Sendai City, NSMT-P 73950 (1, 9.6 cm TL); Natori City, Yuriage, NSMT-P 76840 (1, 14.4 cm TL); Osaki City, Naruko, NSMT-P 74052 (2, 11.8–12.8 cm TL); Sendai City, Izumi, NSMT-P 73720 (4, 8.5–9.7 cm TL).

Yamagata: Tsuruoka City, NSMT-P 73736 (1, 11.4 cm TL); Yamagata City, Nagamachi, NSMT-P 74159 (2, 12.2–12.7 cm TL).

Fukushima: Minamiaizu County, Minamiaizu Town, NSMT-P 73939 (1, 7.6 cm TL).

Order Chimaeriformes

Family Chimaeridae

Hydrolagus barbouri (Garman, 1908) [Japanese name: Kokonohoshi-ginzame]

Fukushima: Iwaki City, Onahama, NSMT-P 77185 (1, 75 cm TL).

Order Carcharhiniformes

Family Scyliorhinidae

Galeus nipponensis Nakaya, 1975 [Japanese name: Nihon-yamori-zame]

Fukushima: Iwaki City, Onahama, NSMT-P 74746 (1, 35.7 cm TL).

Scyliorhinus torazame (Tanaka, 1908) [Japanese name: Tora-zame]

Aomori: Higashitsugaru County, Imabetsu Town, NSMT-P 74879 (2, 43.7–44.7 cm TL); no

detailed locality, NSMT-P 74942 (2, 41.2–46.7 cm TL).

Family Triakididae

Mustelus manazo Bleeker, 1854 [Japanese name: Hoshi-zame]

Akita: Yamamoto County, Happo Town, NSMT-P 74857 (1, 43.9 cm TL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74734 (1, 35.3 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74951 (3, 43.7–46.5 cm TL).

Triakis scyllium Müller & Henle, 1839 [Japanese name: Dochi-zame]

Fukushima: Iwaki City, Onahama, NSMT-P 74963 (4, 36.5–38 cm TL).

Family Carcharhinidae

Sphyrna zygaena (Linnaeus, 1758) [Japanese name: Shiro-shumoku-zame]

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74890 (1, 49.5 cm TL), 74959 (1, 49 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74903 (1, 50.7 cm TL).

Order Lamniformes

Family Alopiidae

Alopias superciliosus Lowe, 1841 [Japanese name: Hachiware]

Miyagi: Ishinomaki City, Kinkazan, NSMT-P 77177 (1, 121 cm TL), 77178 (1, 117 cm TL).

Order Squaliformes

Family Squalidae

Centrophorus sp.

Miyagi: Shiogama City, NSMT-P (1, 20.1 cm SL).

Centroscyllium ritteri Jordan & Fowler, 1903 [Japanese name: Kasumi-zame]

Miyagi: Kesenuma City, NSMT-P 74956 (1, 42.7 cm TL); Natori City, off Yuriage, NSMT-P 74328 (1, 27 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74884 (5, 18.7–45 cm TL).

Etmopterus lucifer Jordan & Snyder, 1902 [Japanese name: Fuji-kujira]

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 75027 (5, 33.5–33.9 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 73653 (3, 23.9–30.5 cm TL), 74360 (4, 26.1–29.5 cm TL), 74376 (2, 17.2–24.2 cm TL), 74908 (1, 43.4 cm TL).

Etmopterus pusillus (Lowe, 1839) [Japanese name: Karasu-zame]

Miyagi: Natori City, off Yuriage, NSMT-P 74454 (2, 24.5–25 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74418 (5, 17.4–21.2 cm TL), 75214 (2, 17.7–19.4 cm TL).

Squalus acanthias Linnaeus, 1758 [Japanese name: Aburatsuno-zame]

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74843 (1, 32.1 cm TL); Kesenuma City, off Karakuwa, NSMT-P 74887 (1, 54.1 cm TL); Natori City, off Yuriage, NSMT-P 73279 (3, 23.7–25.8 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 77172 (4, 25.2–48 cm TL).

Squalus mitsukurii Jordan & Snyder, 1903 [Japanese name: Futotsuno-zame]

Miyagi: Kesenuma City, NSMT-P 74600 (1, 35.8 cm TL).

Squalus sp.

Iwate: Miyako City, off Miyako, NSMT-P 73693 (1, 23.5 cm TL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74084 (2, 4.4–12.4 cm TL), 74401 (1, 35.2 cm TL), 74760 (1, 37.4 cm TL); off Kesenuma City, NSMT-P 74415 (2, 13.9–14.2 cm TL).

Order Squatiniformes

Family Squatinidae

Squatina nebulosa Regan, 1906 [Japanese name: Koro-zame]

Akita: Nikaho City, off Konoura, NSMT-P 74766 (1, 35.6 cm TL).

Order Rajiformes

Family Pristidae

Pristis microdon Latham, 1794 [Japanese name: Nokogiri-ei]

Fukushima: Iwaki City, Onahama, NSMT-P 74742 (1, 59.3 cm TL).

Family Rhinobatidae

Rhinobatos schlegelii Müller & Henle, 1841

[Japanese name: Sakata-zame]

Akita: Nikaho City, Konoura, NSMT-P 74325 (1, 26.6 cm TL).

Family Rajidae

Dipturus tengu (Jordan & Fowler, 1903) [Japanese name: Tengu-kasube]

Miyagi: off Kesenuma City, NSMT-P 74383 (5, 34.5–35.5 cm TL).

Dipturus sp.

Miyagi: Natori City, off Yuriage, NSMT-P 74430 (1, 7.3 cm TL).

Okamejei kenoei (Müller & Henle, 1841) [Japanese name: Komon-kasube]

Aomori: Aomori City, Asamushi, NSMT-P 77139 (1, 30.1 cm TL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73428 (2, 16.9–18.4 cm TL).

Okamejei meerdervoortii (Bleeker, 1860) [Japanese name: Medama-kasube]

Fukushima: Iwaki City, Onahama, NSMT-P 74771 (1, 31 cm TL).

Okamejei schmidti (Ishiyama, 1958) [Japanese name: Tsumari-kasube]

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74880 (1, 35.2 cm TL).

Okamejei sp.

Akita: Nikaho City, Konoura, NSMT-P 74443 (3, 20.1–27.5 cm TL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74859 (1, 30.9 cm TL); Watari County, off Watari Town, NSMT-P 75024 (1, 36 cm TL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74491 (1, 20.1 cm TL).

Rhinoraja kujiensis (Tanaka, 1916) [Japanese

name: Kuji-kasube]

Miyagi: Kesenuma City, NSMT-P 73644 (1, 24.3 cm TL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73582 (1, 21 cm TL).

Family Dasyatidae

Dasyatis akajei (Müller & Henle, 1841) [Japanese name: Aka-ei]

Akita: Nikaho City, Konoura, NSMT-P 74372 (1, 29.1 cm TL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74558 (1, 32.1 cm TL).

Myliobatis tobijei Bleeker, 1854 [Japanese name: Tobi-ei]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 74863 (1, 62.1 cm TL).

Iwate: Miyako City, off Miyako, NSMT-P 75070 (1, 56.6 cm TL).

Miyagi: Natori City, off Yuriage, NSMT-P 74561 (1, 46.6 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74603 (1, 46.4 cm TL), 74769 (1, 48.2 cm TL), 74770 (1, 45 cm TL).

Order Albuliformes

Family Albulidae

Pterothrissus gissu Hilgendorf, 1877 [Japanese name: Gisu]

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74776 (5, 24–25.5 cm SL); Natori City, off Yuriage, NSMT-P 73681 (2, 18.7–19.4 cm SL), 74679 (2, 19.2–23.1 cm SL); Watari County, Watari Town, NSMT-P 74596 (5, 23.2–27.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73812 (1, 18.3 cm SL), 73988 (1, 17.2 cm SL), 74285 (1, 21 cm SL).

Order Anguilliformes

Family Anguillidae

* *Anguilla japonica* Temminck & Schlegel, 1846 [Japanese name: Unagi]

Akita: Katagami City, Hachiro-gata, NSMT-P 74304 (1, 34.2 cm TL); Minamiakita County, Hachiro-gata, NSMT-P 74593 (2, 39.1–47.9 cm TL).

Iwate: Morioka City, NSMT-P 74114 (1, 26.3 cm TL); Sarugaishi-gawa River, NSMT-P 73799 (1, 29.1 cm TL).

Miyagi: Ishinomaki City, Ohara, NSMT-P 73922 (1, 27.4 cm TL), Ishinomaki City, Watanoha, NSMT-P 74393 (1, 32.3 cm TL); Kesenuma City, Karakuwa, NSMT-P 74267 (1, 46.5 cm TL); Kesenuma City, Kesenuma Bay, NSMT-P 74827 (1, 61 cm TL); Kurihara City, Izu-numa Pond, NSMT-P 74147 (1, 27.5 cm TL); Osaki City, Kashimadai, Shinai-numa Pond, NSMT-P 76842 (2, 16.9–17.6 cm TL); Osaki City, near Kashimadai, NSMT-P 73934 (6, 8.1–22.6 cm TL); Sendai City, Aoba, NSMT-P 74123 (2, 23.8–27.2 cm TL); Sendai City, near Hirose-gawa River, NSMT-P 74948 (1, 40 cm TL); Shiraishi City, Bagyu-numa Pond, NSMT-P 74169 (2, 22.6–25.9 cm TL); Watari County, Watari Town, NSMT-P 74139 (4, 20.5–27.1 cm TL).

Family Synphobranchidae

Synphobranchus kaupii Johnson, 1862 [Japanese name: Irako-anago]

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74911 (1, 61.5 cm TL).

Family Ophichthidae

Ophichthus altipennis (Kaup, 1856) [Japanese name: Hotate-umihebi]

Fukushima: Iwaki City, Onahama, NSMT-P 74484 (1, 51.2 cm TL).

Ophisurus macrorhynchus Bleeker, 1853 [Japanese name: Dainan-umihebi]

Akita: Yurihonjo City, off Honjo, NSMT-P 77175 (1, 155 cm TL).

Family Congridae

Ariosoma meeki (Jordan & Snyder, 1900) [Japanese name: Goten-anago]

Akita: Nikaho City, off Konoura, NSMT-P 74820 (1, 57 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74697 (1, 35 cm TL), 74900 (2, 40–42 cm TL).

Conger myriaster (Brevoort, 1856) [Japanese name: Ma-anago]

Akita: Nikaho City, off Konoura, NSMT-P 74587 (1, 37.6 cm TL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73326 (9, 7.3–8.3 cm TL), 74602 (2, 36.2–39.3 cm TL); Ishinomaki City, Ohara, NSMT-P 73784 (1, 26.4 cm TL); Kesenuma City, off Karakuwa, NSMT-P 74588 (1, 45 cm TL); Natori City, off Yuriage, NSMT-P 74592 (1, 38.5 cm TL); off Shiogama City, NSMT-P 74174 (1, 28 cm TL); Watari County, off Watari Town, NSMT-P 74812 (2, 55.5–62 cm TL).

Fukushima: Iwaki City, Onahama, NSMT-P 74909 (1, 50.5 cm TL).

Gnathophis heterognathos ginanago (Asano, 1958) [Japanese name: Nisegin-anago]

Fukushima: Iwaki City, Onahama, NSMT-P 73537 (1, 36.3 cm TL).

Gnathophis heterognathos nystromi (Bleeker, 1858-59) [Japanese name: Gin-anago]

Yamagata: Tsuruoka City, Kamo, NSMT-P 73817 (1, 42 cm TL).

Order Clupeiformes

Family Engraulidae

Engraulis japonicus Temminck & Schlegel, 1846 [Japanese name: Katakuchi-iwashi]

Aomori: Hachinohe City, Same, NSMT-P 73941 (2, 10.1–10.7 cm SL); Higashitsugaru County, Nonai-gawa River, NSMT-P 73751 (2, 4.1–4.6 cm SL).

Miyagi: Rikuzentakata City, Takata, NSMT-P 73325 (2, 7.5–11.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73891 (4, 6.2–8.1 cm SL).

Family Clupeidae

Clupea pallasii Valenciennes, 1847 [Japanese name: Nishin]

Aomori: Aomori City, Asamushi, NSMT-P 74639 (4, 21.5–22.5 cm SL), 74813 (6, 21.5–22 cm SL).

Iwate: Rikuzentakata City, Hirota, NSMT-P 73587 (1, 20.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 75778 (2, 14.2–14.7 cm SL).

Etrumeus teres (DeKay, 1842) [Japanese name: Urume-iwashi]

Miyagi: Motoyoshi County, off Motoyoshi Town, NSMT-P 73893 (5, 13.9–15.8 cm SL).

Konosirus punctatus (Temminck & Schlegel, 1846) [Japanese name: Konoshiro]

Akita: Katagami City, Tenno, Hachiro-gata, NSMT-P 74132 (2, 8.9–9.1 cm SL); Oga City, Funakoshi, Hachiro-gata, NSMT-P 74162 (7, 7.6–8.9 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 74693 (1, 19.6 cm SL); Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 74354 (1, 19 cm SL); Natori City, off Yuriage, NSMT-P 74412 (1, 19.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73373 (4, 8.9–10.8 cm SL), 73940 (1, 9.2 cm SL), 74113 (2, 9.1–10 cm SL).

Sardinella zunasi (Bleeker, 1854) [Japanese name: Sappa]

Fukushima: Iwaki City, Onahama, NSMT-P 73425 (2, 6.6–7.1 cm SL), 73948 (1, 9.4–10.7 cm SL), 74140 (1, 12.7 cm SL), 75301 (6, 6–7.1 cm SL).

Sardinops melanostictus (Temminck & Schlegel, 1846) [Japanese name: Ma-iwashi]

Aomori: Higashitsugaru County, Hiranai Town, NSMT-P 74803 (28, 12.2–14.5 cm SL); Higashitsugaru County, off Hiranai Town, NSMT-P 74550 (28, 12.3–15.4 cm SL), 74759 (46, 12.4–16.2 cm SL).

Miyagi: Kesenuma City, NSMT-P 73951 (4, 9.9–12.4 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 74427 (2, 18.9–20.3 cm SL); Kesenuma City, off Karakuwa, NSMT-P 74260 (6, 11–13.8 cm SL); Motoyoshi County, off Motoyoshi Town, NSMT-P 74599 (10, 13.2–20.6 cm SL); Natori City, off Yuriage, NSMT-P 74311 (12, 12–13.7 cm SL); Oshika County, Onagawa

Town, Enoshima Island, NSMT-P 75774 (2, 10.1–10.4 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73624 (2, 12.3–13.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74018 (1, 8 cm SL), 74124 (14, 10.2–14.3 cm SL), 74384 (21, 12.1–16.5 cm SL).

Order Cypriniformes

Family Cyprinidae

* *Acheilognathus melanogaster* Bleeker, 1860
[Japanese name: Tanago]

Akita: Katagami City, Tenno, NSMT-P 73765 (3, 2.8–4.9 cm SL).

Iwate: Morioka City, Janoshima, NSMT-P 76774 (1, 6.5 cm SL); Morioka City, Kitakami-gawa River, NSMT-P 73552 (11, 5.4–7 cm SL); Morioka City, Ota, NSMT-P 76864 (1, 4.3 cm SL); Sarugaishi-gawa River, NSMT-P 73748 (1, 4.3 cm SL); Shimohei County, Kawai Village, NSMT-P 76929 (1, 3.6 cm SL).

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 73304 (9, 4.5–5.5 cm SL), 73750 (10, 3.7–4.6 cm SL); Sendai City, Wakabayashi, NSMT-P 75101 (1, 2.1 cm SL), 77125 (4, 2.8–3.5 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 75323 (1, 5.1 cm SL); Tome City, Nitta, NSMT-P 75298 (10, 3.6–4.2 cm SL).

Fukushima: Minamiaizu County, Minamiaizu Town, NSMT-P 76857 (2, 2.5–2.6 cm SL).

Acheilognathus tabira erythropterus Arai, Fujikawa & Nagata, 2007 [Japanese name: Akahire-tabira]

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 75177 (3, 3.7–4.6 cm SL), 76623 (1, 4.5 cm SL); Sendai City, Wakabayashi, NSMT-P 77130 (1, 2.9 cm SL).

Acheilognathus tabira tohokuensis Arai, Fujikawa & Nagata, 2007 [Japanese name: Kitano-akahire-tabira]

Miyagi: Osaki City, Kashimadai, Shinai-numa Pond, NSMT-P 76875 (3, 4.5–5 cm SL).

Yamagata: Tsuruoka City, NSMT-P 75320 (3, 6.4–6.6 cm SL); Tsuruoka City, Uchi-kawa River, NSMT-P 76866 (2, 5.1–5.5 cm SL).

* *Acheilognathus typus* (Bleeker, 1863) [Japanese name: Zeni-tanago]

Iwate: Morioka City, Ueda, NSMT-P 73763 (1, 2.9 cm SL).

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 75176 (2, 2.1–2.4 cm SL); Sendai City, Wakabayashi, NSMT-P 73574 (4, 3.2–4 cm SL), 77127 (2, 3.3–4.6 cm SL), 77129 (2, 3.5–3.6 cm SL), 77135 (4, 3.4–3.8 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 74332 (2, 3.7–4.1 cm SL); Toda County, Wakuya Town, NSMT-P 76881 (3, 3.1–3.7 cm SL); Tome City, Nitta, NSMT-P 74133 (2, 6–6.3 cm SL), 75297 (2, 2.8–4.5 cm SL); Tome City, Nitta, Naga-numa Pond, NSMT-P 73530 (34, 2.5–5.8 cm SL).

Yamagata: Tsuruoka City, NSMT-P 74324 (3, 3.2–3.8 cm SL), 76870 (17, 1.6–6.1 cm SL); Tsuruoka City, Uchi-kawa River, NSMT-P 76867 (1, 3.7 cm SL).

Carassius gibelio langsdorfii (Cuvier & Valenciennes, 1842) [Japanese name: Ginbuna]

Aomori: Towada City, Sanbongi, NSMT-P 76885 (9, 1.6–2.7 cm SL); Tsugaru City, Tappi-numa Pond, NSMT-P 73831 (3, 7.2–10.1 cm SL).

Akita: Katagami City, Hachiro-gata, NSMT-P 73978 (2, 3.7–4.7 cm SL); Katagami City, Okubo, NSMT-P 74809 (2, 20.8–24.5 cm SL); Katagami City, Okubo, Hachiro-gata, NSMT-P 74426 (2, 18.2–19.1 cm SL); Oga City, Funakoshi, Hachiro-gata, NSMT-P 74416 (5, 12.5–14.8 cm SL).

Iwate: Iwate County, Shizukuishi Town, NSMT-P 76883 (2, 2.4–3.4 cm SL); Morioka City, Kamiyonai, NSMT-P 74319 (2, 10.5–17.3 cm SL); Sarugaishi-gawa River, NSMT-P 74038 (1, 4.9 cm SL); Shimohei County, Kawai Village, NSMT-P 76928 (2, 4.2–5.3 cm SL); Shiwa County, Yahaba Town, NSMT-P 73868 (8, 5.4–10.2 cm SL).

Miyagi: Kami County, Kami Town, Yutori-numa Pond, NSMT-P 74885 (17, 11.8–20.5 cm SL); Kesennuma City, Kesennuma Bay, NSMT-P 73974 (1, 8.9 cm SL); Kurihara City, Izu-numa Pond, NSMT-P 73943 (2, 2–3.4 cm SL), 75178 (2, 2.8–2.9 cm SL); Osaki City, Kashimadai, Shinai-numa Pond, NSMT-P 73928 (16, 2.7–9.4 cm SL).

SL); Sendai City, NSMT-P 74032 (2, 6.6–9.5 cm SL); Sendai City, Miyagino, Nanakita-gawa River, NSMT-P 74057 (4, 5.8–10.1 cm SL); Sendai City, near Nishitaga, NSMT-P 73937 (2, 5.7–5.8 cm SL); Sendai City, Wakabayashi, NSMT-P 74309 (119, 2.7–10.3 cm SL), 74407 (302, 2.2–10.3 cm SL), 76637 (1, 2.3 cm SL), 77138 (174, 2.8–8.6 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 73652 (2, 11.5–16.2 cm SL), 73980 (3, 4.5–8.6 cm SL), 74134 (1, 11.1 cm SL), 74200 (2, 10.1–16.2 cm SL), 76879 (3, 3.6–4.8 cm SL), 77038 (1, 17 cm SL); Tome City, Nitta, NSMT-P 74106 (7, 6.9–9.6 cm SL), 75299 (13, 2.7–4.9 cm SL), 75685 (3, 2–2.1 cm SL); Tome City, Nitta, Naga-numa Pond, NSMT-P 75179 (2, 4.1–5.2 cm SL), 75318 (1, 3.2 cm SL); Watari County, Watari Town, NSMT-P 73820 (2, 2.1–3.1 cm SL), 73983 (4, 3.2–6.8 cm SL).

Yamagata: Niida-gawa River, NSMT-P 74155 (6, 7.1–10.6 cm SL); Tsuruoka City, NSMT-P 73944 (6, 3.9–5.9 cm SL), 74017 (4, 3.7–8.2 cm SL); Tsuruoka City, Uchi-kawa River, NSMT-P 74010 (1, 12.8 cm SL).

Fukushima: Kitakata City, NSMT-P 73680 (2, 10.1–16.7 cm SL); Minamiaizu County, Minamiaizu Town, NSMT-P 74074 (3, 7.2–8.5 cm SL), 76856 (4, 3.2–4.6 cm SL).

Carassius gibelio subsp. [Japanese name: Kinbuna]

Aomori: Higashitsugaru County, Hiranai Town, NSMT-P 74214 (1, 14.2 cm SL).

Miyagi: Kami County, Kami Town, Yutori-numa Pond, NSMT-P 73602 (1, 13.3 cm SL); Sendai City, Wakabayashi, NSMT-P 74575 (250, 2.2–8.8 cm SL), 77126 (55, 2.8–7.6 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 75691 (1, 8.6 cm SL); Toda County, Wakuya Town, Nabire-numa Pond, NSMT-P 73985 (7, 6.1–8.4 cm SL); Watari County, Watari Town, NSMT-P 75218 (1, 5.8 cm SL).

* *Cyprinus carpio* Linnaeus, 1758 [Japanese name: Koi]

Iwate: Morioka City, Kamiyonai, NSMT-P 76073 (1, 8.8 cm SL); Morioka City, Ueda, NSMT-P 74914 (1, 21.6 cm SL).

Miyagi: Shiraishi City, Bagyu-numa Pond, NSMT-P 74810 (3, 17.4–27.5 cm SL), 74950 (1, 31.1 cm SL); Toda County, Wakuya Town, NSMT-P 74627 (1, 29.8 cm SL); Watari County, Watari Town, NSMT-P 73459 (1, 8.5 cm SL).

Yamagata: Niida-gawa River, NSMT-P 74186 (3, 9.4–10.4 cm SL), 74611 (4, 14.1–15.3 cm SL); Nikko-gawa River, NSMT-P 74482 (4, 11.6–17.1 cm SL); Tsuruoka City, NSMT-P 74320 (2, 6.8–18.4 cm SL).

Fukushima: Minamiaizu County, Minamiaizu Town, NSMT-P 76858 (1, 4.5 cm SL).

* *Hemibarbus barbuis* (Temminck & Schlegel, 1846) [Japanese name: Nigoji]

Aomori: Tsugaru City, Tappi-numa Pond, NSMT-P 73616 (1, 12.2 cm SL).

Akita: Katagami City, Okubo, NSMT-P 74946 (2, 28–32.6 cm SL).

Iwate: Morioka City, Janoshima, NSMT-P 74738 (1, 27.1 cm SL).

Miyagi: Sendai City, Hirose-gawa River, NSMT-P 73959 (1, 9.6 cm SL), 74953 (1, 39.6 cm SL); Toda County, Wakuya Town, Deki-gawa River, NSMT-P 73997 (4, 6.3–9.8 cm SL).

Yamagata: Tsuruoka City, NSMT-P 73431 (1, 10.7 cm SL), 73634 (2, 10.8–12.2 cm SL).

Fukushima: Fukushima City, Abukuma-gawa River, NSMT-P 73276 (4, 15.5–19.9 cm SL); Kitakata City, NSMT-P 74437 (3, 18.3–20.1 cm SL).

* *Phoxinus lagowskii steindachneri* (Sauvage, 1883) [Japanese name: Aburahaya]

Akita: Yokote City, Yasawagi, NSMT-P 73924 (5, 6.9–9.5 cm SL).

Iwate: Ichinoseki City, Orikabe, NSMT-P 74069 (1, 8.7 cm SL); Morioka City, Janoshima, NSMT-P 76874 (1, 7.3 cm SL).

Miyagi: Osaki City, Naruko, NSMT-P 76772 (1, 8.7 cm SL).

Fukushima: Kitakata City, NSMT-P 73777 (7, 5.4–8.9 cm SL); Minamiaizu County, Minamiaizu Town, NSMT-P 73372 (8, 2.4–6.4 cm SL), 75105 (2, 6.3–8.1 cm SL).

* *Pseudogobio esocinus esocinus* (Temminck & Schlegel, 1846) [Japanese name: Kamatsuka]

Iwate: Kitakami-gawa River, NSMT-P 74080

(2, 8.5–9.1 cm SL); Morioka City, Janoshima, NSMT-P 73529 (1, 11.3 cm SL).

Miyagi: Osaki City, Kawatabi, NSMT-P 73463 (2, 8.2–8.3 cm SL); Sendai City, Hirose-gawa River, NSMT-P 73238 (4, 5.4–9 cm SL), 74390 (6, 6.9–9.6 cm SL).

Yamagata: Tsuruoka City, NSMT-P 73617 (1, 12.9 cm SL), 74086 (5, 9.3–11.4 cm SL).

Fukushima: Minamiaizu County, Minamiaizu Town, NSMT-P 73754 (1, 9.9 cm SL); near Fukushima City, Abukuma-gawa River, NSMT-P 73590 (2, 12.1–13.1 cm SL).

* *Pseudorasbora pumila pumila* Miyadi, 1930 [Japanese name: Shinai-motsugo] (Fig. 3)

Akita: Minamiakita County, Hachiro-gata, NSMT-P 73460 (1, 4.5 cm SL); Yokote City, NSMT-P 76770 (1, 2.2 cm SL).

Iwate: Morioka City, Ota, NSMT-P 76865 (1, 3.6 cm SL); Shiwa County, Shiwa Town, NSMT-P 74314 (2, 4.8–5.6 cm SL), 76868 (1, 4.2 cm SL); Waga County, NSMT-P 74042 (4, 3.6–3.9 cm SL).

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 76621 (1, 3.3 cm SL); Kurihara City, Wakayanagi, NSMT-P 74231 (2, 4.5–4.8 cm SL); Osaki City, Kashimadai, Shinai-numa Pond, NSMT-P 73379 (2, 5.6–6.3 cm SL); Sendai City, Izumi, NSMT-P 74016 (1, 5.6 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 74011 (21, 2.5–6.6 cm SL); Tome City, Nitta, NSMT-P 73890 (5, 3.1–3.4 cm SL); Tome City, Nitta, Naga-numa Pond, NSMT-P 74049 (51, 3–5.3 cm SL).

Yamagata: Tsuruoka City, NSMT-P 74154 (2, 4.6–7.2 cm SL), 74232 (4, 3.7–4.8 cm SL), 77123 (1, 3.7 cm SL).

***Rhodeus* sp.**

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 76622 (1, 4 cm SL).

* *Tanakia lanceolata* (Temminck & Schlegel, 1846) [Japanese name: Yari-tanago]

Akita: Yokote City, Asamai, NSMT-P 76862 (2, 3.4–5.3 cm SL).

Yamagata: Tsuruoka City, NSMT-P 74020 (5, 5.2–6.6 cm SL); Tsuruoka City, Uchi-kawa River, NSMT-P 74542 (1, 5.1 cm SL).

Fukushima: Kitakata City, NSMT-P 76861 (3, 3.4–5.2 cm SL).

Tribolodon brandti (Dybowski, 1872) [Japanese name: Maruta]

Miyagi: Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 74274 (1, 21.4 cm SL); off Shiogama City, NSMT-P 74957 (1, 36.4 cm SL); Watari County, off Watari Town, NSMT-P 74459 (2, 18.1–19.6 cm SL).

Fukushima: Fukushima City, Abukuma-gawa River, NSMT-P 77188 (1, 37 cm SL).

* ***Tribolodon hakonensis*** (Günther, 1877) [Japanese name: Ugui]

Aomori: Nakatsugaru County, Soma-gawa River, NSMT-P 74547 (2, 18.5–19.7 cm SL); Shimokita County, Higashidori Village, NSMT-P 76886 (10, 5.4–6.5 cm SL); Shimokita County, Osorezan, Usori Lake, NSMT-P 74804 (59, 5.2–14.2 cm SL); Tsugaru City, Tappi-numa Pond, NSMT-P 73761 (1, 10.7 cm SL).

Akita: Katagami City, Hachiro-gata, NSMT-P 73994 (2, 9.4–10.1 cm SL), 74725 (2, 20.2–20.5 cm SL); Oga City, Funakoshi, Hachiro-gata, NSMT-P 74353 (7, 12.3–17 cm SL); Semboku City, Tazawa Lake, NSMT-P 73802 (3, 9–11.4 cm SL), 74828 (4, 14.4–20.1 cm SL); Yokote City, NSMT-P 73838 (5, 1.6–2.5 cm SL).

Iwate: Hanamaki City, NSMT-P 74075 (1, 9.8 cm SL); Iwate County, Shizukuishi Town, NSMT-P 73920 (2, 3.2–3.6 cm SL); Iwate County, Shizukuishi-gawa River, NSMT-P 73360 (2, 7.6–10.6 cm SL), 74148 (2, 11.7–12 cm SL), 74278 (2, 18–20 cm SL); Morioka City, Janoshima, NSMT-P 73932 (1, 10.7 cm SL), 76872 (1, 8 cm SL); Morioka City, Kamiyonai, NSMT-P 74145 (2, 12.3–15.2 cm SL); Rikuzentakata City, Hirota, NSMT-P 73655 (1, 28.8 cm SL).

Miyagi: Kami County, Kami Town, Naruse-gawa River, NSMT-P 74138 (6, 8.5–9.6 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 74218 (1, 20.6 cm SL), 74573 (1, 21.9 cm SL); Kesenuma City, off Karakuwa, NSMT-P 73268 (7, 17.1–24.5 cm SL), 73696 (5, 15.7–18.3 cm SL); Kesenuma City, O-kawa River, NSMT-P 73528 (13, 5.2–10.4 cm SL); Osaki City, Naruko, NSMT-P 76773 (1, 8.5 cm SL); Sendai City,

NSMT-P 74062 (2, 9.7–10 cm SL); Sendai City, Hirose-gawa River, NSMT-P 73430 (4, 8.9–10.2 cm SL), 73687 (7, 8.7–10.2 cm SL), 73964 (1, 8.4 cm SL), 74157 (1, 10.8 cm SL), 74204 (2, 14.4–14.7 cm SL), 74247 (6, 8.8–10.4 cm SL), 74249 (1, 15.1 cm SL), 74388 (3, 15.5–17.3 cm SL), 74444 (67, 8.1–10.8 cm SL), 74636 (1, 24.3 cm SL); Sendai City, Miyagino, NSMT-P 76863 (2, 4.2–4.8 cm SL); Sendai City, Wakabayashi, NSMT-P 74065 (4, 4.7–12 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 73690 (4, 13.3–15.2 cm SL); Toda County, Wakuya Town, NSMT-P 76880 (5, 7.7–10.1 cm SL); Toda County, Wakuya Town, Nabire-numa Pond, NSMT-P 73684 (5, 14.1–16 cm SL), 75100 (2, 5.6–6.1 cm SL).

Yamagata: Nikko-gawa River, NSMT-P 73782 (3, 11.4–12.6 cm SL); Tsuruoka City, NSMT-P 73340 (5, 7.3–13.4 cm SL); Tsuruoka City, Uchikawa River, NSMT-P 73417 (1, 12.6 cm SL), 73884 (1, 10.4 cm SL).

Fukushima: Fukushima City, Abukuma-gawa River, NSMT-P 74968 (2, 19–23 cm SL); Iwaki City, Onahama, NSMT-P 74105 (1, 16.9 cm SL); Kitakata City, NSMT-P 73785 (4, 11.6–12.5 cm SL); Minamiaizu County, Minamiaizu Town, NSMT-P 73414 (1, 7.9 cm SL), 75174 (1, 3.6 cm SL); Minamiaizu County, Minamiaizu Town, Arakai-gawa River, NSMT-P 73992 (1, 10.2 cm SL).

Family Cobitidae

* *Cobitis biwae* Jordan & Snyder, 1901 [Japanese name: Shima-dojou]

Aomori: Aomori City, Nozawa, NSMT-P 73298 (10, 3–7.6 cm SL); Hirosaki City, NSMT-P 73248 (2, 4.5–4.8 cm SL).

Akita: Yokote City, Asamai, NSMT-P 76654 (2, 4.7–6.4 cm SL).

Iwate: Hanamaki City, NSMT-P 75300 (1, 6.7 cm SL); Morioka City, Kippushi, NSMT-P 73254 (2, 3–5.8 cm SL); Morioka City, Niou, NSMT-P 73320 (3, 4.3–4.9 cm SL); Morioka City, Ueda, NSMT-P 76869 (2, 3.7–3.9 cm SL); Shimohei County, Kawai Village, NSMT-P 73302 (2,

3.7–5.1 cm SL).

Miyagi: Kurihara City, Wakayanagi, NSMT-P 73316 (1, 4.9 cm SL); Osaki City, Naruko, NSMT-P 73309 (1, 5.3 cm SL); Sendai City, NSMT-P 73300 (1, 4.1 cm SL); Sendai City, near Nishitaga, NSMT-P 73303 (6, 3.2–5.2 cm SL); Sendai City, Wakabayashi, NSMT-P 74167 (16, 2.6–7.1 cm SL), 76150 (17, 2.9–6.6 cm SL), 76636 (2, 4.1–4.3 cm SL), 77128 (2, 4.4–5.6 cm SL); Toda County, Wakuya Town, Nabire-numa Pond, NSMT-P 73350 (1, 6.5 cm SL); no detailed locality, NSMT-P 75683 (1, 5.3 cm SL).

Yamagata: Sakata City, Arase-gawa River, NSMT-P 73791 (3, 5.1–5.9 cm SL); Tsuruoka City, NSMT-P 73839 (6, 3.2–5.1 cm SL).

Fukushima: Minamiaizu County, Arakai-gawa River, NSMT-P 73292 (7, 3.2–5.3 cm SL).

* *Lefua echigonia* Jordan & Richardson, 1907 [Japanese name: Hotoke-dojou]

Miyagi: Osaki City, Kawatabi, NSMT-P 73338 (1, 4.7 cm SL).

Yamagata: Yamagata City, Nagamachi, NSMT-P 74068 (3, 5.8–6.9 cm SL).

Fukushima: Minamiaizu County, Minamiaizu Town, NSMT-P 73308 (3, 2.1–2.5 cm SL).

* *Misgurnus anguillicaudatus* (Cantor, 1842) [Japanese name: Dojou]

Aomori: Hirosaki City, NSMT-P 74180 (3, 6.3–9.1 cm SL).

Akita: Katagami City, Tenno, NSMT-P 73301 (2, 6.7–7 cm SL).

Iwate: Hanamaki City, NSMT-P 74024 (1, 5.7 cm SL); Iwate County, Shizukuishi Town, NSMT-P 73317 (3, 2.3–4 cm SL), 73759 (1, 9.5 cm SL), 73764 (1, 5.8 cm SL), 76936 (1, 3.8 cm SL); Kitakami-gawa River, NSMT-P 73778 (4, 9.2–10.7 cm SL); Morioka City, Janoshima, NSMT-P 74161 (2, 10.9–12.2 cm SL); Shimohei County, Kawai Village, NSMT-P 73305 (1, 8.3 cm SL); Waga County, NSMT-P 73788 (1, 9.5 cm SL).

Miyagi: Kesenuma City, Karakuwa, NSMT-P 73933 (7, 6.7–13.1 cm SL), 76850 (1, 12.3 (+) cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 73310 (1, 10.5 cm SL); Kurihara City, Izu-numa Pond, NSMT-P 75217 (1, 3.3 cm SL);

Kurokawa County, Taiwa Town, NSMT-P 74026 (2, 5.3–8.8 cm SL); Natori City, Yuriage, NSMT-P 73747 (1, 8.6 cm SL); Osaki City, Naruko, NSMT-P 74103 (1, 15.3 cm SL); Osaki City, Shida, NSMT-P 73318 (2, 9.1–10 cm SL); Sendai City, near Nishitaga, NSMT-P 73756 (1, 9.6 cm SL); NSMT-P; Sendai City, Wakabayashi, NSMT-P 73307 (1, 15.4 cm SL), 74143 (2, 12.3–14.2 cm SL), 74362 (49, 4–14.4 cm SL), 75317 (2, 8.9–9.2 cm SL); Toda County, Wakuya Town, Nabire-numa Pond, NSMT-P 74107 (4, 9.1–12.1 cm SL); no detailed locality, NSMT-P 74150 (4, 10.8–12.1 cm SL).

Yamagata: Tsuruoka City, NSMT-P 73768 (9, 7.9–12.6 cm SL).

Fukushima: Minamiaizu County, Arakai-gawa River, NSMT-P 76871 (3, 7–8.5 cm SL); Minamiaizu County, Minamiaizu Town, NSMT-P 75104 (1, 2.6 cm SL).

Order Siluriformes

Family Bagridae

* *Pseudobagrus tokiensis* Döderlein, 1887
[Japanese name: Gibachi]

Iwate: Ichinoseki City, Kouda, NSMT-P 74063 (6, 4.4–11.2 cm SL); Morioka City, Kippushi, NSMT-P 73314 (1, 14.5 cm SL).

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 73249 (1, 7.3 cm SL); Osaki City, Kashimadai, Shinai-numa Pond, NSMT-P 73798 (2, 4–8.6 cm SL); Osaki City, Naruko, NSMT-P 73243 (1, 8.3 cm SL), 73965 (1, 13.8 cm SL); Sendai City, Hirose-gawa River, NSMT-P 73299 (1, 6.8 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 74263 (12, 4–16.1 cm SL).

Family Siluridae

* *Silurus asotus* Linnaeus, 1758 [Japanese name: Namazu]

Aomori: Aomori City, Asamushi, NSMT-P 74943 (3, 20.7–39.8 cm SL); near Aomori City, NSMT-P 74435 (17, 10.5–18.7 cm SL); Tsugaru City, Tappi-numa Pond, NSMT-P 74334 (1, 23.5 cm SL).

Akita: near Yokote City, NSMT-P 74821 (1, 32.4 cm SL), 74915 (1, 33.6 cm SL); Noshiro City, Yoneshiro-gawa River, NSMT-P 74340 (1, 24 cm SL); Oga City, Funakoshi, Hachiro-gata, NSMT-P 74564 (2, 16.2–21.3 cm SL).

Iwate: Iwate County, Shizukuishi Town, NSMT-P 74160 (1, 14.9 cm SL); Morioka City, Janoshima, NSMT-P 73977 (1, 12.4 cm SL); Morioka City, Kitakami-gawa River, NSMT-P 73545 (1, 12.5 cm SL).

Miyagi: Sendai City, NSMT-P 74348 (2, 18.5–20.1 cm SL); Sendai City, near Nishitaga, NSMT-P 74036 (1, 10.2 cm SL); Sendai City, Wakabayashi, NSMT-P 74308 (5, 6.1–19.9 cm SL); Toda County, Wakuya Town, Deki-gawa River, NSMT-P 74825 (5, 20.9–22 cm SL); Watari County, Watari Town, NSMT-P 74181 (1, 13.2 cm SL).

Yamagata: Niida-gawa River, NSMT-P 74792 (2, 24.2–28.1 cm SL); Tsuruoka City, NSMT-P 74166 (4, 12.7–14.2 cm SL); Tsuruoka City, Uchi-kawa River, NSMT-P 74400 (1, 23.4 cm SL).

Fukushima: Kitakata City, NSMT-P 74455 (1, 25.4 cm SL).

Family Amblycipitidae

Liobagrus reinii Hilgendorf, 1878 [Japanese name: Akaza]

Yamagata: Tsuruoka City, Aka-gawa River, NSMT-P 74330 (2, 8.5–9.1 cm SL).

Family Plotosidae

Plotosus japonicus Yoshino & Kishimoto, 2008
[Japanese name: Gonzui]

Fukushima: Iwaki City, Onahama, NSMT-P 73775 (1, 11.2 cm SL), 73984 (1, 10.6 cm SL).

Order Osmeriformes

Family Argentinidae

Glossanodon semifasciatus (Kishinouye, 1904)
[Japanese name: Nigisu]

Akita: Akita City, off Tsuchizakiminato, NSMT-P 74414 (9, 16.7–21.7 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73792 (1, 16.3 cm SL).

Family Osmeridae

Hypomesus japonicus (Brevoort, 1856) [Japanese name: Chika]

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73903 (3, 7.9–8.4 cm SL).

* *Hypomesus nipponensis* McAllister, 1963 [Japanese name: Wakasagi]

Akita: Katagami City, Hachiro-gata, NSMT-P 73925 (2, 9.6–9.7 cm SL); Oga City, Funakoshi, NSMT-P 73609 (15, 5.2–11.9 cm SL).

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 74236 (5, 7.7–9.2 cm SL); Toda County, Wakuya Town, NSMT-P 73362 (10, 7.3–8.9 cm SL).

* *Plecoglossus altivelis altivelis* (Temminck & Schlegel, 1846) [Japanese name: Ayu]

Aomori: Hirosaki City, Iwaki-gawa River, NSMT-P 73781 (3, 13.2–14.5 cm SL).

Akita: Yamamoto County, Fujisato Town, Kasuge-gawa River, NSMT-P 74326 (2, 14.4–14.5 cm SL); Katagami City, Tenno, NSMT-P 74281 (3, 14–14.4 cm SL); Yamamoto County, Fujisato Town, Kasuge-gawa River, NSMT-P 74100 (6, 14–15.9 cm SL).

Iwate: Isawa County, Kanegasaki Town, Kitakami-gawa River, NSMT-P 74318 (1, 21.1 cm SL); Isawa-gawa River, NSMT-P 74305 (5, 15.8–16.5 cm SL); Kitakami-gawa River, NSMT-P 74301 (5, 11.1–14.9 cm SL); Sarugaishi-gawa River, NSMT-P 73570 (1, 19 cm SL), 74647 (1, 21 cm SL); Shimohei County, Iwaizumi Town, Omoto-gawa River, NSMT-P 74549 (10, 15.9–19.7 cm SL), 74606 (10, 19.3–20.8 cm SL).

Miyagi: Kami County, Kami Town, Naruse-gawa River, NSMT-P 74357 (17, 9.8–15.2 cm SL); Natori City, Natori-gawa River, NSMT-P 73860 (19, 7.9–12.5 cm SL); Sendai City, Hirose-gawa River, NSMT-P 73960 (5, 6.2–9.3 cm SL), 74255 (19, 7.1–13.5 cm SL); Sendai City, Nishitaga, NSMT-P 74365 (15, 8.7–12.4 cm SL); Watari County, Watari Town, NSMT-P 73679 (1, 11.8 cm SL).

Yamagata: Tsuruoka City, Aka-gawa River, NSMT-P 73805 (2, 13.5–13.7 cm SL); Higashitagawa County, Shonai Town, NSMT-P 74481 (22, 11.9–14.8 cm SL); Nikko-gawa River, NSMT-P 74359 (8, 11.7–18 cm SL); Tsuruoka City, NSMT-P 73787 (2, 10.6–12.2 cm SL).

Fukushima: Fukushima City, Abukuma-gawa River, NSMT-P 74385 (2, 14.2–14.4 cm SL); Kitakata City, Yamato, NSMT-P 74119 (2, 15–15.6 cm SL).

Kitakami-gawa River, NSMT-P 74374 (6, 14.1–15.7 cm SL).

Family Salangidae

Salangichthys microdon (Bleeker, 1860) [Japanese name: Shirauo]

Aomori: Nonai-gawa River, NSMT-P 76062 (3, 5.5–5.7 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73786 (31, 5.2–6 cm SL).

Order Salmoniformes

Family Salmonidae

Oncorhynchus keta (Walbaum, 1792) [Japanese name: Sake]

Aomori: Nonai-gawa River, NSMT-P 76063 (2, 3.3–3.5 cm SL); NSMT-P 75071 (69, 1.1–2.5 cm SL).

Miyagi: Watari County, off Watari Town, NSMT-P 77157 (1, 58.5 cm SL).

Oncorhynchus masou masou (Brevoort, 1856) [Japanese name: Yamame (Sakura-masu)]

Aomori: Hirakawa City, Hira-kawa River, NSMT-P 73630 (1, 11.9 cm SL), 74192 (2, 11.4–12.4 cm SL); Minamitsugaru County, Hayaseno-gawa River, NSMT-P 74149 (1, 11.8 cm SL).

Iwate: Iwate County, Shizukuishi Town, NSMT-P 73596 (2, 11.9–12.9 cm SL); Morioka City, Janoshima, NSMT-P 74310 (1, 19.6 cm SL); Morioka City, Kamiyonai, NSMT-P 73542 (2, 10–10.1 cm SL); Yana-gawa River, NSMT-P 74004 (6, 7.7–9.4 cm SL).

Miyagi: Kesenuma City, off Karakuwa,

NSMT-P 74671 (1, 36.5 cm SL), 77074 (1, 33.9 cm SL); Sendai City, Hirose-gawa River, NSMT-P 74185 (1, 17.5 cm SL).

Yamagata: Tsuruoka City, NSMT-P 73772 (2, 5.1–5.7 cm SL).

Oncorhynchus nerka nerka (Walbaum, 1792) [Japanese name: Beni-zake (Himemasu)].

Akita: Semboku City, Tazawa Lake, NSMT-P 92156 (3, 18.4–18.7 cm SL), 92157 (2, 18.8–19.4 cm SL).

Oncorhynchus sp.

Akita: Semboku City, Tazawa Lake, NSMT-P 76846 (1, 4.3 cm SL).

* *Salvelinus fontinalis* (Mitchill, 1814) [Japanese name: Kawa-masu]

Aomori: Kamikita County (fish farm), NSMT-P 73758 (1, 11.8 cm SL).

* *Salvelinus leucomaenis pluvius* (Hilgendorf, 1876) [Japanese name: Nikkou-iwana]

Aomori: Hirakawa City, Hira-kawa River, NSMT-P 74110 (1, 13 cm SL); Hirakawa City, Ikarigaseki, NSMT-P 76876 (2, 4.4–5.5 cm SL).

Akita: Semboku City, Tazawa, NSMT-P 74265 (2, 9.4–18 cm SL).

Iwate: Morioka City, Tamayama, NSMT-P 74151 (1, 14.6 cm SL).

Miyagi: Kami County, Kami Town, Yutori-numa Pond, NSMT-P 74438 (6, 16.1–17.6 cm SL), 76931 (5, 3.2–4 cm SL); Osaki City, Naruko, NSMT-P 74163 (1, 12.5 cm SL); Sendai City, Hirose-gawa River, NSMT-P 74336 (1, 17.3 cm SL).

Yamagata: Tsuruoka City, Tamugimata, NSMT-P 74222 (7, 11–15.7 cm SL).

Fukushima: Fukushima City, Amado-gawa River, NSMT-P 74266 (3, 14.6–16.8 cm SL); Kitakata City, NSMT-P 74428 (1, 21.5 cm SL); Minamiaizu County, Minamiaizu Town, NSMT-P 73973 (1, 10.9 cm SL).

Order Ateleopodiformes

Family Ateleopodidae

Ateleopus japonicus Bleeker, 1853 [Japanese name: Shachiburi]

Fukushima: Iwaki City, off Onahama, NSMT-P

74349 (1, 46.1 cm SL); Iwaki City, Onahama, NSMT-P 74831 (1, 41 cm SL).

Ateleopus tanabensis Tanaka, 1918 [Japanese name: Tanabe-shachiburi]

Fukushima: Iwaki City, Onahama, NSMT-P 76760 (1, 47 cm SL).

Order Aulopiformes

Family Aulopodidae

Aulopus japonicus Günther, 1877 [Japanese name: Hime]

Akita: Nikaho City, off Konoura, NSMT-P 74130 (1, 12.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73444 (1, 15.5 cm SL).

Family Chlorophthalmidae

Chlorophthalmus borealis Kuronuma & Yamaguchi, 1941 [Japanese name: Maru-aomeeso]

Fukushima: Iwaki City, Onahama, NSMT-P 73297 (1, 12.8 cm SL); NSMT-P 73882 (7, 5.7–14.6 cm SL).

Family Synodontidae

Saurida elongata (Temminck & Schlegel, 1846) [Japanese name: Tokage-eso]

Akita: Katagami City, Tenno, NSMT-P 74633 (1, 30.5 cm SL).

Saurida macrolepis Tanaka, 1917 [Japanese name: Ma-eso]

Fukushima: Iwaki City, off Onahama, NSMT-P 74641 (1, 27 cm SL).

Order Myctophiformes

Family Myctophidae

Diaphus sp.

Fukushima: Iwaki City, Onahama, NSMT-P 73363 (1, 11.6 cm SL).

Order Polymixiiformes

Family Polymixiidae

Polymixia sp.

Fukushima: Iwaki City, Onahama, NSMT-P 73568 (1, 8.6 cm SL).

Order Ophidiiformes

Family Ophidiidae

Hoplobrotula armata (Temminck & Schlegel, 1846) [Japanese name: Yoro-i-tachiuo]

Yamagata: Tsuruoka City, 50 km off Kamo, NSMT-P 74660 (2, 28.5–29.8 cm SL); Tsuruoka City, Kamo, NSMT-P 74205 (1, 22.3 cm SL).

Neobythites sivicola (Jordan & Snyder, 1901) [Japanese name: Shio-itachiuo]

Akita: Nikaho City, Konoura, NSMT-P 73795 (1, 17.5 cm SL); Nikaho City, off Konoura, NSMT-P 73595 (2, 15.9–16.1 cm SL), 74680 (1, 33.6 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73562 (1, 16.1 cm SL); Iwaki City, Onahama, NSMT-P 74121 (1, 22 cm SL), 74217 (1, 20.7 cm SL).

Order Gadiformes

Family Macrouridae

Caelorinchus anatirostris Jordan & Gilbert, 1904 [Japanese name: Nezumi-hige]

Miyagi: Kesennuma City, NSMT-P 74846 (1, 34.2 cm TL).

Caelorinchus gilberti Jordan & Hubbs, 1925 [Japanese name: Oni-hige]

Miyagi: off Kesennuma City, NSMT-P 74691 (1, 51 cm TL).

Caelorinchus sp.

Iwate: Miyako City, off Miyako, NSMT-P 74239 (1, 31.1 cm TL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73686 (1, 29.1 cm TL); Iwaki City, Onahama, NSMT-P 73336 (1, 18 cm TL).

Coryphaenoides nasutus Günther, 1877 [Japanese name: Hana-sokodara]

Miyagi: Natori City, off Yuriage, NSMT-P 74555 (1, 28.5 cm TL).

Coryphaenoides sp.

Miyagi: Natori City, off Yuriage, NSMT-P 74215 (1, 30.3 cm TL).

Family Moridae

Laemonema longipes Schmidt, 1938 [Japanese name: Itohiki-dara]

Miyagi: Shiogama City, Shiogama Fish Market, NSMT-P 77150 (1, 37.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74594 (1, 38.2 cm SL).

Physiculus japonicus Hilgendorf, 1879 [Japanese name: Chigo-dara]

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 74733 (2, 26.5–28.5 cm SL), 74823 (1, 30.1 cm SL); Kesennuma City, off Karakuwa, NSMT-P 73547 (2, 17.4–23.2 cm SL); Natori City, off Yuriage, NSMT-P 73676 (1, 17.8 cm SL), 74578 (2, 22–23.8 cm SL); Natori City, Yuriage, NSMT-P 74752 (2, 24.4–25.5 cm SL); Shiogama City, Shiogama Fish Market, NSMT-P 76059 (1, 13.3 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73315 (1, 15.9 cm SL), 74220 (2, 20.5 (+)–22.4 (+) cm SL), 74379 (2, 19.1–19.3 cm SL), 74955 (1, 34 cm SL).

Physiculus maximowiczi (Herzenstein, 1896) [Japanese name: Ezo-iso-ainame]

Aomori: Higashitsugaru County, Imabetsu Town, NSMT-P 74874 (7, 15 (+)–23.3 (+) cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 74838 (1, 34.1 cm SL).

Miyagi: Ishinomaki City, Ohara, NSMT-P 73429 (1, 16.4 cm SL); Kesennuma City, off Karakuwa, NSMT-P 74801 (5, 22.5–26.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73550 (4, 19.4–22.8 cm SL).

Family Gadidae

Eleginus gracilis (Tilesius, 1810) [Japanese name: Komai]

Akita: Akita City, off Tsuchizakiminato, NSMT-P 74419 (4, 15.9–19 cm SL); Nikaho City, off Konoura, NSMT-P 73689 (2, 18.3–19.8 cm SL).

Miyagi: Shiogama City, Shiogama Fish Market, NSMT-P 74077 (2, 12.3–13.3 cm SL).

Gadus macrocephalus Tilesius, 1810 [Japanese

name: Ma-dara]

Aomori: Aomori City, Okunai, NSMT-P 73909 (6, 5.4–6.1 cm SL); Nishitsugaru County, off Fukaura Town, NSMT-P 74877 (2, 21–27.8 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 74866 (2, 28.7–30.1 cm SL); Oga City, Funakawaminato, NSMT-P 74762 (2, 24.5–25.6 cm SL).

Miyagi: Kesenuma City, NSMT-P 74483 (5, 19.4–20.8 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 73651 (1, 26.5 cm SL); Natori City, off Yuriage, NSMT-P 73927 (2, 15–15.1 cm SL); off Kesenuma City, NSMT-P 74548 (1, 23.1 cm SL); Watari County, Watari Town, NSMT-P 74961 (1, 44.7 cm SL), 74969 (1, 48.3 cm SL), 74970 (1, 44.6 cm SL), 74971 (1, 46.4 cm SL).

Theragra chalcogramma (Pallas, 1814) [Japanese name: Suketou-dara]

Akita: Akita City, off Tsuchizakiminato, NSMT-P 73697 (3, 17.3–24.1 cm SL); Nikaho City, off Konoura, NSMT-P 74386 (1, 23.5 cm SL).

Miyagi: Watari County, Watari Town, NSMT-P 74739 (5, 27.9–30.6 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74747 (2, 25.3–25.5 cm SL).

Order Lophiiformes

Family Lophiidae

Lophiomus setigerus (Vahl, 1797) [Japanese name: Ankou]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 74280 (1, 20.5 cm SL).

Lophius litulon (Jordan, 1902) [Japanese name: Ki-ankou]

Aomori: Aomori Bay, NSMT-P 74917 (1, 28.2 (+) cm SL).

Akita: Nikaho City, Konoura, NSMT-P 73707 (4, 9.4–19.6 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 74257 (1, 12.9 cm SL); Natori City, Yuriage, NSMT-P 74727 (2, 17.9–20.3 cm SL); off Kesenuma City, NSMT-P 74849 (2, 29.2–30.6 cm

SL); Watari County, Watari Town, NSMT-P 74867 (2, 35.5–36.2 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73518 (3, 20.2–22.7 cm SL); Iwaki City, Onahama, NSMT-P 74248 (3, 13.2–16 cm SL).

Family Antennariidae

Histrio histrio (Linnaeus, 1758) [Japanese name: Hana-okoze]

Miyagi: Ishinomaki City, Tashirojima Island, NSMT-P 73995 (1, 10.1 cm SL).

Family Chaunacidae

Chaunax abei Le Danois, 1978 [Japanese name: Midori-fusa-ankou]

Fukushima: Iwaki City, Onahama, NSMT-P 73539 (1, 10.1 cm SL), 73740 (3, 9–9.6 cm SL), 73966 (1, 9 cm SL), 74191 (1, 9.4 cm SL).

Family Ogcocephalidae

Halieutaea stellata (Vahl, 1797) [Japanese name: Akagutsu]

Akita: Nikaho City, off Konoura, NSMT-P 73366 (1, 9.3 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 75795 (1, 4.2 cm SL).

Family Ceratiidae

Cryptopsaras couesii Gill, 1883 [Japanese name: Mitsukuri-enaga-chouchin-ankou]

Iwate: off Kesenuma City, NSMT-P 74425 (1, 14.8 cm SL).

Order Mugiliformes

Family Mugilidae

Chelon affinis (Günther, 1861) [Japanese name: Sesuji-bora]

Yamagata: Mogami-gawa River, NSMT-P 73797 (2, 9.2–10.1 cm SL).

**Chelon haematocheilus* (Temminck & Schlegel, 1845) [Japanese name: Menada]

Aomori: Hachinohe City, Same, NSMT-P

73957 (1, 8.1 cm SL).

Yamagata: Mogami-gawa River, NSMT-P 75175 (1, 9.2 cm SL).

* *Mugil cephalus cephalus* Linnaeus, 1758
[Japanese name: Bora]

Aomori: Goshogawara City, Jusan, NSMT-P 74732 (1, 31.1 cm SL), 77076 (1, 30.3 cm SL).

Akita: Oga City, Funakawaminato, NSMT-P 73673 (1, 21.5 cm SL).

Iwate: Rikuzentakata City, Hirota, NSMT-P 73824 (1, 27.8 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73436 (1, 19.6 cm SL), 74211 (1, 17.6 cm SL), 74226 (1, 17.4 cm SL); Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 74632 (2, 22–22.5 cm SL); Toda County, Wakuya Town, Nabire-numa Pond, NSMT-P 73834 (3, 16–16.4 cm SL); Watari County, off Watari Town, NSMT-P 74102 (4, 14.4–16.2 cm SL); Watari County, Watari Town, NSMT-P 73827 (2, 18.3–19.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73826 (1, 18.4 cm SL).

Order Atheriniformes

Family Atherinidae

Hypoatherina valenciennesi (Bleeker, 1853)
[Japanese name: Tougorou-iwashi]

Fukushima: Iwaki City, Onahama, NSMT-P 73847 (1, 8.7 cm SL), 74043 (2, 7.9–8.1 cm SL), 74056 (2, 7.5–7.6 cm SL), 75777 (1, 7.9 cm SL).

Order Beloniformes

Family Adrianichthyidae

* *Oryzias latipes* (Temminck & Schlegel, 1846)
[Japanese name: Medaka]

Aomori: Higashitsugaru County, Yomogida Village, NSMT-P 73376 (3, 2.3–2.4 cm SL); Hirakawa City, Saruga, NSMT-P 73565 (14, 2.9–2.5 cm SL).

Akita: Katagami City, Tenno, NSMT-P 73808 (5, 1.7–2 cm SL); Yokote City, NSMT-P 73810 (5, 1.4–2.6 cm SL).

Iwate: Kitakami City, Kurosawajiri, NSMT-P

73608 (80, 1.7–3.1 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73600 (20, 2.4–3.2 cm SL); Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 73599 (12, 2–3 cm SL); Sendai City, near Nishitaga, NSMT-P 73564 (5, 1.8–2.2 cm SL); Sendai City, Wakabayashi, NSMT-P 73567 (20, 1.4–2.2 cm SL), 77124 (1, 2.1 cm SL), 77132 (12, 2.2–2.7 cm SL), 77136 (33, 1.7–2.5 cm SL).

Family Belontiidae

Strongylura anastomella (Valenciennes, 1846)
[Japanese name: Datsu]

Fukushima: Iwaki City, Onahama, NSMT-P 74905 (1, 58.6 cm SL).

Family Scomberesocidae

Cololabis saira (Brevoort, 1856) [Japanese name: Sanma]

Miyagi: Kesenuma City, NSMT-P 74577 (5, 23.5–25.3 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 74649 (2, 23.8–24.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74221 (1, 22.1 cm SL).

Family Exocoetidae

Cypselurus agoo agoo (Temminck & Schlegel, 1846) [Japanese name: Tobiuo]

Fukushima: Iwaki City, Hisanohama, NSMT-P 73666 (1, 25.1 cm SL).

Cypselurus heterurus doederleini (Steindachner, 1887) [Japanese name: Tsukushi-tobiuo]

Miyagi: Natori City, off Yuriage, NSMT-P 73691 (2, 20.5–20.9 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74860 (3, 24.5–25.2 cm SL).

Cypselurus pinnatibarbus japonicus (Franz, 1910) [Japanese name: Hama-tobiuo]

Yamagata: Tsuruoka City, Kamo, NSMT-P 74479 (2, 29.9–30.2 cm SL).

Cypselurus sp.

Miyagi: Ishinomaki City, Tashirohama, NSMT-P 73699 (2, 22.2–25.1 cm SL); Kesenu-

ma City, off Karakuwa, NSMT-P 74774 (2, 23.3–28.5 cm SL).

Family Hemiramphidae

Hyporhamphus intermedius (Cantor, 1842)
[Japanese name: Kurume-sayori]

Aomori: Hachinohe City, Same, NSMT-P 74189 (2, 9–10.3 cm SL).

Akita: Nikaho City, Konoura, NSMT-P 74005 (2, 10.3–10.4 cm SL); Oga City, Funakoshi, Hachiro-gata, NSMT-P 74298 (22, 9.5–12.5 cm SL).

**Hyporhamphus sajori* (Temminck & Schlegel, 1846) [Japanese name: Sayori]

Aomori: Aomori City, Asamushi, NSMT-P 73271 (8, 26–26.8 cm SL), 74754 (12, 24.4–27.9 cm SL).

Akita: Katagami City, Tenno, NSMT-P 73637 (2, 17.6–18 cm SL); Oga City, Funakoshi, NSMT-P 73621 (4, 18.5–20.3 cm SL).

Iwate: Rikuzentakata City, Takata, NSMT-P 74650 (1, 26.9 (+) cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 74268 (1, 24.4 cm SL).

Order Beryciformes

Family Monocentridae

Monocentris japonica (Houttuyn, 1782) [Japanese name: Matsukasa-uo]

Akita: Nikaho City, off Konoura, NSMT-P 73532 (1, 7.7 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74055 (2, 8.8–9.1 cm SL).

Family Trachichthyidae

Hoplostethus japonicus Hilgendorf, 1879
[Japanese name: Hiuchi-dai]

Fukushima: Iwaki City, Onahama, NSMT-P 73364 (2, 7.6–8.5 cm SL).

Family Berycidae

Beryx splendens Lowe, 1834 [Japanese name: Kinme-dai]

Fukushima: Iwaki City, Onahama, NSMT-P 73677 (1, 18.1 cm SL).

Order Zeiformes

Family Zeidae

Cyttopsis rosea (Lowe, 1843) [Japanese name: Kago-matou-dai]

Fukushima: Iwaki City, Onahama, NSMT-P 73369 (1, 7.2 cm SL).

Zenopsis nebulosa (Temminck & Schlegel, 1845) [Japanese name: Kagami-dai]

Iwate: Shimohei County, Yamada Town, Yamada Bay, NSMT-P 74630 (2, 21.9–22.7 cm SL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74171 (1, 10.4 cm SL); Motoyoshi County, off Motoyoshi Town, NSMT-P 73426 (1, 7.4 cm SL); Natori City, near Yuriage, NSMT-P 74730 (1, 18.9 cm SL); Natori City, off Yuriage, NSMT-P 73702 (3, 15–16.4 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74798 (1, 25.1 cm SL); Iwaki City, Onahama, NSMT-P 74111 (1, 11.4 cm SL), 74462 (2, 8.9–10.3 cm SL).

Zeus faber Linnaeus, 1758 [Japanese name: Matou-dai]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 73906 (1, 11.9 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73623 (1, 7.9 cm SL); Yamamoto County, Happo Town, NSMT-P 74918 (2, 24.7–25.9 cm SL).

Iwate: Miyako City, off Miyako, NSMT-P 73432 (3, 9.1–10.9 cm SL).

Miyagi: Kesenuma City, NSMT-P 74772 (1, 27.3 cm SL); Natori City, off Yuriage, NSMT-P 74551 (1, 15.8 cm SL), 76410 (4, 6.9–14.7 cm SL); Watari County, off Watari Town, NSMT-P 74736 (2, 10.3–25.8 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73700 (2, 16.4–17.5 cm SL).

Fukushima: off Iwaki City, NSMT-P 74085 (1, 8.8 cm SL).

Family Caproidae

Antigonia capros Lowe, 1843 [Japanese name:

Hishi-dai]

Fukushima: Iwaki City, Onahama, NSMT-P 73770 (1, 6.8 cm SL).

Order Gasterosteiformes

Family Aulorhynchidae

Aulichthys japonicus Brevoort, 1862 [Japanese name: Kuda-yagara]

Miyagi: Kesennuma City, NSMT-P 76777 (2, 6.6–7.5 cm SL); Kesennuma City, Kesennuma Bay, NSMT-P 74023 (1, 12.2 cm SL); Kesennuma City, off Karakuwa, NSMT-P 76927 (1, 6.8 cm SL).

Family Gasterosteidae

* *Gasterosteus aculeatus* Linnaeus, 1758 [Japanese name: Itoyo]

Aomori: Towada City, Fujisaka, NSMT-P 74175 (2, 3.5–7.6 cm SL), 76852 (1, 3.6 cm SL).

Miyagi: Kesennuma City, Shishiori, NSMT-P 73861 (4, 2.2–6.5 cm SL); Sendai City, Miyagi-no, NSMT-P 74120 (2, 6.8–7.2 cm SL); Sendai City, near Miyaginohara, NSMT-P 76832 (1, 8.1 cm SL).

Yamagata: Tsuruoka City, NSMT-P 73852 (7, 6.8–8 cm SL).

Fukushima: Minamiaizu County, Minamiaizu Town, NSMT-P 76831 (13, 2.7–5.2 cm SL).

* *Pungitius pungitius* (Linnaeus, 1758) [Japanese name: Ibara-tomiyo]

Aomori: Towada City, Fujisaka, NSMT-P 76851 (10, 3–5 cm SL), 77421 (9, 3–5.1 cm SL).

Akita: Daisen City, Hanadate, NSMT-P 77397 (2, 3.6–4 cm SL); Katagami City, Tenno, NSMT-P 76780 (3, 4.2–5.2 cm SL); Yokote City, Asamai, NSMT-P 73837 (3, 4.6–5.4 cm SL), 74172 (2, 4.2–5.3 cm SL), 76271 (8, 2.8–7 cm SL), 76779 (3, 4.1–4.9 cm SL); Yuzawa City, NSMT-P 74364 (2, 3.7–3.8 cm SL).

Yamagata: Higashine City, Otomi, NSMT-P 77418 (4, 3.1–4.4 cm SL); Niida-gawa River, NSMT-P 76778 (2, 3–3.8 cm SL); Tsuruoka City, NSMT-P 73242 (26, 2.6–4.8 cm SL), 77403 (9, 2.6–5.4 cm SL).

Family Syngnathidae

Hippocampus coronatus Temminck & Schlegel, 1850 [Japanese name: Tatsuno-otoshigo]

Aomori: Aomori City, Asamushi, NSMT-P 76925 (6, 4.8–6.6 cm SL).

Syngnathus schlegeli Kaup, 1856 [Japanese name: Yojiuo]

Aomori: Aomori City, Yunoshima Island, NSMT-P 76574 (5, 15.5–21 cm SL).

Akita: Katagami City, Hachiro-gata, NSMT-P 74216 (3, 18.7–20.6 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73347 (1, 22.8 cm SL); Iwaki City, Onahama, NSMT-P 74164 (3, 21.3–21.6 cm SL).

Family Fistulariidae

Fistularia commersonii Rüppell, 1838 [Japanese name: Ao-yagara]

Akita: NSMT-P 74872 (1, 45.9 cm SL).

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 74176 (4, 16.3–19.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73912 (1, 17.3 cm SL), 74253 (2, 19–21.3 cm SL).

Fistularia petimba Lacepède, 1803 [Japanese name: Aka-yagara]

Akita: Nikaho City, off Konoura, NSMT-P 74554 (4, 24.6–35 cm SL); 74954 (2, 48.2–50.1 cm SL).

Family Macroramphosidae

Macroramphosus scolopax (Linnaeus, 1758) [Japanese name: Sagifue]

Miyagi: Natori City, off Yuriage, NSMT-P 76833 (1, 8.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74027 (1, 10.7 cm SL).

Order Scorpaeniformes

Family Dactylopteridae

Daicocis peterseni (Nyström, 1887) [Japanese name: Hoshisemi-houbou]

Akita: Nikaho City, off Konoura, NSMT-P

74620 (1, 24.5 cm SL).

Iwate: Ofunato City, Ofuna Bay, NSMT-P 73346 (1, 23.4 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 73335 (1, 25 cm SL); 74672 (2, 23.5–25.7 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74673 (1, 28 cm SL); Iwaki City, Onahama, NSMT-P 74904 (1, 26.5 cm SL), 76769 (1, 29.6 cm SL).

Family Scorpaenidae

Helicolenus hilgendorfi (Döderlein, 1884)

[Japanese name: Yume-kasago]

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73789 (1, 10.2 cm SL), 75172 (2, 11.4–12.4 cm SL); Kesenuma City, off Karakuwa, NSMT-P 74728 (19, 9.8–16.4 cm SL); Natori City, near Yuriage, NSMT-P 73452 (2, 18.8–19.5 cm SL); Natori City, off Yuriage, NSMT-P 73512 (2, 12.4–13.8 cm SL); off Kesenuma City, NSMT-P 74572 (8, 12.8–16 cm SL); Watari County, Watari Town, NSMT-P 74254 (5, 13.7–14 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73419 (2, 9.2–9.4 cm SL), 73862 (2, 9–10.6 cm SL); Iwaki City, Onahama, NSMT-P 73864 (1, 15.1 cm SL), 74194 (1, 13 cm SL).

Inimicus japonicus (Cuvier, 1829) [Japanese name: Oni-okoze]

Aomori: Aomori City, Asamushi, NSMT-P 73597 (1, 9.5 cm SL), 73659 (3, 10.8–12.9 cm SL); Nishitsugaru County, off Fukaura Town, NSMT-P 74245 (1, 18 cm SL).

Akita: Nikaho City, Konoura, NSMT-P 73591 (1, 21.5 cm SL); Nikaho City, off Konoura, NSMT-P 76500 (1, 16.1 cm SL).

Yamagata: Tsuruoka City, off Kamo, NSMT-P 73856 (1, 10.1 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74258 (1, 15.5 cm SL); Iwaki City, Onahama, NSMT-P 73456 (1, 17 cm SL), 74302 (1, 17.3 cm SL), 74585 (1, 19.7 cm SL).

Scorpaena neglecta Temminck & Schlegel, 1843
[Japanese name: Izu-kasago]

Akita: Yamamoto County, Happo Town, NSMT-P 74651 (2, 16.2–18.6 cm SL), 74745 (1, 19.9 cm SL).

Fukushima: Iwaki City, NSMT-P 74021 (2, 7.2–7.4 cm SL); Iwaki City, Onahama, NSMT-P 73660 (1, 13.6 cm SL).

Sebastes cheni Barsukov, 1988 [Japanese name: Shiro-mebaru]

Aomori: Aomori City, Yunoshima Island, NSMT-P 74635 (3, 17–17.9 cm SL); Aomori City, Asamushi, NSMT-P 74869 (2, 21.6(+)-22.2(+)) cm SL); Higashitsugaru County, Hiranai Town, NSMT-P 74658 (3, 20.1 (+)-22.6 (+)) cm SL).

Miyagi: Ishinomaki City, off Watanoha, NSMT-P 73524 (1, 14.9 cm SL); Ishinomaki City, Ohara, NSMT-P 74022 (2, 7.4–7.8 cm SL); Kesenuma City, NSMT-P 74195 (1, 14.5 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 73767 (1, 11.8 cm SL), 74361 (1, 19 cm SL); Natori City, off Yuriage, NSMT-P 73695 (4, 13.5–15.9 cm SL); Natori City, Yuriage, NSMT-P 74196 (1, 15.1 cm SL); off Kesenuma City, NSMT-P 74830 (1, 22.7 cm SL); Watari County, Watari Town, NSMT-P 74389 (1, 15.8 cm SL), 74901 (1, 22.7 cm SL), 76763 (1, 21.8 cm SL), 76764 (1, 22.4 cm SL), 76765 (1, 21.6 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73904 (2, 10.9–11.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73606 (1, 12.5 cm SL).

Sebastes inermis Cuvier, 1829 [Japanese name: Aka-mebaru]

Yamagata: Sakata City, Tobishima, NSMT-P 73374 (1, 10.4 cm SL).

Sebastes iracundus (Jordan & Starks, 1904)
[Japanese name: Osaga]

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 76767 (1, 18.7 cm SL); Natori City, off Yuriage, NSMT-P 74753 (1, 30.9 cm SL), 76762 (1, 27.3 cm SL).

Sebastes joyneri Günther, 1878 [Japanese name: Togotto-mebaru]

Miyagi: Kesenuma City, Karakuwa, NSMT-P 74763 (3, 16.7–25.2 cm SL); Watari County, Watari Town, NSMT-P 74764 (2, 21.3–21.4 cm SL).

SL).

Sebastes nivosus Hilgendorf, 1880 [Japanese name: Goma-soi]

Akita: Yamamoto County, Happo Town, NSMT-P 74824 (2, 18.5–21.4 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74640 (1, 20.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74292 (1, 20.2 cm SL).

Sebastes oblongus Günther, 1880 [Japanese name: Takenoko-mebaru]

Aomori: Aomori City, near Asamushi, NSMT-P 75302 (1, 8.1 cm SL); Higashitsugaru County, Hiranai Town, Mourajima Island, NSMT-P 74657 (1, 26 (+) cm SL).

Sebastes owstoni (Jordan & Thompson, 1914) [Japanese name: Hatsume]

Akita: Nikaho City, off Konoura, NSMT-P 74681 (1, 23.1 cm SL).

Iwate: Miyako City, off Miyako, NSMT-P 73361 (1, 13.6 cm SL).

Sebastes pachycephalus nudus Matsubara, 1943 [Japanese name: Ougon-mura-soi]

Aomori: Higashitsugaru County, Imabetsu Town, NSMT-P 74546 (1, 17.5 cm SL), 74559 (3, 19.2–20 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 74300 (1, 15 cm SL).

Miyagi: Ishinomaki City, Watanoha, NSMT-P 74566 (1, 17.1 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74396 (1, 16.5 cm SL).

Sebastes schlegelii Hilgendorf, 1880 [Japanese name: Kuro-soi]

Aomori: Aomori City, Asamushi, NSMT-P 76056 (1, 3.3 cm SL).

Akita: Nikaho City, Kisakata, NSMT-P 74567 (1, 16.5 cm SL); Nikaho City, off Konoura, NSMT-P 74424 (1, 18.2 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73911 (1, 5.2 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74476 (1, 15.8 cm SL).

Sebastes scythropus (Jordan & Snyder, 1900) [Japanese name: Ukeguchi-mebaru]

Iwate: Miyako City, off Miyako, NSMT-P

75112 (1, 11.7 cm SL).

Sebastes steindachneri Hilgendorf, 1880 [Japanese name: Yanaginomai]

Akita: Nikaho City, off Konoura, NSMT-P 74791 (1, 25 cm SL).

Sebastes taczanowskii Steindachner 1880 [Japanese name: Ezo-mebaru]

Aomori: Nikaho City, off Konoura, NSMT-P 74366 (9, 11.7–15 cm SL).

Sebastes thompsoni (Jordan & Hubbs, 1925) [Japanese name: Usu-mebaru]

Miyagi: Natori City, near Yuriage, NSMT-P 74557 (2, 18.2–18.5 cm SL); off Kesenuma City, NSMT-P 73626 (2, 15–15.1 cm SL), 74582 (5, 15.6–17.2 cm SL).

Sebastes trivittatus Hilgendorf, 1880 [Japanese name: Shima-zoi]

Aomori: Aomori City, near Asamushi, NSMT-P 74045 (1, 13.3 cm SL).

Akita: Yamamoto County, Happo Town, NSMT-P 74740 (1, 21.2 cm SL).

Sebastes vulpes Döderlein, 1884 [Japanese name: Kitsune-mebaru]

Aomori: Higashitsugaru County, NSMT-P 74458 (2, 9.1–14.7 cm SL), 74773 (1, 26.2 cm SL), 74922 (1, 29.7 (+) cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74598 (1, 21.5 cm SL); Natori City, Yuriage, NSMT-P 74275 (1, 18.8 cm SL).

Yamagata: Tsuruoka City, off Kamo, NSMT-P 74625 (2, 24.5–24.9 cm SL).

Sebastes zonatus Chen & Barsukov, 1976 [Japanese name: Tanuki-mebaru]

Iwate: Rikuzentakata City, Hirota, NSMT-P 74238 (1, 17.6 cm SL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 73685 (1, 18.9 cm SL).

***Sebastes* sp.**

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73416 (3, 9.1–9.5 cm SL).

Sebastiscus marmoratus (Cuvier, 1829) [Japanese name: Kasago]

Miyagi: Natori City, near Yuriage, NSMT-P 74475 (1, 14.5 cm SL); off Kesenuma City, NSMT-P 73742 (1, 15.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P

74556 (2, 18.3–18.5 cm SL).

Sebastolobus macrochir (Günther, 1877) [Japanese name: Kichiji]

Iwate: Miyako City, off Miyako, NSMT-P 75113 (1, 11.5 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73667 (1, 20.5 cm SL); Kesenuma City, off Karakuwa, NSMT-P 74817 (5, 18.8–20.4 cm SL); Natori City, off Yuriage, NSMT-P 73647 (2, 13.4–13.7 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73648 (1, 16.9 cm SL).

Family Aploactinidae

Erisphex pottii (Steindachner, 1896) [Japanese name: Abu-okoze]

Miyagi: Natori City, off Yuriage, NSMT-P 73766 (3, 6.8–8.5 cm SL); Watari County, off Watari Town, NSMT-P 74048 (1, 9 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73968 (2, 7.8–8.9 cm SL), 73986 (3, 7.1–8.7 cm SL), 73987 (1, 8.4 cm SL); Iwaki City, Onahama, NSMT-P 73971 (1, 8.9 cm SL).

Family Triglidae

Chelidonichthys spinosus (McClelland, 1844) [Japanese name: Houbou]

Aomori: Aomori City, Asamushi, NSMT-P 74676 (1, 26.9 cm SL).

Akita: Nikaho City, Kisakata, NSMT-P 74674 (1, 23.8 cm SL); Yamamoto County, Happo Town, NSMT-P 74289 (3, 17–24.5 cm SL).

Miyagi: Natori City, Yuriage, NSMT-P 73625 (2, 16.7–17.8 cm SL).

Lepidotrigla abyssalis Jordan & Starks, 1904 [Japanese name: Soko-kanagashira]

Aomori: Aomori City, Asamushi, NSMT-P 75775 (1, 13.5 cm SL); Nishitsugaru County, Fukaura Town, NSMT-P 74116 (3, 10.6–11.5 cm SL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 73657 (2, 19.6–19.8 cm SL).

Lepidotrigla microptera Günther, 1873 [Japanese name: Kanagashira]

Aomori: Aomori City, Asamushi, NSMT-P

74583 (1, 24 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 74297 (1, 12.4 cm SL).

Iwate: Rikuzentakata City, Hirota, NSMT-P 74295 (1, 22.8 cm SL).

Miyagi: Kesenuma City, NSMT-P 74288 (1, 19.7 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 74229 (1, 18.5 cm SL); Kesenuma City, off Karakuwa, NSMT-P 74552 (4, 15.6–22.5 cm SL), 74634 (4, 13.6–21.6 cm SL); Natori City, off Yuriage, NSMT-P 73870 (6, 11.4–16.2 cm SL), 73954 (2, 14.2–14.5 cm SL); off Kesenuma City, NSMT-P 74613 (5, 18.9–20 cm SL); Watari County, Watari Town, NSMT-P 73813 (1, 16.3 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74237 (2, 15.5–15.6 cm SL); Tsuruoka City, off Kamo, NSMT-P 74570 (2, 20–20.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73282 (2, 9.2–10.9 cm SL), 73631 (1, 10.7 cm SL), 74307 (4, 11–19.2 cm SL).

Peristedion orientale Temminck & Schlegel, 1843 [Japanese name: Kihoubou]

Akita: Nikaho City, off Konoura, NSMT-P 73465 (2, 9.8–10.1 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 73849 (1, 12.8 cm SL), 76175 (1, 11.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73803 (1, 12.1 cm SL), 74109 (3, 10.8–12.8 cm SL).

Satyrichthys amiscus (Jordan & Starks, 1904) [Japanese name: Hige-kihoubou]

Miyagi: Shiogama City, Shiogama Fish Market, NSMT-P 76058 (1, 8.8 cm SL); Watari County, off Watari Town, NSMT-P 73421 (1, 9 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73371 (1, 12.8 cm SL).

Satyrichthys rieffeli (Kaup, 1859) [Japanese name: Iso-kihoubou]

Fukushima: Iwaki City, Onahama, NSMT-P 75183 (1, 13.5 cm SL).

Family Platycephalidae

Cociella crocodila (Tilesius, 1812) [Japanese

name: Ine-gochi]

Akita: Nikaho City, Konoura, NSMT-P 73682 (2, 17.5–24.1 cm SL); Nikaho City, off Konoura, NSMT-P 74135 (1, 14.3 cm SL), 75213 (1, 23.4 cm SL).

Fukushima: Iwaki City, NSMT-P 74690 (1, 25.7 cm SL).

Platycephalus sp. [Japanese name: Ma-gochi]

Akita: Katagami City, Tenno, NSMT-P 74682 (1, 29.4 cm SL).

Miyagi: Ishinomaki City, off Watanoha, NSMT-P 73669 (1, 25.4 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 74841 (2, 27.8–28.5 cm SL); Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 74757 (2, 22.2–28.6 cm SL); Natori City, off Yuriage, NSMT-P 73645 (4, 20.6–20.7 cm SL); Watari County, off Watari Town, NSMT-P 74441 (1, 22.4 cm SL).

Suggrundus meerdervoortii (Bleeker, 1860)

[Japanese name: Me-gochi]

Aomori: Nishitsugaru County, Fukaura Town, NSMT-P 74127 (1, 14 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73663 (1, 17.3 cm SL).

Rogadius asper (Cuvier, 1829) [Japanese name: Matsuba-gochi]

Akita: Katagami City, Tenno, NSMT-P 74256 (2, 11.6–13.1 cm SL).

Family Hoplichthyidae

Hoplichthys gilberti Jordan & Richardson, 1908

[Japanese name: Soko-harigochi]

Fukushima: Iwaki City, near Onahama, NSMT-P 74041 (1, 8.9 cm SL).

Family Hexagrammidae

Hexagrammos agrammus (Temminck & Schlegel, 1843) [Japanese name: Kujime]

Akita: Oga City, Funakawaminato, NSMT-P 74678 (3, 14.3–21.3 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73418 (2, 13.9–14.1 cm SL).

Hexagrammos otakii Jordan & Starks, 1895

[Japanese name: Ainame]

Aomori: Aomori City, Asamushi, NSMT-P 77079 (1, 38.4 cm SL), 77080 (1, 34 cm SL), 77081 (1, 28.8 cm SL), 77082 (1, 30.6 cm SL), 77083 (1, 33.4 cm SL), 77084 (1, 33.3 cm SL), 77085 (1, 31.8 cm SL), 77086 (1, 30.1 cm SL), 77087 (1, 28.8 cm SL), 77088 (1, 28.2 cm SL), 77089 (1, 28.9 cm SL), 77090 (1, 27.6 cm SL), 77091 (1, 28.2 cm SL), 77092 (1, 27 cm SL); Higashitsugaru County, Hiranai Town, off Futagojima Island, NSMT-P 74947 (1, 28.2 cm SL).

Akita: Oga City, Funakawaminato, NSMT-P 74876 (2, 20.3–21.6 cm SL).

Iwate: Rikuzentakata City, Hirota, NSMT-P 73665 (1, 20.7 cm SL).

Miyagi: Kesenuma City, Karakuwa, NSMT-P 74741 (1, 33.1 (+) cm SL), 74818 (3, 23.5–28 cm SL), 73443 (4, 4.3–4.7 cm SL), 74182 (1, 15.9 cm SL); Kesenuma City, off Karakuwa, NSMT-P 74861 (5, 23–27.2 cm SL); Natori City, off Yuriage, NSMT-P 73578 (4, 9–19.3 cm SL); Natori City, Yuriage, NSMT-P 73662 (1, 19.7 cm SL); off Shiogama City, NSMT-P 73753 (1, 11.4 cm SL), 74574 (9, 11.1–17.4 cm SL); Watari County, Watari Town, NSMT-P 74851 (4, 27.8–28.5 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73771 (1, 10.9 cm SL).

Pleurogrammus azonus Jordan & Metz, 1913 [Japanese name: Hokke]

Miyagi: Watari County, off Watari Town, NSMT-P 74735 (1, 32 cm SL).

Family Ereuniidae

Marukawichthys ambulator Sakamoto, 1931

[Japanese name: Marukawa-kajika]

Akita: Nikaho City, off Konoura, NSMT-P 74006 (1, 11.9 cm SL).

Miyagi: Watari County, off Watari Town, NSMT-P 73809 (1, 10.9 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 76776 (2, 9.8–10.3 cm SL).

Family Cottidae

Alicichthys elongatus (Steindachner, 1881)

[Japanese name: Niji-kajika]

Akita: Nikaho City, Konoura, NSMT-P 74586 (3, 16.1–19.7 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73729 (1, 17.1 cm SL); Kesenuma City, off Karakuwa, NSMT-P 74750 (3, 18.3–21.1 cm SL); off Kesenuma City, NSMT-P 74850 (7, 13.6–20.7 cm SL); Shiogama City, NSMT-P 74076 (1, 18.4 cm SL); Watari County, off Watari Town, NSMT-P 73332 (4, 14.4–19.4 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73730 (1, 14.3 cm SL).

Bero elegans (Steindachner, 1881) [Japanese name: Bero]

Aomori: Aomori Bay, NSMT-P 73707 (4, 6.2–11.7 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 76834 (1, 8.1 cm SL); Motoyoshi County, Motoyoshi Town, NSMT-P 73972 (2, 3.6–13 cm SL).

Blepsias cirrhosus (Pallas, 1814) [Japanese name: Isobatengu]

Aomori: Higashitsugaru County, Hiranai Town, Oshima Island, NSMT-P 73312 (4, 5.3–5.8 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73713 (2, 11.1–13.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73739 (1, 12.2 cm SL).

Cottiusculus schmidti Jordan & Starks, 1904 [Japanese name: Kin-kajika]

Miyagi: Natori City, off Yuriage, NSMT-P 76401 (2, 6.3–7.4 cm SL); off Kesenuma City, NSMT-P 76992 (2, 6.3–6.4 cm SL); Watari County, off Watari Town, NSMT-P 75293 (3, 7.5–7.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73717 (3, 6.6–7.5 cm SL), 73850 (4, 6.7–7.7 cm SL), 76837 (2, 7–7.3 cm SL).

* **Cottus pollux** Günther, 1873 [Japanese name: Kajika]

Aomori: near Hirosaki City, NSMT-P 76838 (3, 5.5–8 cm SL); Shimokita County, Higashidori Village, NSMT-P 73910 (10, 4.4–7.5 cm SL).

Akita: Odate City, Odate, NSMT-P 73731 (2, 5.2–7.1 cm SL).

Iwate: Iwate County, Shizukuishi Town, NSMT-P 73760 (1, 9.2 cm SL); Iwate County, Shizukuishi-gawa River, NSMT-P 73473 (2, 5.2–5.8 cm SL); Morioka City, Janoshima, NSMT-P 76835 (3, 5.9–6.9 cm SL); Sarugaishigawa River, NSMT-P 76839 (3, 4.1–6 cm SL); Shimohei County, Kawai Village, NSMT-P 73266 (1, 3.2 cm SL).

Miyagi: Osaki City, Naruko, NSMT-P 73718 (1, 7.3 cm SL), 76836 (1, 9.5 cm SL); Osaki City, Naruko, Arao-gawa River, NSMT-P 73467 (10, 5–9.2 cm SL), 75295 (2, 5.4–5.9 cm SL).

Yamagata: Tsuruoka City, Aka-gawa River, NSMT-P 73584 (1, 8.7 cm SL); Tsuruoka City, Tamugimata, NSMT-P 73721 (2, 5.5–7.3 cm SL); Tsuruoka City, NSMT-P 73719 (1, 7.6 cm SL).

Fukushima: Kitakata City, NSMT-P 76771 (1, 10 cm SL).

Kitakami-gawa River, NSMT-P 74190 (1, 8.9 cm SL).

Cottus reinii Hilgendorf, 1879 [Japanese name: Utsusemi-kajika]

Miyagi: Sendai City, near Nishitaga, NSMT-P 73842 (1, 3.3 cm SL).

Enophrys diceraus (Pallas, 1788) [Japanese name: Oni-kajika]

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 73610 (1, 13.6 cm SL).

Furcina ishikawae Jordan & Starks, 1904 [Japanese name: Sarasa-kajika]

Aomori: Aomori City, Asamushi, NSMT-P 74030 (6, 3.6–6 cm SL).

Furcina osimae Jordan & Starks, 1904 [Japanese name: Kinu-kajika]

Fukushima: Iwaki City, Onahama, NSMT-P 73469 (1, 3.5 cm SL).

Gymnocanthus galeatus Bean, 1881 [Japanese name: Chikame-kajika]

Fukushima: Iwaki City, off Onahama, NSMT-P 75687 (1, 16.8 cm SL).

Gymnocanthus intermedius (Temminck & Schlegel, 1843) [Japanese name: Ai-kajika]

Akita: Nikaho City, off Konoura, NSMT-P 73874 (2, 12.7–14.2 cm SL).

Miyagi: Natori City, near Yuriage, NSMT-P 73876 (1, 15.8 cm SL); off Kesenuma City,

NSMT-P 76993 (3, 15.5–16.4 cm SL).

Gymnocanthus pistilliger (Pallas, 1814) [Japanese name: Hage-kajika]

Akita: Nikaho City, Konoura, NSMT-P 73749 (1, 8.7 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 73546 (1, 12.4 cm SL), 73875 (1, 13.2 cm SL); Shiogama City, Shiogama Fish Market, NSMT-P 74071 (1, 15.1 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 75190 (1, 11.9 cm SL); Tsuruoka City, off Kamo, NSMT-P 73479 (3, 7.6–11.5 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74219 (2, 15.8–16 cm SL), 74293 (6, 15.4–17.5 cm SL).

Icelus cataphractus (Pavlenko, 1910) [Japanese name: Koori-kajika]

Akita: Nikaho City, Konoura, NSMT-P 74477 (5, 17.8–21.2 cm SL); Nikaho City, off Konoura, NSMT-P 74039 (1, 9.7 cm SL).

Iwate: Miyako City, off Miyako, NSMT-P 73420 (1, 13.4 cm SL).

Myoxocephalus brandtii (Steindachner, 1867) [Japanese name: Shimofuri-kajika]

Fukushima: Iwaki City, Onahama, NSMT-P 73725 (1, 10.5 cm SL).

Myoxocephalus polyacanthocephalus (Pallas, 1814) [Japanese name: Toge-kajika]

Akita: Nikaho City, off Konoura, NSMT-P 74864 (1, 32.2 cm SL).

Myoxocephalus stelleri Tilesius, 1811 [Japanese name: Gisu-kajika]

Aomori: Aomori Bay, NSMT-P 73733 (1, 7.1 cm SL); Aomori City, Asamushi, NSMT-P 74371 (1, 15 cm SL); Nishitsugaru County, Fukaura Town, NSMT-P 74560 (1, 17.3 cm SL).

Miyagi: Ishinomaki City, Ohara, NSMT-P 74775 (1, 23.4 cm SL); Kesenuma City, NSMT-P 73674 (1, 18.9 cm SL); Matsushima Bay, NSMT-P 73818 (1, 19 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73329 (1, 12.6 cm SL), 73790 (1, 19 cm SL).

Myoxocephalus sp.

Miyagi: Ishinomaki City, Ohara, NSMT-P 74420 (1, 19.1 cm SL).

Pseudoblennius cottoides (Richardson, 1848)

[Japanese name: Asahi-anahaze]

Aomori: Aomori City, Asamushi, NSMT-P 73468 (9, 4–5.1 cm SL).

Miyagi: Kesenuma City, Karakuwa, NSMT-P 76849 (1, 7.9 cm SL).

Pseudoblennius percooides Günther, 1861 [Japanese name: Anahaze]

Fukushima: Iwaki City, Onahama, NSMT-P 73963 (1, 13.7 cm SL).

Pseudoblennius sp. [Japanese name: Kirin-anahaze]

Aomori: Aomori Bay, NSMT-P 75173 (57, 3–6 cm SL); Aomori City, Asamushi, NSMT-P 73728 (32, 3.9–6.9 cm SL), 76055 (21, 5.3–7.2 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73723 (2, 4.6–5.6 cm SL); Kesenuma City, NSMT-P 73952 (1, 12.5 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 73475 (1, 11.3 cm SL), 73476 (2, 11.6–13.5 cm SL), 73478 (1, 12.5 cm SL), 73706 (1, 12.7 cm SL), 73735 (3, 4.7–8.5 cm SL).

Yamagata: Sakata City, Tobishima, NSMT-P 73726 (2, 4.6–6 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74233 (1, 9.6 cm SL).

Family Hemitripterae

Hemitripterus villosus (Pallas, 1814) [Japanese name: Kemushi-kajika]

Aomori: Aomori City, Asamushi, NSMT-P 74612 (1, 23.2 (+) cm SL), 74790 (1, 24.8 (+) cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 76499 (1, 13.6 cm SL), 74796 (2, 19.8–25.3 cm SL).

Miyagi: Ishinomaki City, Ohara, NSMT-P 73649 (1, 20.5 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 73477 (1, 16.7 cm SL); Kesenuma City, off Karakuwa, NSMT-P 74350 (1, 18.7 cm SL); Motoyoshi County, off Motoyoshi Town, NSMT-P 75034 (3, 22.2 (+)–25.4 (+) cm SL); Natori City, near Yuriage, NSMT-P 74212 (1, 16.8 cm SL); Natori City, off Yuriage, NSMT-P 73632 (1, 11.5 cm SL), 73907 (1, 16.9 cm SL);

off Kesennuma City, NSMT-P 74291 (1, 23 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73594 (1, 10.2 cm SL); Iwaki City, Onahama, NSMT-P 74568 (3, 17.8–19.5 cm SL), 76145 (1, 10.2 cm SL).

Family Agonidae

Agonomalus proboscidalis (Valenciennes, 1858)
[Japanese name: Atsumori-uo]

Miyagi: Natori City, off Yuriage, NSMT-P 73480 (1, 11.5 cm SL).

Freemanichthys thompsoni (Jordan & Gilbert, 1898) [Japanese name: Yase-tokubire]

Akita: Nikaho City, off Konoura, NSMT-P 73744 (1, 13 cm SL).

Hypsagonus corniger Taranetz, 1933 [Japanese name: Tongari-shachi-uo]

Yamagata: Tsuruoka City, off Kamo, NSMT-P 73727 (1, 7.9 cm SL).

Ocella iburia (Jordan & Starks, 1904) [Japanese name: Saburou]

Miyagi: Natori City, off Yuriage, NSMT-P 74395 (3, 18–20.1 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73916 (1, 7.3 cm SL); Iwaki City, Onahama, NSMT-P 74210 (2, 15.1–15.4 cm SL), 74225 (1, 18.4 cm SL).

Ocella kuronumai (Freeman, 1951) [Japanese name: Shirou]

Akita: Nikaho City, off Konoura, NSMT-P 74201 (1, 15.4 cm SL), 76650 (1, 15 cm SL).

Pallasina barbata (Steindachner, 1876) [Japanese name: Yagiuo]

Akita: Nikaho City, off Konoura, NSMT-P 73466 (1, 16 cm SL); Yamamoto County, Happo Town, NSMT-P 73471 (1, 12.2 cm SL).

Percis japonica (Pallas, 1769) [Japanese name: Inu-gochi]

Iwate: Miyako City, off Miyako, NSMT-P 74286 (1, 14.4 cm SL).

Podothecus sachi (Jordan & Snyder, 1901)
[Japanese name: Tokubire]

Akita: Nikaho City, Konoura, NSMT-P 74323 (1, 22.5 cm SL); Nikaho City, off Konoura,

NSMT-P 73345 (1, 23.6 cm SL), 73448 (1, 17.4 cm SL).

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 73880 (2, 16.5–17.7 cm SL), 74223 (1, 19.7 cm SL); Natori City, off Yuriage, NSMT-P 73352 (3, 24.2–25.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74965 (3, 23.7–30.2 cm SL).

Sarritor leptorhynchus (Gilbert, 1896) [Japanese name: Tengu-tokubire]

Miyagi: Watari County, off Watari Town, NSMT-P 73339 (4, 12.5–16.7 cm SL).

Tilesina gibbosa Schmidt, 1904 [Japanese name: Oni-shachi-uo]

Akita: Nikaho City, off Konoura, NSMT-P 76649 (1, 9.5 cm SL).

Family Psychrolutidae

Dasycottus setiger Bean, 1890 [Japanese name: Ganko]

Akita: Nikaho City, off Konoura, NSMT-P 74814 (3, 14.4–19.2 cm SL), 74845 (2, 21.5–24.4 cm SL).

Miyagi: Watari County, off Watari Town, NSMT-P 73953 (1, 14.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73611 (1, 14.3 cm SL).

Ebinania vermiculata Sakamoto, 1932 [Japanese name: Aka-donko]

Fukushima: Iwaki City, off Onahama, NSMT-P 74848 (1, 30 cm SL); Iwaki City, Onahama, NSMT-P 74862 (1, 29.3 cm SL).

Malacocottus zonurus Bean, 1890 [Japanese name: Kobushi-kajika]

Iwate: Miyako City, off Miyako, NSMT-P 73930 (1, 15 cm SL).

Family Cyclopteridae

Aptocyclus ventricosus (Pallas, 1769) [Japanese name: Hotei-uo]

Akita: Yamamoto County, Happo Town, NSMT-P 74835 (2, 22.3–24.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74694 (1, 22.7 cm SL).

Family Liparidae

Careproctus rastrinus Gilbert & Burke, 1912
[Japanese name: Sake-bikunin]

Iwate: Miyako City, off Miyako, NSMT-P 73878 (4, 9.4–14.4 cm SL).

Miyagi: Shiogama City, Shiogama Fish Market, NSMT-P 74078 (5, 9.6–13.7 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74067 (1, 12.1 cm SL).

Crystallias matsushimae Jordan & Snyder, 1902
[Japanese name: Abachan]

Akita: Nikaho City, off Konoura, NSMT-P 73724 (3, 10.5–13 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73738 (1, 16.5 cm SL).

Liparis tanakae (Gilbert & Burke, 1912) [Japanese name: Kusa-uo]

Akita: Nikaho City, Konoura, NSMT-P 73743 (1, 18 cm SL).

Miyagi: Watari County, off Watari Town, NSMT-P 74609 (5, 20.1–21.2 cm SL).

Liparis sp.

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73275 (1, 19.5 cm SL).

Order Perciformes

Family Moronidae

* *Lateolabrax japonicus* (Cuvier, 1828) [Japanese name: Suzuki]

Aomori: Aomori City, Asamushi, NSMT-P 73536 (1, 25.9 cm SL); Goshogawara City, Jusan, NSMT-P 74685 (1, 27.6 cm SL).

Akita: Katagami City, Hachiro-gata, NSMT-P 73829 (4, 13.1–16.3 cm SL), 74246 (1, 17.8 cm SL); Yurihonjo City, off Yuri, NSMT-P 77181 (1, 30 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 74352 (2, 19.1–19.2 cm SL); Natori City, Yuriage, NSMT-P 74637 (1, 23.3 cm SL).

Yamagata: Tsuruoka City, Uchi-kawa River, NSMT-P 74046 (2, 9.1–9.6 cm SL); Tsuruoka City, NSMT-P 73779 (2, 8.3–10 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73816 (1, 15.6 cm SL); Iwaki City, Onahama, NSMT-P 74805 (1, 22.6 cm SL).

Family Acropomatidae

Acropoma hanedai Matsubara, 1953 [Japanese name: Haneda-hotarujako]

Fukushima: Iwaki City, Onahama, NSMT-P 75779 (1, 13 cm SL).

Doederleinia berycoides (Hilgendorf, 1879)
[Japanese name: Aka-mutsu]

Aomori: Nishitsugaru County, Fukaura Town, NSMT-P 73990 (2, 10.3–10.4 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73871 (3, 15.4–16.6 cm SL).

Miyagi: Natori City, near Yuriage, NSMT-P 74153 (1, 9.6 cm SL); Natori City, off Yuriage, NSMT-P 73814 (1, 11.2 cm SL), 74031 (1, 14.7 cm SL); Watari County, off Watari Town, NSMT-P 73872 (8, 15–17 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73658 (2, 14.9–15.2 cm SL); Tsuruoka City, off Kamo, NSMT-P 73970 (2, 14.5–14.6 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74608 (1, 28.7 cm SL); Iwaki City, Onahama, NSMT-P 73612 (2, 8.7–9.4 cm SL), 73811 (1, 10.2 cm SL).

Stereolepis doederleini Lindberg & Krasnyukova, 1969 [Japanese name: Okuchi-ishinagi]

Aomori: Nishitsugaru County, Fukaura Town, NSMT-P 74108 (2, 10.6–13.3 cm SL).

Akita: Nikaho City, Konoura, NSMT-P 73569 (2, 12.5–13 cm SL); Oga City, Funakawaminato, NSMT-P 74744 (3, 13.3–21.3 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 74447 (6, 11.3–17.2 cm SL); Natori City, Yuriage, NSMT-P 73521 (1, 16.2 cm SL); Watari County, off Watari Town, NSMT-P 74050 (1, 16.2 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73865 (1, 13.3 cm SL), 74059 (1, 10.3 cm SL).

Synagrops japonicus (Döderlein, 1883) [Japanese name: Sumikui-uo]

Fukushima: Iwaki City, Onahama, NSMT-P 74199 (1, 13.3 cm SL).

Family Serranidae

Epinephelus septemfasciatus (Thunberg, 1793)
[Japanese name: Ma-hata]

Akita: Oga City, Funakawaminato, NSMT-P 74842 (1, 25 cm SL).

***Epinephelus* sp.**

Akita: Nikaho City, off Konoura, NSMT-P 76922 (1, 2.6 cm SL).

Niphon spinosus Cuvier, 1828 [Japanese name: Ara]

Aomori: Nishitsugaru County, Fukaura Town, NSMT-P 74053 (1, 13.3 cm SL).

Akita: Oga City, off Funakawaminato, NSMT-P 74768 (3, 16–25.8 cm SL).

Miyagi: Natori City, near Yuriage, NSMT-P 74259 (2, 14.6–16.8 cm SL); Natori City, off Yuriage, NSMT-P 73603 (1, 15.3 cm SL), 74235 (2, 14.4–14.9 cm SL); Watari County, off Watari Town, NSMT-P 74095 (1, 15.5 cm SL).

Yamagata: Tsuruoka City, 70 km off Kamo, NSMT-P 74748 (2, 19.9–20.6 cm SL); Tsuruoka City, Kamo, NSMT-P 74099 (2, 12.2–13.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74411 (1, 17.2 cm SL), 74440 (5, 14.5–17.3 cm SL).

Family Priacanthidae

Cookeolus japonicus (Cuvier, 1829) [Japanese name: Chikame-kintoki]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 74187 (1, 9.4 cm SL).

Iwate: Miyako City, off Miyako, NSMT-P 74439 (2, 10.2–12 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 74342 (4, 10–13 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 75204 (1, 12 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73457 (2, 13.6–13.9 cm SL), 73643 (1, 13.1 cm SL).

Priacanthus macracanthus Cuvier, 1829 [Japanese name: Kintoki-dai]

Miyagi: Natori City, off Yuriage, NSMT-P 74317 (1, 9.5 cm SL).

***Priacanthus* sp.**

Fukushima: Iwaki City, Onahama, NSMT-P 73573 (1, 6.2 cm SL), 74008 (1, 7 cm SL).

Family Apogonidae

Apogon lineatus Temminck & Schlegel 1842 [Japanese name: Tenjiku-dai]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 74025 (3, 6.3–7.1 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73979 (4, 6.5–7.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73462 (1, 6.6 cm SL).

Family Sillaginidae

Sillago japonica Temminck & Schlegel, 1843 [Japanese name: Shiro-gisu]

Aomori: Higashitsugaru County, Nonai-gawa River, NSMT-P 75103 (1, 5.3 cm SL); Nishitsugaru County, Fukaura Town, NSMT-P 73887 (2, 15–15.1 cm SL).

Akita: Katagami City, Hachiro-gata, NSMT-P 75288 (2, 5.6–5.7 cm SL); Nikaho City, Kisakata, NSMT-P 74207 (1, 15.5 cm SL); Nikaho City, off Konoura, NSMT-P 74240 (1, 16.6 cm SL); Oga City, Funakawaminato, NSMT-P 74273 (2, 16.6–20.3 cm SL).

Fukushima: Iwaki City, near Onahama, NSMT-P 73830 (3, 13–15.7 cm SL); Iwaki City, Onahama, NSMT-P 74184 (1, 11.6 cm SL), 74241 (1, 16.7 cm SL), 76172 (1, 8.6 cm SL), 76923 (1, 7.6 cm SL).

Family Malacanthidae

Branchiostegus japonicus (Houttuyn, 1782) [Japanese name: Aka-ama-dai]

Akita: Nikaho City, Kisakata, NSMT-P 74837 (1, 32.1 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73523 (2, 12.9–14.6 cm SL).

***Branchiostegus* sp.**

Akita: Akita City, off Tsuchizakiminato, NSMT-P 74394 (2, 13–14.4 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74563 (2, 19–19.7 cm SL).

Family Pomatomidae

Scombrops boops (Houttuyn, 1782) [Japanese

name: Mutsu]

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73859 (1, 13.6 cm SL), 74083 (2, 13.2–14.1 cm SL).

Scombrops gilberti (Jordan & Snyder, 1901)
[Japanese name: Kuro-mutsu]

Miyagi: Watari County, off Watari Town, NSMT-P 74815 (1, 25.4 cm SL).

Family Echeneididae

Remora remora (Linnaeus, 1758) [Japanese name: Naga-koban]

Aomori: Aomori Bay, NSMT-P 74087 (1, 38.3 cm SL).

Family Coryphaenidae

Coryphaena hippurus Linnaeus, 1758 [Japanese name: Shiira]

Akita: Akita City, off Tsuchizakiminato, NSMT-P 74944 (1, 41.8 cm SL).

Family Carangidae

Alectis ciliaris (Bloch, 1787) [Japanese name: Itohiki-aji]

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74035 (1, 10.2 cm SL); Watari County, off Watari Town, NSMT-P 74731 (1, 11.7 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74463 (1, 8.9 cm SL).

Kaiwarinus equula (Temminck & Schlegel, 1844) [Japanese name: Kaiwari]

Aomori: Nishitsugaru County, Fukaura Town, NSMT-P 73601 (1, 9.2 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73899 (2, 11.1–11.8 cm SL), 73921 (1, 7.7 cm SL); Oga City, Funakawaminato, NSMT-P 74270 (3, 8.7–12.5 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 73935 (1, 10.1 cm SL).

Naucrates ductor (Linnaeus, 1758) [Japanese name: Buri-modoki]

Fukushima: Iwaki City, Onahama, NSMT-P 74054 (3, 10.7–14.1 cm SL).

Seriola lalandi Valenciennes, 1833 [Japanese name: Hiramasa]

Miyagi: Ishinomaki City, off Kinkazan, NSMT-P 77077 (1, 43.2 cm SL); off Natori City, NSMT-P 73589 (1, 15.9 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73583 (1, 13.9 cm SL).

Seriola quinqueradiata Temminck & Schlegel, 1845 [Japanese name: Buri]

Aomori: Aomori City, Asamushi, NSMT-P 74802 (13, 13.6–20.5 cm SL).

Akita: Nikaho City, NSMT-P 74654 (2, 13.8–22.8 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74833 (2, 21.5–21.9 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74377 (1, 18.4 cm SL).

Trachurus japonicus (Temminck & Schlegel, 1844) [Japanese name: Ma-aji]

Aomori: Aomori City, Asamushi, NSMT-P 73434 (6, 11.4–12.9 cm SL); Nishitsugaru County, off Fukaura Town, NSMT-P 73538 (1, 14.8 cm SL).

Miyagi: Hachinohe City, NSMT-P 73746 (1, 6.8 cm SL); Kesenuma City, NSMT-P 73902 (1, 9.2 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 73375 (2, 8.9–9.6 cm SL), 73544 (1, 16.7 cm SL), 73841 (1, 9.3 cm SL), 73926 (1, 17.1 cm SL), 74136 (1, 17.2 cm SL); Kesenuma City, off Karakuwa, NSMT-P 73961 (1, 15.4 cm SL); Motoyoshi County, off Motoyoshi Town, NSMT-P 74434 (6, 17.7–19.3 cm SL); Watari County, Watari Town, NSMT-P 74605 (4, 21.5–24.5 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73989 (2, 8.6–8.9 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73577 (10, 11.8–16.4 cm SL), 74276 (1, 23.6 cm SL), 74329 (1, 20.5 cm SL), 74642 (1, 22.1 cm SL).

Family Bramidae

Brama japonica Hilgendorf, 1878 [Japanese name: Shima-gatsuo]

Fukushima: Iwaki City, Onahama, NSMT-P

74966 (1, 36.3 cm SL).

Taractichthys steindachneri (Döderlein, 1883)

[Japanese name: Hirejiro-manzaiuo]

Miyagi: Kesenuma City, NSMT-P 74964 (1, 29.1 cm SL).

Family Lobotidae

Lobotes surinamensis (Bloch, 1790) [Japanese name: Matsu-dai]

Miyagi: Ishinomaki City, near Kinkazan, NSMT-P 74623 (1, 31.7 cm SL); Kesenuma City, off Karakuwa, NSMT-P 77093 (1, 42.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74916 (1, 37.2 cm SL).

Family Haemulidae

Hapalogenys nigripinnis (Temminck & Schlegel, 1843) [Japanese name: Higesori-dai]

Akita: Yamamoto County, Happo Town, NSMT-P 74797 (1, 26.2 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74457 (1, 16.5 cm SL).

Plectorhinchus cinctus (Temminck & Schlegel, 1843) [Japanese name: Koshou-dai]

Akita: Nikaho City, off Konoura, NSMT-P 73579 (1, 12.6 cm SL); Yamamoto County, Happo Town, NSMT-P 76759 (1, 10.4 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 74335 (6, 11.5–13.7 cm SL); Watari County, Watari Town, NSMT-P 73804 (1, 14.3 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73580 (1, 9.6 cm SL).

Family Sparidae

Acanthopagrus schlegelii (Bleeker, 1854) [Japanese name: Kuro-dai]

Aomori: Aomori Bay, NSMT-P 74765 (1, 25 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 74202 (1, 10.4 cm SL); Oga City, Funakawaminato, NSMT-P 74755 (1, 27.8 cm SL), 77075 (2, 9.3–10.7 cm SL).

Miyagi: Ishinomaki City, Ohara, NSMT-P

75688 (1, 5 cm SL); Watari County, off Watari Town, NSMT-P 73780 (1, 11 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74283 (1, 10.9 cm SL).

Eyvynnis tumifrons (Temminck & Schlegel, 1843) [Japanese name: Chi-dai]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 73433 (2, 10.5–12.2 cm SL).

Iwate: Kamaishi City, Kamaishi Bay, NSMT-P 74198 (2, 12.2–12.5 cm SL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74456 (1, 14.1 cm SL); Motoyoshi County, off Motoyoshi Town, NSMT-P 74234 (2, 11.7–12.1 cm SL), 74822 (5, 16–17.5 cm SL); Natori City, near Yuriage, NSMT-P 74250 (2, 13.4–14.5 cm SL); Natori City, off Yuriage, NSMT-P 74252 (1, 14.3 cm SL); Watari County, Watari Town, NSMT-P 74446 (4, 14.5–15.3 cm SL).

Yamagata: Tsuruoka City, off Kamo, NSMT-P 74565 (2, 15.5–16 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73572 (1, 6.5 cm SL), 74344 (6, 11.7–14.1 cm SL), 74648 (1, 19.7 cm SL).

Pagrus major (Temminck & Schlegel, 1843) [Japanese name: Ma-dai]

Aomori: Aomori Bay, NSMT-P 74844 (1, 23.8 cm SL); Aomori City, Asamushi, NSMT-P 74756 (3, 16.1–16.4 cm SL).

Akita: Nikaho City, NSMT-P 74847 (1, 27.5 cm SL); Nikaho City, off Konoura, NSMT-P 73646 (1, 15.3 cm SL).

Miyagi: Watari County, off Watari Town, NSMT-P 75291 (2, 7.5–7.8 cm SL).

Family Sciaenidae

Nibe mitsukurii (Jordan & Snyder, 1900) [Japanese name: Nibe]

Miyagi: Ishinomaki City, off Watanoha, NSMT-P 73641 (1, 19.2 cm SL); Natori City, off Yuriage, NSMT-P 74473 (3, 10–15.8 cm SL); Watari County, off Watari Town, NSMT-P 74767 (10, 15.5–20.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73527 (1, 9.3 cm SL), 73604 (1, 18.5 cm SL),

75200 (3, 14.5–16 cm SL).

Pennahia argentata (Houttuyn, 1782) [Japanese name: Shiro-guchi]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 73635 (2, 10.8–12.4 cm SL).

Akita: Katagami City, Hachiro-gata, NSMT-P 73427 (2, 11.4–11.7 cm SL); Nikaho City, Konoura, NSMT-P 74737 (1, 27.6 cm SL).

Miyagi: Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 73571 (5, 13.7–16.1 cm SL); Natori City, near Yuriage, NSMT-P 74751 (2, 18.3–21 cm SL); off Shiogama City, NSMT-P 74569 (4, 14.8–16 cm SL); Watari County, off Watari Town, NSMT-P 74758 (5, 18.6–23.8 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74104 (2, 10.2–12.2 cm SL); Iwaki City, Onahama, NSMT-P 73622 (4, 11.2–13.6 cm SL), 73628 (3, 16.1–17.4 cm SL).

Family Mullidae

Upeneus japonicus (Houttuyn, 1782) [Japanese name: Himeji]

Akita: Nikaho City, Konoura, NSMT-P 73794 (2, 8.9–9 cm SL); Nikaho City, off Konoura, NSMT-P 73323 (3, 8.3–9.6 cm SL), 73946 (1, 8.8 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 73762 (1, 12.7 cm SL).

Fukushima: Iwaki City, near Onahama, NSMT-P 74096 (4, 10.2–11.1 cm SL).

Family Chaetodontidae

Chaetodon auripes Jordan & Snyder, 1901 [Japanese name: Chocho-uo]

Fukushima: Iwaki City, Onahama, NSMT-P 73752 (1, 3.7 cm SL).

Family Pentacerotidae

Evistias acutirostris (Temminck & Schlegel, 1844) [Japanese name: Tengu-dai]

Fukushima: Iwaki City, Onahama, NSMT-P 74949 (1, 22.5 cm SL).

Family Kyphosidae

Girella punctata Gray, 1835 [Japanese name: Mejina]

Akita: Katagami City, Hachiro-gata, NSMT-P 73757 (2, 5.7–6.7 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73559 (1, 7 cm SL), 73892 (1, 7.9 cm SL); Kesenuma City, NSMT-P 76884 (1, 3.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74033 (2, 9.7–11.3 cm SL).

Microcanthus strigatus (Cuvier, 1831) [Japanese name: Kagokaki-dai]

Fukushima: Iwaki City, near Onahama, NSMT-P 74405 (1, 14 cm SL).

Family Teraponidae

Rhynchopelates oxyrhynchus (Temminck & Schlegel, 1842) [Japanese name: Shima-isaki]

Akita: Katagami City, Tenno, NSMT-P 73566 (2, 2–2.6 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73563 (1, 7.7 cm SL).

Family Oplegnathidae

Oplegnathus fasciatus (Temminck & Schlegel, 1844) [Japanese name: Ishi-dai]

Aomori: Aomori City, Asamushi, NSMT-P 73534 (21, 5.8–8.5 cm SL), 75205 (1, 19.6 cm SL); Higashitsugaru County, Imabetsu Town, NSMT-P 73613 (1, 16.3 cm SL); Nishitsugaru County, off Fukaura Town, NSMT-P 74269 (1, 13.1 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 74003 (2, 9.1–10.3 cm SL), 74014 (1, 8.8 cm SL); Oga City, Funakawaminato, NSMT-P 73873 (2, 10–15.3 cm SL), 74856 (1, 19.5 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 76843 (1, 2.2 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 74001 (2, 5.9–8.3 cm SL), 74015 (6, 3.2–4.6 cm SL); Kesenuma City, off Karakuwa, NSMT-P 73993 (3, 5.8–7.5 cm SL); Natori City, off Yuriage, NSMT-P 74433 (10, 8.9–10.6 cm SL); Watari County, off Watari

Town, NSMT-P 73592 (3, 9.5–12.5 cm SL), 74060 (10, 6.1–8 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73295 (1, 9.2 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73278 (4, 7.6–10.4 cm SL); 74094 (1, 10.8 cm SL).

Oplegnathus punctatus (Temminck & Schlegel, 1844) [Japanese name: Ishigaki-dai]

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 74034 (2, 5.8–6.6 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74409 (1, 12.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73999 (1, 9.2 cm SL).

Family Cheilodactylidae

Goniistius zebra (Döderlein, 1883) [Japanese name: Migimaki]

Fukushima: Iwaki City, Onahama, NSMT-P 73636 (1, 15.4 cm SL).

Goniistius zonatus (Cuvier, 1830) [Japanese name: Takanoha-dai]

Fukushima: Iwaki City, Onahama, NSMT-P 73822 (1, 6.3 cm SL).

Family Cepolidae

Cepola schlegeli Bleeker, 1854 [Japanese name: Sumitsuki-akatachi]

Fukushima: Iwaki City, Onahama, NSMT-P 74128 (2, 21.5–22 (+) cm TL), 74378 (3, 23.7–35.2 cm SL), 74453 (2, 24.4–25.6 cm SL).

Family Embiotocidae

Ditrema temminckii temminckii (Bleeker, 1853) [Japanese name: Umi-tanago]

Aomori: Higashitsugaru County, Imabetsu Town, NSMT-P 74571 (8, 12.6–18.4 cm SL).

Akita: Oga City, Funakawaminato, 73668 (2, 12.8–15.6 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 74064 (49, 2.4–3.5 cm SL); Kesennuma City, NSMT-P 75199 (5, 11–11.7 cm SL); Kesennuma City, Karakuwa, NSMT-P 73341 (2,

14.5–18 cm SL); Kesennuma City, Kesennuma Bay, NSMT-P 73344 (1, 15.6 cm SL), 73807 (1, 12.4 cm SL), 74066 (2, 5.9–6.2 cm SL); Kesennuma City, off Karakuwa, NSMT-P 74795 (4, 16.6–20.8 cm SL); Motoyoshi County, Motoyoshi Town, NSMT-P 73441 (3, 15.2–19.2 cm SL), 74279 (1, 16.1 cm SL); Natori City, off Yuriage, NSMT-P 73855 (2, 9.4–10.4 cm SL); Oshika County, Onagawa Bay, NSMT-P 74158 (1, 13.4 cm SL); Oshika County, Onagawa Town, off Enoshima, NSMT-P 73291 (1, 15.2 cm SL), 73319 (6, 14–15.3 cm SL); Sendai City, NSMT-P 76924 (9, 2.7–3.1 cm SL).

Yamagata: Sakata City, Tobishima, NSMT-P 74117 (1, 12.7 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73265 (3, 9.7–11.8 cm SL); Iwaki City, Onahama, NSMT-P 73656 (1, 16 cm SL), 74461 (1, 17.2 cm SL).

Ditrema viride Oshima, 1940 [Japanese name: Ao-tanago]

Akita: Oga City, Funakawaminato, NSMT-P 73263 (1, 11.5 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 74125 (4, 11.6–13.9 cm SL); Ishinomaki City, Ohara, NSMT-P 74000 (1, 11.1 cm SL); Kesennuma City, off Karakuwa, NSMT-P 73776 (2, 7.9–8.1 cm SL); Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 74312 (3, 13–14.3 cm SL); Natori City, Yuriage, NSMT-P 73261 (1, 12.3 cm SL); Natori City, off Yuriage, NSMT-P 73819 (1, 13.2 cm SL).

Neoditrema ransonneti Steindachner, 1883 [Japanese name: Oki-tanago]

Miyagi: Ishinomaki City, Tashirojima Island, NSMT-P 73900 (1, 9.4 cm SL); Kesennuma City, NSMT-P 73253 (4, 8.8–9.1 cm SL), 73620 (4, 13–14.7 cm SL); Kesennuma City, off Karakuwa, NSMT-P 73281 (1, 16.1 cm SL), 73844 (1, 8.5 cm SL); Kesennuma City, Karakuwa, NSMT-P 73975 (1, 10.1 cm SL); Oshika County, Onagawa Bay, NSMT-P 76171 (3, 7.7–11.3 cm SL); Oshika County, Onagawa Town, off Enoshima, NSMT-P 76652 (5, 12.2–12.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74480 (2, 14.8–17 cm SL), 76186 (1, 13.7 cm

SL).

Family Pomacentridae

Chromis notata notata (Temminck & Schlegel, 1843) [Japanese name: Suzume-dai]

Yamagata: Sakata City, Tobishima, NSMT-P 73365 (2, 8.5–8.6 cm SL), 73464 (1, 10.4 cm SL).

Family Labridae

Halichoeres poecilopterus (Temminck & Schlegel, 1845) [Japanese name: Kyusen]

Aomori: Aomori City, Asamushi, NSMT-P 74073 (2, 10.3–11.5 cm SL), 74322 (3, 15.2–18.8 cm SL); Higashitsugaru County, NSMT-P 73835 (3, 10.5–18.3 cm SL); Higashitsugaru County, Hiranai Town, Futagojima Island, NSMT-P 74126 (3, 15.5–15.8 cm SL), 74545 (2, 16–18.1 cm SL).

Akita: Oga City, Funakawaminato, NSMT-P 74398 (1, 18.3 cm SL).

Miyagi: Ishinomaki City, Watanoha, NSMT-P 74264 (1, 16.8 cm SL); Matsushima Bay, NSMT-P 74562 (1, 20 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74299 (1, 16.6 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74659 (1, 22.3 cm SL).

Halichoeres tenuispinis (Günther, 1862) [Japanese name: Hon-bera]

Yamagata: Sakata City, Tobishima, NSMT-P 74061 (1, 10.9 cm SL).

Pseudolabrus sieboldi Mabuchi & Nakabo, 1997 [Japanese name: Hoshi-sasanoha-bera]

Fukushima: Iwaki City, Onahama, NSMT-P 74122 (1, 15 cm SL).

Semicossyphus reticulatus (Valenciennes, 1839) [Japanese name: Kobu-dai]

Aomori: Higashitsugaru County, Hiranai Town, off Oshima Island, NSMT-P 74368 (1, 17.4 cm SL).

Miyagi: Kesennuma City, off Karakuwa, NSMT-P 74417 (1, 17.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73442 (1, 22.1 cm SL).

Family Zoarcidae

Bothrocara hollandi (Jordan & Hubbs, 1925) [Japanese name: Noro-genge]

Akita: Nikaho City, off Konoura, NSMT-P 74282 (2, 26.6–27 cm SL).

Bothrocara tanakae (Jordan & Hubbs, 1925) [Japanese name: Kanten-genge]

Akita: Nikaho City, off Konoura, NSMT-P 74272 (1, 34.6 cm SL).

Miyagi: Kesennuma City, NSMT-P 74431 (1, 29.8 cm SL); Natori City, off Yuriage, NSMT-P 74432 (3, 35.5–40.2 cm SL), 74465 (1, 37.6 cm SL); Shiogama City, Shiogama Fish Market, NSMT-P 74262 (1, 38 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74331 (2, 32–32.7 cm SL); Iwaki City, Onahama, NSMT-P 74213 (1, 35.7 cm SL).

Lycodes hubbsi Matsubara, 1955 [Japanese name: Yokosuji-kuro-genge]

Miyagi: off Kesennuma City, NSMT-P 74464 (1, 31.7 cm SL); Shiogama City, Shiogama Fish Market, NSMT-P 77151 (1, 29.8 (+) cm SL).

Lycodes nishimurai Shinohara & Shirai, 2005 [Japanese name: Orochi-genge]

Akita: Nikaho City, off Konoura, NSMT-P 74489 (2, 26.9–28.5 cm SL).

Lycodes tanakae Jordan & Thompson, 1914 [Japanese name: Tanaka-genge]

Akita: Nikaho City, off Konoura, NSMT-P 74007 (1, 17.5 cm SL), 74337 (1, 21.5 cm SL), 74380 (1, 29.8 cm SL).

Zoarchias sp.

Aomori: Aomori City, Asamushi, NSMT-P 73377 (2, 7.9–8 cm SL).

Family Stichaeidae

Chirolophis japonicus Herzenstein, 1890 [Japanese name: Fusa-ginpo]

Aomori: Aomori City, Asamushi, NSMT-P 74422 (1, 20.4 cm SL), 74653 (2, 16–23.5 cm SL), 74839 (1, 31 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73853 (1, 14.5 (+) cm SL).

Dictyosoma burgeri van der Hoeven, 1855 [Japanese name: Dainan-ginpo]

Akita: Nikaho City, off Konoura, NSMT-P 74141 (1, 17.3 cm SL), 74228 (3, 13.8–15 cm SL).

Miyagi: Kesennuma City, Karakuwa, NSMT-P 73370 (1, 7.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74870 (1, 29.5 cm SL).

Ernogrammus hexagrammus (Schlegel, 1845)
[Japanese name: Musuji-gaji]

Akita: Nikaho City, off Konoura, NSMT-P 75690 (1, 8.2 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73955 (2, 8.8–11.1 cm SL).

Opisthocentrus tenuis Bean & Bean, 1897
[Japanese name: Hanajiro-gaji]

Aomori: Aomori City, Asamushi, NSMT-P 73520 (40, 5.3–13.2 cm SL), 74413 (5, 7.9–14.2 cm SL); Higashitsugaru County, Hiranai Town, Oshima Island, NSMT-P 74051 (39, 3.9–15.4 cm SL).

Miyagi: Kesennuma City, Karakuwa, NSMT-P 73378 (1, 9.6 cm SL).

Opisthocentrus sp.

Miyagi: Kesennuma City, Karakuwa, NSMT-P 73823 (1, 5.6 cm SL).

Stichaeus grigorjewi Herzenstein, 1890 [Japanese name: Nagazuka]

Akita: Nikaho City, off Konoura, NSMT-P 74541 (3, 24.2–25.4 cm SL).

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 74683 (1, 36.5 cm SL); Kesennuma City, off Karakuwa, NSMT-P 73664 (1, 31.1 cm SL), 75035 (8, 32.5–45.5 cm SL); Shiogama City, Shiogama Fish Market, NSMT-P 74875 (1, 35 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74590 (2, 24.3–24.9 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74098 (1, 20.8 cm SL).

Family Pholididae

Pholis crassispina (Temminck & Schlegel, 1845)
[Japanese name: Take-ginpo]

Aomori: Aomori City, Asamushi, NSMT-P 74333 (15, 9.1–14.8 cm SL), 76060 (9, 9.8–13

cm SL); Higashitsugaru County, Hiranai Town, Oshima Island, NSMT-P 73633 (12, 8.9–14.7 cm SL).

Miyagi: Ishinomaki City, NSMT-P 73424 (1, 8.6 cm SL).

Fukushima: Iwaki City, near Onahama, NSMT-P 75289 (1, 13.5 cm SL).

Pholis nebulosa (Temminck & Schlegel, 1845)
[Japanese name: Ginpo]

Aomori: Higashitsugaru County, Nonai-gawa River, NSMT-P 76572 (2, 3.2–3.9 cm SL).

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 73618 (2, 19.2–21.7 cm SL), 73866 (1, 21.8 cm SL); Natori City, off Yuriage, NSMT-P 73614 (1, 24.2 cm SL); Watari County, Watari Town, NSMT-P 73461 (5, 12.5–15.8 cm SL).

Fukushima: Iwaki City, near Onahama, NSMT-P 73661 (2, 5.4–22.2 cm SL).

Pholis sp.

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 73423 (14, 2.8–3.4 cm SL).

Family Pinguipedidae

Parapercis sexfasciata (Temminck & Schlegel, 1843) [Japanese name: Kurakake-toragisu]

Akita: Nikaho City, off Konoura, NSMT-P 74129 (1, 15.2 cm SL).

Parapercis sp.

Akita: Nikaho City, off Konoura, NSMT-P 74131 (1, 25.7 cm SL).

Family Trichodontidae

Arctoscopus japonicus (Steindachner, 1881)
[Japanese name: Hatahata]

Akita: Nikaho City, Kisakata, NSMT-P 73901 (1, 13.5 cm SL), 74339 (15, 13.4–19.8 cm SL); Nikaho City, off Konoura, NSMT-P 74868 (21, 15.3–20.3 cm SL).

Yamagata: Tsuruoka City, off Kamo, NSMT-P 73886 (1, 15.6 cm SL), 73956 (1, 15.2 cm SL).

Family Ammodytidae

Ammodytes personatus Girard, 1856 [Japanese name: Ikanago]

Aomori: Hachinohe City, Shirahama, NSMT-P 76878 (5, 5–6.3 cm SL).

Miyagi: Ishinomaki City, Ajishima Island, NSMT-P 74243 (10, 9.6–12.7 cm SL); Kesennuma City, Kesennuma Bay, NSMT-P 74367 (4, 16.4–23.2 cm SL); Kesennuma City, off Karakuwa, NSMT-P 74442 (17, 15.2–20.7 cm SL); Natori City, off Yuriage, NSMT-P 73800 (1, 8.8 cm SL); Oshika County, Onagawa Town, Enoshima Island, NSMT-P 74242 (29, 9.7–14.3 cm SL).

Family Uranoscopidae

Uranoscopus chinensis Guichenot, 1882 [Japanese name: Kibire-mishima]

Miyagi: Natori City, Yuriage, NSMT-P 74343 (1, 16.8 cm SL); Watari County, off Watari Town, NSMT-P 74313 (2, 16–16.6 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 74177 (1, 13.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 76064 (1, 16.1 cm SL), 76690 (1, 10.3 cm SL).

Uranoscopus japonicus Houttuyn, 1782 [Japanese name: Mishima-okoze]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 74144 (1, 15.3 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 74173 (2, 12.7–14.5 cm SL); Yurihonjo City, Yuri, NSMT-P 74743 (1, 18.8 cm SL).

Yamagata: Tsuruoka City, off Kamo, NSMT-P 74478 (2, 16.5–17.1 cm SL).

Xenocephalus elongatus (Temminck & Schlegel, 1843) [Japanese name: Ao-mishima]

Akita: Oga City, off Funakawaminato, NSMT-P 73981 (1, 10.1 cm SL).

Yamagata: Tsuruoka City, off Kamo, NSMT-P 74142 (1, 16.6 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73526 (1, 11.7 cm SL), 74891 (6, 15.8–17.7 cm SL).

Family Blenniidae

Omobranchus elegans (Steindachner, 1876) [Japanese name: Nabeka]

Aomori: Higashitsugaru County, Hiranai

Town, Futagojima Island, NSMT-P 73525 (9, 2.8–4.2 cm SL).

Akita: Katagami City, Tenno, NSMT-P 73734 (1, 3.1 cm SL); Nikaho City, Konoura, NSMT-P 73357 (2, 3.9–4.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73769 (2, 3.8–5 cm SL).

Xiphasia setifer Swainson, 1839 [Japanese name: Unagi-ginpo]

Fukushima: Iwaki City, Onahama, NSMT-P 73522 (1, 36.7 cm SL).

Family Callionymidae

Repomucenus curvicornis Valenciennes, 1837 [Japanese name: Nezumi-gochi]

Akita: Nikaho City, off Konoura, NSMT-P 73260 (2, 12.4–16.3 cm SL).

Repomucenus lunatus (Temminck & Schlegel, 1845) [Japanese name: Numeri-gochi]

Fukushima: off Iwaki City, NSMT-P 73535 (2, 11.7–10.4 cm SL).

Repomucenus ornatipinnis (Regan, 1905) [Japanese name: Seto-numeri]

Aomori: Aomori Bay, Aburamezaki Cape, NSMT-P 73541 (2, 14–14.8 cm SL); Aomori City, Asamushi, NSMT-P 74208 (2, 15.2–16.1 cm SL), 76412 (1, 9.5 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 73294 (5, 8.3–13.1 cm SL), 75206 (3, 12.9–16 cm SL).

Fukushima: Iwaki City, NSMT-P 73619 (1, 16.5 cm SL); Iwaki City, Onahama, NSMT-P 73806 (2, 12.3–13.7 cm SL).

Repomucenus valenciennei (Temminck & Schlegel, 1845) [Japanese name: Hatatate-numeri]

Aomori: Aomori City, Asamushi, NSMT-P 73472 (1, 8.6 cm SL).

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 76926 (1, 8.3 cm SL), 76930 (1, 7.3 cm SL).

Family Odontobutidae

Odontobutis obscura (Temminck & Schlegel, 1845) [Japanese name: Donko]

Iwate: Shimohei County, Kawai Village, NSMT-P 76859 (1, 4.8 cm SL).

Family Gobiidae

* *Acanthogobius flavimanus* (Temminck & Schlegel, 1845) [Japanese name: Ma-haze]

Akita: Katagami City, Hachiro-gata, NSMT-P 73929 (3, 9.4–13.1 cm SL); Katagami City, Tenno, NSMT-P 76651 (1, 4.8 cm SL); Oga City, Funakoshi, Hachiro-gata, NSMT-P 74402 (11, 10.5–15.7 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 74037 (1, 12.8 cm SL), 74072 (2, 13.4–13.7 cm SL), 74197 (1, 15 cm SL); Matushima Bay, NSMT-P 74410 (2, 16.5–16.6 cm SL); off Shiogama City, NSMT-P 74406 (4, 15.1–15.8 cm SL); Osaki City, Naruko, Araogawa River, NSMT-P 75294 (1, 8.5 cm SL); Sendai City, Wakabayashi, NSMT-P 74047 (1, 13 cm SL); Watari County, off Watari Town, NSMT-P 73931 (5, 13.1–14.9 cm SL); Watari County, Watari Town, NSMT-P 74058 (1, 8.3 cm SL).

Yamagata: Nikko-gawa River, NSMT-P 74112 (2, 11.5–15.4 cm SL); Tsuruoka City, NSMT-P 73845 (2, 6.6–7.6 cm SL), 73947 (2, 10.2–13.4 cm SL).

* *Acanthogobius lactipes* (Hilgendorf, 1879) [Japanese name: Ashishiro-haze]

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73836 (3, 3.1–3.8 cm SL); Sendai City, Wakabayashi, NSMT-P 75689 (1, 3.9 cm SL).

Yamagata: Tsuruoka City, NSMT-P 76173 (1, 4.3 cm SL).

Amblychaeturichthys hexanema (Bleeker, 1853) [Japanese name: Aka-haze]

Akita: Nikaho City, off Konoura, NSMT-P 73255 (1, 11.5 cm SL), 73540 (3, 13.6–15.3 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 75776 (2, 12.3–12.5 cm SL); off Iwaki City, NSMT-P 74044 (3, 11.5–13.5 cm SL).

Chaenogobius annularis Gill, 1859 [Japanese name: Ago-haze]

Aomori: Aomori City, Asamushi, NSMT-P 75292 (16, 2.7–4.7 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73908 (1, 4.4 cm SL).

Chaenogobius gulosus (Sauvage, 1882) [Japanese name: Dorome]

Aomori: Aomori City, Asamushi, NSMT-P 73918 (5, 4.1–8.2 cm SL); Nishitsugaru County, Fukaura Town, NSMT-P 74082 (2, 6.5–8.9 cm SL).

Akita: Nikaho City, Konoura, NSMT-P 73857 (3, 7.7–8.7 cm SL).

Miyagi: Ishinomaki City, Kinkazan, NSMT-P 74382 (2, 3.4–3.5 cm SL).

Chaenogobius sp.

Fukushima: Iwaki City, Onahama, NSMT-P 73306 (3, 1.8–1.9 cm SL).

Favonigobius gymnauchen (Bleeker, 1860) [Japanese name: Hime-haze]

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 76211 (2, 4.9–5.2 cm SL).

* *Gymnogobius breunigii* (Steindachner, 1879) [Japanese name: Biringo]

Aomori: Aomori City, Asamushi, NSMT-P 76411 (1, 4.5 cm SL).

Akita: Katagami City, Tenno, NSMT-P 73313 (2, 4.3–5.1 cm SL).

Gymnogobius castaneus (O'Shaughnessy, 1875) [Japanese name: Jujukake-haze]

Aomori: Higashitsugaru County, Hiranai Town, Oshima Island, NSMT-P 76057 (1, 2.7 cm SL).

Akita: Yokote City, Asamai, NSMT-P 73246 (5, 3.4–4.4 cm SL); Yokote City, NSMT-P 73801 (2, 2.5–2.8 cm SL).

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 73543 (5, 2.9–3.8 cm SL); Osaki City, Kawatabi, NSMT-P 73322 (2, 2.3–2.7 cm SL); Sendai City, Wakabayashi, NSMT-P 77133 (21, 2.9–4.2 cm SL), 77137 (35, 2.9–4.7 cm SL), 76635 (12, 2.7–3.9 cm SL); Shiraishi City, Bagyu-numa Pond, NSMT-P 74012 (3, 3.1–5.2 cm SL); Toda County, Wakuya Town, NSMT-P 76933 (2, 3.7–4.8 cm SL); Tome City, Nitta, NSMT-P 74070 (82, 2.3–5.1 cm SL); Tome City, Nitta, Naga-numa Pond, NSMT-P 75319 (2, 1.4–2.1 cm SL).

Yamagata: Nikko-gawa River, NSMT-P 73333

(3, 3.1–4.3 cm SL); Tsuruoka City, NSMT-P 75321 (1, 2.2 cm SL), 76174 (4, 3.6–4.3 cm SL).

Gymnogobius heptacanthus (Hilgendorf, 1879)
[Japanese name: Niku-haze]

Aomori: Aomori City, Asamushi, NSMT-P 73843 (57, 1.2–2.5 cm SL), 74081 (63, 3.2–4.7 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 76210 (1, 4.6 cm SL).

Gymnogobius petschiliensis (Rendahl, 1924)
[Japanese name: Sumi-ukigori]

Aomori: Hachinohe City, Same, NSMT-P 76882 (2, 4–4.1 cm SL).

Miyagi: Ishinomaki City, Ohara, NSMT-P 76775 (2, 4.1–4.6 cm SL), 76937 (1, 7 cm SL); Kesenuma City, Karakuwa, NSMT-P 76935 (2, 3.1–4.6 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 76939 (2, 4.2–4.4 cm SL).

***Gymnogobius* sp.**

Aomori: Goshogawara City, Jusan, NSMT-P 76941 (32, 1.9–3.2 cm SL).

Miyagi: Osaki City, Naruko, NSMT-P 73264 (2, 4.5–4.7 cm SL); Osaki City, Naruko, Araigawa River, NSMT-P 73923 (3, 4.5–5.4 cm SL).

* ***Gymnogobius urotaenia*** (Hilgendorf, 1879)
[Japanese name: Ukigori]

Aomori: Aomori City, near Asamushi, NSMT-P 73846 (2, 8.1–9.9 cm SL).

Akita: Semboku City, Tazawa Lake, NSMT-P 76845 (1, 5.3 cm SL).

Leucopsarion petersii Hilgendorf, 1880 [Japanese name: Shiro-uo]

Aomori: Nonai-gawa River, NSMT-P 74355 (518, 3.3–4.6 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 76920 (15, 3.5–4 cm SL).

Pterogobius elapoides (Günther, 1872) [Japanese name: Kinubari]

Aomori: Aomori City, Asamushi, NSMT-P 73949 (66, 1.9–4.7 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 76932 (1, 5.5 cm SL).

Pterogobius zacalles Jordan & Snyder, 1901
[Japanese name: Ryugu-haze]

Aomori: Aomori Bay, NSMT-P 73273 (26,

7.5–11.1 cm SL); Aomori City, Asamushi, NSMT-P 73324 (3, 9–9.7 cm SL), 73905 (2, 8.5–8.7 cm SL); Aomori City, near Asamushi, NSMT-P 73793 (1, 8.4 cm SL).

Pterogobius zonoleucus Jordan & Snyder, 1901
[Japanese name: Chagara]

Yamagata: Sakata City, Tobishima, NSMT-P 73330 (7, 4.7–6.4 cm SL).

***Rhinogobius* sp.** [Japanese name: Tou-yoshinobori]

Aomori: Hirosaki City, Iwaki-gawa River, NSMT-P 76179 (2, 4.2–5.4 cm SL); Shimokita County, Higashidori Village, NSMT-P 75236 (2, 3.9–4 cm SL).

Iwate: Hanamaki City, NSMT-P 76921 (1, 3.7 cm SL); Morioka City, Kamiyonai, NSMT-P 73259 (1, 3.7 cm SL); Morioka City, Ueda, NSMT-P 74381 (3, 2.5–3 cm SL); Sarugaishigawa River, NSMT-P 74002 (2, 6.4–6.6 cm SL); Shiwa County, Shiwa Town, NSMT-P 73245 (9, 2.6–3.4 cm SL).

Miyagi: Kurihara City, Tsukidate, Natsu-kawa River, NSMT-P 76844 (1, 3.8 cm SL); Sendai City, Wakabayashi, NSMT-P 73239 (117, 2.3–4 cm SL), 75102 (1, 2.3 cm SL), 77131 (1, 3.3 cm SL), 77134 (2, 2.8–3.2 cm SL); Toda County, Wakuya Town, NSMT-P 76919 (6, 2.3–3.7 cm SL), 76934 (2, 3–3.2 cm SL).

***Rhinogobius* sp.**

Iwate: Iwate County, Shizukuishi Town, NSMT-P 73732 (4, 1.7–1.8 cm SL).

Miyagi: Kurihara City, Wakayanagi, NSMT-P 76877 (1, 2.9 cm SL).

Tridentiger brevispinis Katsuyama, Arai & Nakamura, 1972 [Japanese name: Numachichibu]

Aomori: Hirosaki City, Iwaki-gawa River, NSMT-P 73858 (1, 9.9 cm SL).

Miyagi: Kurihara City, Izu-numa Pond, NSMT-P 76938 (4, 4.2–7.1 cm SL); Tome City, Nitta, NSMT-P 75686 (23, 3.1–6.3 cm SL).

Yamagata: Nikko-gawa River, NSMT-P 73575 (2, 7.1–7.6 cm SL); Tsuruoka City, NSMT-P 73244 (2, 7.3–9.3 cm SL).

* ***Tridentiger obscurus*** (Temminck & Schlegel, 1845) [Japanese name: Chichibu]

Iwate: Morioka City, Janoshima, NSMT-P 74013 (3, 5.5–7 cm SL).

Miyagi: Sendai City, Hirose-gawa River, NSMT-P 73711 (3, 7–8 cm SL).

Tridentiger trigonocephalus (Gill, 1859) [Japanese name: Akaobi-shima-haze]

Akita: Nikaho City, Konoura, NSMT-P 76942 (2, 5–5.3 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73915 (1, 3.2 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73337 (1, 6.4 cm SL), 75290 (2, 4.6–6.2 cm SL).

Family Siganidae

Siganus fuscescens (Houttuyn, 1782) [Japanese name: Aigo]

Akita: Oga City, Funakawaminato, NSMT-P 73367 (1, 8.8 cm SL), 73755 (1, 8.2 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 74294 (1, 10.5 cm SL); Watari County, off Watari Town, NSMT-P 73605 (1, 11.4 cm SL).

Family Zanclidae

Zanclus cornutus (Linnaeus, 1758) [Japanese name: Tsunodashi]

Fukushima: Iwaki City, Onahama, NSMT-P 74652 (1, 14 cm SL).

Family Sphyrænidae

Sphyræna japonica Bloch & Schneider, 1801 [Japanese name: Yamato-kamasu]

Fukushima: Iwaki City, Onahama, NSMT-P 73638 (20, 11.6–14.3 cm SL).

Sphyræna pinguis Günther, 1874 [Japanese name: Aka-kamasu]

Fukushima: Iwaki City, off Onahama, NSMT-P 74687 (1, 26.9 cm SL); Iwaki City, Onahama, NSMT-P 73422 (2, 12–12.4 cm SL).

Family Gempylidae

Ruvettus pretiosus Cocco, 1833 [Japanese name: Bara-mutsu]

Fukushima: Iwaki City, Onahama, NSMT-P

73692 (1, 23 cm SL).

Family Trichiuridae

Trichiurus japonicus Temminck & Schlegel, 1844 [Japanese name: Tachi-uo]

Fukushima: Iwaki City, off Onahama, NSMT-P 74408 (3, 38–38.2 cm TL); Iwaki City, Onahama, NSMT-P 74858 (1, 79.3 cm TL).

Trichiurus sp. [Japanese name: Tenjiku-tachi]

Yamagata: Tsuruoka City, Kamo, NSMT-P 77165 (1, 101.9 cm TL).

Family Scombridae

Auxis rochei (Risso, 1810) [Japanese name: Maru-soda]

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 74920 (1, 27.2 cm SL).

Auxis thazard (Lacepède, 1800) [Japanese name: Hira-soda]

Miyagi: Kesennuma City, off Karakuwa, NSMT-P 74888 (5, 27.3–29.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74689 (1, 26.8 cm SL).

Katsuwonus pelamis (Linnaeus, 1758) [Japanese name: Katsuo]

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 74886 (1, 35 cm SL); Kesennuma City, off Karakuwa, NSMT-P 77155 (1, 50.6 cm SL).

Sarda orientalis (Temminck & Schlegel, 1844) [Japanese name: Hagatsuo]

Fukushima: Iwaki City, Onahama, NSMT-P 74179 (1, 15 cm SL), 74224 (1, 18.8 cm SL).

Scomber australasicus Cuvier, 1832 [Japanese name: Goma-saba]

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 74696 (1, 23.5 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74688 (1, 26.8 cm SL).

Scomber japonicus Houttuyn, 1782 [Japanese name: Ma-saba]

Aomori: Aomori City, Asamushi, NSMT-P 73701 (9, 20.5–22.7 cm SL).

Akita: Nikaho City, Kisakata, NSMT-P 74553 (1, 21.5 cm SL).

Miyagi: Ishinomaki City, off Watanoha,

NSMT-P 74643 (1, 27.2 cm SL); Kesennuma City, Kesennuma Bay, NSMT-P 73848 (1, 11.4 cm SL), 74761 (1, 27.7 cm SL); Kesennuma City, off Karakuwa, NSMT-P 74923 (5, 28.2–34.3 cm SL); Natori City, off Yuriage, NSMT-P 74726 (6, 7.7–22.6 cm SL); Rikuzentakata City, Takata, NSMT-P 76643 (1, 11.5 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 76170 (3, 8.5–11.1 cm SL); Iwaki City, Onahama, NSMT-P 74193 (1, 19.2 cm SL), 74646 (2, 24–25.2 cm SL), 74836 (3, 28.7–30.5 cm SL).

Family Centrolophidae

Hyperoglyphe japonica (Döderlein, 1884)
[Japanese name: Me-dai]

Miyagi: off Shiogama City, NSMT-P 74460 (1, 16.9 cm SL).

Psenopsis anomala (Temminck & Schlegel, 1844) [Japanese name: Ibo-dai]

Fukushima: Iwaki City, Onahama, NSMT-P 73598 (1, 15 cm SL).

Psenopsis shojimai Ochiai & Mori 1965 [Japanese name: Niseibo-dai]

Miyagi: Natori City, off Yuriage, NSMT-P 73615 (1, 11.5 cm SL); Watari County, off Watari Town, NSMT-P 73560 (2, 11–11.8 cm SL).

Order Pleuroneciformes

Family Bothidae

Crossorhombus kobensis (Jordan & Starks, 1906) [Japanese name: Kobe-daruma-garei]

Fukushima: Iwaki City, Onahama, NSMT-P 73531 (1, 8.7 cm SL).

Family Paralichthyidae

Paralichthys olivaceus (Temminck & Schlegel, 1846) [Japanese name: Hirame]

Aomori: Higashitsugaru County, Imabetsu Town, NSMT-P 74628 (1, 29.8 cm SL); Nishitsugaru County, off Fukaura Town, NSMT-P 74621 (1, 22 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73321 (2, 13–18.2 cm SL).

Miyagi: Kesennuma City, Kesennuma Bay,

NSMT-P 73714 (1, 13.5 cm SL); Kesennuma City, off Karakuwa, NSMT-P 77182 (1, 31 cm SL), 77183 (1, 31 cm SL); Natori City, near Yuriage, NSMT-P 73533 (1, 20.8 cm SL); Natori City, off Yuriage, NSMT-P 73741 (2, 10.9–16.7 cm SL); Watari County, Watari Town, NSMT-P 74921 (4, 32.8–37.9 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 77024 (2, 13–15.4 cm SL).

Pseudorhombus cinnamoneus (Temminck & Schlegel, 1846) [Japanese name: Ganzou-birame]

Akita: Yamamoto County, Happo Town, NSMT-P 74882 (1, 22.4 cm SL).

Pseudorhombus oculocirris Amaoka, 1969
[Japanese name: Heraganzou-birame]

Fukushima: Iwaki City, Onahama, NSMT-P 77023 (2, 12.4–12.6 cm SL).

Pseudorhombus pentophthalmus Günther, 1862
[Japanese name: Tamaganzou-birame]

Aomori: Nishitsugaru County, Fukaura Town, NSMT-P 73877 (3, 10.2–11.5 cm SL).

Miyagi: Natori City, near Yuriage, NSMT-P 76642 (1, 9.4 cm SL).

Family Pleuronectidae

Atheresthes evermanni Jordan & Starks, 1904
[Japanese name: Abura-garei]

Miyagi: Kesennuma City, off Karakuwa, NSMT-P 74800 (3, 23.5–30.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74873 (2, 24.5–27.2 cm SL), 77018 (2, 23.4–30.2 cm SL).

Clidoderma asperrimum (Temminck & Schlegel, 1846) [Japanese name: Same-garei]

Miyagi: Natori City, near Yuriage, NSMT-P 73501 (2, 14.1–17.1 cm SL); Watari County, off Watari Town, NSMT-P 75028 (4, 25–32.5 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73267 (1, 19.4 cm SL); Iwaki City, Onahama, NSMT-P 73498 (1, 18.3 cm SL), 77013 (1, 26.3 cm SL).

Dexistes rikuzenius Jordan & Starks, 1904
[Japanese name: Migi-garei]

Miyagi: Kesenuma City, Karakuwa, NSMT-P 73296 (2, 11.9–16.7 cm SL); Natori City, near Yuriage, NSMT-P 76501 (2, 15.8–19 cm SL); off Kesenuma City, NSMT-P 73287 (1, 14.7 cm SL), 74604 (1, 19.4 cm SL); Watari County, Watari Town, NSMT-P 73349 (4, 17.5–19.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 77017 (2, 11.5–13.5 cm SL).

Eopsetta grigorjewi (Herzenstein, 1890) [Japanese name: Mushi-garei]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 73286 (1, 20 cm SL).

Miyagi: Natori City, near Yuriage, NSMT-P 76503 (2, 20.9–21.1 cm SL); Natori City, off Yuriage, NSMT-P 74622 (2, 17.1–17.3 cm SL), 76995 (2, 19.6–19.8 cm SL); off Kesenuma City, NSMT-P 74960 (5, 21.3–22.9 cm SL), 76413 (1, 19.7 cm SL), 76416 (1, 15.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 76999 (4, 12–26.8 cm SL); off Iwaki City, NSMT-P 73505 (2, 17.5–18.3 cm SL).

Glyptocephalus stelleri (Schmidt, 1904) [Japanese name: Hire-guro]

Miyagi: Kesenuma City, Karakuwa, NSMT-P 73331 (5, 13.3–17.6 cm SL); Natori City, off Yuriage, NSMT-P 74284 (3, 14.4–17.8 cm SL); off Kesenuma City, NSMT-P 73500 (3, 15.2–17 cm SL), 76641 (2, 14.3–15 cm SL); Watari County, off Watari Town, NSMT-P 74907 (5, 22–24.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73445 (2, 12–13.4 cm SL).

Hippoglossoides dubius Schmidt, 1904 [Japanese name: Aka-garei]

Miyagi: Shiogama City, Shiogama Fish Market, NSMT-P 73881 (2, 10.6–12.3 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 76997 (2, 21–22.2 cm SL).

Hippoglossoides pinetorum Jordan & Starks, 1904 [Japanese name: Souhachi]

Miyagi: Kesenuma City, NSMT-P 73650 (3, 18.6–20.2 cm SL); Kesenuma City, Kesenuma Bay, NSMT-P 73503 (1, 17.8 cm SL); Motoyoshi County, off Motoyoshi Town, NSMT-P 73832 (1, 13.1 cm SL); Natori City, near Yuriage, NSMT-P

73284 (1, 18.6 cm SL); Natori City, off Yuriage, NSMT-P 73359 (2, 14.2–15.4 cm SL); off Kesenuma City, NSMT-P 76414 (1, 21.7 cm SL), 76415 (1, 16.9 cm SL).

Fukushima: Iwaki City, NSMT-P 73358 (1, 10.6 cm SL); Iwaki City, Onahama, NSMT-P 73446 (1, 14.4 cm SL), 77016 (1, 11.8 cm SL).

Kareius bicoloratus (Basilewsky, 1855) [Japanese name: Ishi-garei]

Aomori: Aomori City, Asamushi, NSMT-P 73290 (1, 18.6 cm SL), 74638 (1, 26.4 cm SL); Higashitsugaru County, Nonai-gawa River, NSMT-P 76573 (1, 2.5 cm SL).

Miyagi: Ishinomaki City, Mangokuura, NSMT-P 73938 (3, 2.8–6.3 cm SL); Ishinomaki City, Ohara, NSMT-P 77022 (2, 11.9–17.8 cm SL); Natori City, near Yuriage, NSMT-P 73240 (1, 21.6 cm SL); Natori City, off Yuriage, NSMT-P 73262 (2, 9.9–10 cm SL); Watari County, off Watari Town, NSMT-P 77019 (3, 6.5–7.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74351 (1, 13.6 cm SL), 77015 (2, 10.9–18.1 cm SL).

Lepidopsetta mochigarei Snyder, 1911 [Japanese name: Asaba-garei]

Akita: Yurihonjo City, Yuri, NSMT-P 74749 (1, 19.7 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73510 (1, 22.2 cm SL); Natori City, near Yuriage, NSMT-P 73504 (1, 17.3 cm SL); Natori City, off Yuriage, NSMT-P 74629 (1, 19.6 cm SL); off Kesenuma City, NSMT-P 74607 (2, 20–20.6 cm SL), 74610 (1, 26.9 cm SL).

Liopsetta pinnifasciata (Kner, 1870) [Japanese name: Matsukawa]

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 73458 (1, 17.3 cm SL).

Microstomus stelleri (Schmidt, 1904) [Japanese name: Baba-garei]

Miyagi: Kesenuma City, Karakuwa, NSMT-P 74618 (1, 21.3 cm SL), 74906 (3, 22.9–27.8 cm SL); Natori City, Yuriage, NSMT-P 74793 (2, 17.8–21.2 cm SL); off Kesenuma City, NSMT-P 73654 (3, 20–21.3 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P

74794 (2, 21.4–22.2 cm SL).

Myzopsetta punctatissimus (Steindachner, 1879)
[Japanese name: Suna-garei]

Akita: Nikaho City, off Konoura, NSMT-P 73354 (1, 21.6 cm SL).

Platichthys stellatus (Pallas, 1787) [Japanese name: Numa-garei]

Aomori: Aomori City, Asamushi, NSMT-P 74617 (1, 17.6 cm SL); Nishitsugaru County, off Fukaura Town, NSMT-P 73269 (1, 20.4 cm SL).

Akita: Nikaho City, Konoura, NSMT-P 74677 (3, 10.4–21.5 cm SL); Oga City, Funakoshi, NSMT-P 73516 (6, 11.7–14.4 cm SL); Yurihonjo City, Yuri, NSMT-P 73509 (1, 19.1 cm SL).

Miyagi: Kesennuma City, Kesennuma Bay, NSMT-P 74445 (1, 15.4 cm SL); NSMT-P 73270 (1, 12.5 cm SL).

Pleuronectes sp.

Miyagi: Kesennuma City, Karakuwa, NSMT-P 73969 (1, 14.7 cm SL).

Pleuronichthys cornutus (Temminck & Schlegel, 1846) [Japanese name: Meita-garei]

Aomori: Aomori Bay, NSMT-P 73517 (1, 19.2 cm SL); Nishitsugaru County, Fukaura Town, NSMT-P 73879 (3, 12.5–12.7 cm SL).

Akita: Nikaho City, Konoura, NSMT-P 73283 (1, 13.7 cm SL); Nikaho City, off Konoura, NSMT-P 73348 (1, 12.4 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 74290 (6, 9.2–11.5 cm SL); Watari County, off Watari Town, NSMT-P 74591 (1, 16.1 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74616 (4, 15–17.4 cm SL), 77012 (1, 16.7 cm SL); off Iwaki City, NSMT-P 73258 (2, 14.2–15 cm SL).

Pleuronichthys sp. [Japanese name: Nagaremeita-garei]

Aomori: Higashitsugaru County, Imabetsu Town, NSMT-P 74645 (1, 21.7 cm SL).

Miyagi: Natori City, near Yuriage, NSMT-P 73288 (1, 16.3 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73942 (1, 13.3 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 77000 (1, 9 cm SL).

Pseudopleuronectes herzensteini (Jordan &

Snyder, 1901) [Japanese name: Ma-garei]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 76683 (2, 13.1–14.6 cm SL).

Miyagi: Ishinomaki City, Ohara, NSMT-P 77021 (5, 10.9–15.5 cm SL); Natori City, near Yuriage, NSMT-P 73683 (2, 15.8–18.9 cm SL); Natori City, off Yuriage, NSMT-P 76994 (7, 11.8–13.3 cm SL); Watari County, off Watari Town, NSMT-P 74854 (6, 14.2–29.2 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 77014 (2, 12.1–13.5 cm SL).

Pseudopleuronectes schrenki (Schmidt, 1904)
[Japanese name: Kurogashira-garei]

Miyagi: Rikuzentakata City, Hirota, NSMT-P 74614 (1, 27.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73715 (2, 14.5–15.5 cm SL).

Pseudopleuronectes yokohamae (Günther, 1877)
[Japanese name: Mako-garei]

Aomori: Aomori City, Asamushi, NSMT-P 73277 (15, 4.4–18.2 cm SL).

Miyagi: Kesennuma City, Karakuwa, NSMT-P 73508 (6, 14.8–19.3 cm SL), 74819 (4, 17.1–20.8 cm SL); Kesennuma City, Kesennuma Bay, NSMT-P 74576 (2, 17.1–19.1 cm SL); Natori City, off Yuriage, NSMT-P 73502 (2, 14–14.6 cm SL), 74892 (6, 10.7–16.9 cm SL); Natori City, Yuriage, NSMT-P 73506 (2, 15.8–17.4 cm SL); off Kesennuma City, NSMT-P 77166 (5, 20.9–24.7 cm SL); Watari County, off Watari Town, NSMT-P 77020 (4, 13.7–14.9 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73328 (1, 10.5 cm SL), 73451 (1, 12.4 cm SL), 76998 (1, 14 cm SL).

Tohoku District, NSMT-P 74698 (2, 19.2–20.6 cm SL).

Tanakius kitaharae (Jordan & Starks, 1904)
[Japanese name: Yanagimushi-garei]

Miyagi: Natori City, near Yuriage, NSMT-P 76502 (2, 21.4–22.3 cm SL).

Verasper variegatus (Temminck & Schlegel, 1846) [Japanese name: Hoshi-garei]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 74624 (1, 30 cm SL).

Akita: Oga City, Funakawaminato, NSMT-P 73272 (2, 12.5–15.5 cm SL).

Miyagi: Ishinomaki City, off Kinkazan, NSMT-P 74619 (1, 21.5 cm SL); Natori City, near Yuriage, NSMT-P 73519 (1, 20.4 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 74626 (1, 18.5 cm SL); Iwaki City, Onahama, NSMT-P 74919 (1, 22.9 cm SL).

Family Soleidae

Heteromycteris japonicus (Temminck & Schlegel, 1846) [Japanese name: Sasa-ushinoshita]

Akita: Nikaho City, off Konoura, NSMT-P 73894 (1, 11.5 cm SL).

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 73854 (1, 11.1 cm SL).

Pseudaesopia japonica (Bleeker, 1860) [Japanese name: Seto-ushinoshita]

Akita: Yamamoto County, Happo Town, NSMT-P 74799 (1, 9.8 cm SL).

Zebrias zebrinus (Temminck & Schlegel, 1846) [Japanese name: Shima-ushinoshita]

Akita: Yamamoto County, Happo Town, NSMT-P 74855 (3, 12.3–24 cm SL).

Yamagata: Tsuruoka City, Kamo, NSMT-P 73586 (1, 15.3 cm SL).

Family Cynoglossidae

Cynoglossus interruptus Günther, 1880 [Japanese name: Genko]

Akita: Nikaho City, off Konoura, NSMT-P 75287 (1, 14.3 cm SL).

Cynoglossus joyneri Günther, 1878 [Japanese name: Akashitabirame]

Akita: Yamamoto County, Happo Town, NSMT-P 77073 (1, 26.4 cm SL).

Miyagi: Watari County, off Watari Town, NSMT-P 74853 (8, 19.2–20.5 cm SL).

Fukushima: Iwaki City, NSMT-P 76653 (2, 14.2–14.8 cm SL); Iwaki City, Onahama, NSMT-P 74170 (3, 12.6–15 cm SL), 74421 (1, 19.5 cm SL).

Paraplagusia japonica (Temminck & Schlegel, 1846) [Japanese name: Kuro-ushinoshita]

Akita: Nikaho City, Kisakata, NSMT-P 74589 (1, 24.6 cm SL); Yamamoto County, Happo

Town, NSMT-P 77072 (3, 23.5–24.6 cm SL).

Iwate: Rikuzentakata City, Hirota, NSMT-P 74347 (1, 29.2 cm SL).

Miyagi: Ishinomaki City, off Watanoha, NSMT-P 74404 (1, 23.5 cm SL); Natori City, off Yuriage, NSMT-P 74230 (1, 12.7 cm SL); Watari County, off Watari Town, NSMT-P 74852 (6, 24.5–32.8 cm SL); Watari County, Watari Town, NSMT-P 74889 (1, 28.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73710 (1, 8.7 cm SL).

Order Tetraodontiformes

Family Triacanthodidae

Triacanthodes anomalus (Temminck & Schlegel, 1850) [Japanese name: Beni-kawamuki]

Fukushima: Iwaki City, Onahama, NSMT-P 76841 (1, 6.9 cm SL).

Family Monacanthidae

Aluterus monoceros (Linnaeus, 1758) [Japanese name: Usuba-hagi]

Fukushima: Iwaki City, Onahama, NSMT-P 74967 (1, 35.5 cm SL).

Rudarius ercodes Jordan & Fowler, 1902 [Japanese name: Amime-hagi]

Aomori: Aomori City, Asamushi, NSMT-P 73241 (13, 0.3–2.4 cm SL), 73251 (9, 1.8–3.3 cm SL).

Stephanolepis cirrhifer (Temminck & Schlegel, 1850) [Japanese name: Kawa-hagi]

Aomori: Nishitsugaru County, off Fukaura Town, NSMT-P 73898 (1, 11.5 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73895 (2, 10.5–11 cm SL); Oga City, Funakawaminato, NSMT-P 73551 (3, 10.9–12.4 cm SL).

Miyagi: Natori City, off Yuriage, NSMT-P 73982 (2, 11.1–11.5 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73917 (1, 7.3 cm SL); Iwaki City, Onahama, NSMT-P 73252 (1, 9.9 cm SL), 74338 (1, 11.3 cm SL), 74601 (1, 13 cm SL).

Thamnaconus modestus (Günther, 1877)

[Japanese name: Umazura-hagi]

Aomori: Nishitsugaru County, Fukaura Town, NSMT-P 73256 (1, 14.1 cm SL).

Akita: Nikaho City, off Konoura, NSMT-P 73896 (2, 11–12.5 cm SL).

Miyagi: Kesenuma City, Kesenuma Bay, NSMT-P 73250 (1, 5.9 cm SL); Kesenuma City, off Karakuwa, NSMT-P 73678 (1, 15.8 cm SL), 74865 (6, 16.3–21.7 cm SL); Natori City, off Yuriage, NSMT-P 74655 (3, 19.8–21.4 cm SL); Natori City, Yuriage, NSMT-P 73737 (2, 12.3–14.4 cm SL).

Yamagata: Tsuruoka City, off Kamo, NSMT-P 74597 (2, 18.2–18.6 cm SL).

Fukushima: Iwaki City, off Onahama, NSMT-P 73705 (4, 13.3–15.8 cm SL); Iwaki City, Onahama, NSMT-P 73285 (2, 15–15.5 cm SL), 73289 (2, 11.7–12.7 cm SL), 74962 (3, 21.5–30.5 cm SL); no detailed locality, NSMT-P 73704 (3, 14.8–17.7 cm SL).

Family Ostraciidae

Kentrocapros aculeatus (Houttuyn, 1782)

[Japanese name: Itomaki-fugu]

Miyagi: Natori City, off Yuriage, NSMT-P 73474 (1, 8.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73247 (1, 4.8 cm SL), 73998 (1, 7.8 cm SL).

Lactoria diaphana (Bloch & Schneider, 1801)

[Japanese name: Umi-suzume]

Miyagi: Watari County, off Watari Town, NSMT-P 73353 (1, 10.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73821 (1, 9.2 cm SL).

Ostracion immaculatus Temminck & Schlegel, 1850 [Japanese name: Hako-fugu]

Aomori: Higashitsugaru County, Hiranai Town, off Kamomejima Island, NSMT-P 74692 (1, 19.4 cm SL).

Tetrosomus concatentatus (Bloch, 1785) [Japanese name: Hama-fugu]

Miyagi: Kesenuma City, Matsuiwa, NSMT-P 74040 (1, 3.6 cm SL).

Family Tetraodontidae

Lagocephalus gloveri Abe & Tabeta, 1983

[Japanese name: Kuro-saba-fugu]

Akita: Nikaho City, off Konoura, NSMT-P 73293 (1, 13.8 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74287 (1, 12.9 cm SL), 74373 (1, 17.1 cm SL).

Lagocephalus wheeleri Abe, Tabeta & Kitahama, 1984 [Japanese name: Shiro-saba-fugu]

Akita: Nikaho City, off Konoura, NSMT-P 73869 (1, 13.2 cm SL).

Takifugu niphobles (Jordan & Snyder, 1901)

[Japanese name: Kusa-fugu]

Aomori: Aomori City, Asamushi, NSMT-P 74097 (3, 6.6–7.8 cm SL).

Miyagi: Miyagi County, Matsushima Town, Matsushima Bay, NSMT-P 73867 (2, 10–10.2 cm SL); off Shiogama City, NSMT-P 73450 (3, 9–11.2 cm SL); Oshika County, Onagawa, Dejima Island, NSMT-P 74261 (5, 9–11.2 cm SL).

Yamagata: Sakata City, Tobishima, NSMT-P 74152 (1, 12.4 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74079 (2, 8.3–11.5 cm SL).

Takifugu pardalis (Temminck & Schlegel, 1850) [Japanese name: Higan-fugu]

Akita: Oga City, Funakawaminato, NSMT-P 73967 (1, 9.1 cm SL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74669 (1, 26.8 cm SL), 77032 (1, 16.2 cm SL), 77033 (1, 21 cm SL); Motoyoshi County, Motoyoshi Town, NSMT-P 74663 (1, 23.8 cm SL), 77029 (1, 23.4 cm SL), 77030 (1, 23.1 cm SL); Motoyoshi County, off Motoyoshi Town, NSMT-P 74101 (1, 13.4 cm SL); Natori City, NSMT-P 73945 (1, 9 cm SL).

Takifugu poecilonotus (Temminck & Schlegel, 1850) [Japanese name: Komon-fugu]

Akita: Oga City, Funakawaminato, NSMT-P 75324 (1, 9.7 cm SL).

Takifugu porphyreus (Temminck & Schlegel, 1850) [Japanese name: Ma-fugu]

Akita: Nikaho City, off Konoura, NSMT-P 74667 (1, 21.5 cm SL), 77028 (1, 22.5 cm SL).

Miyagi: Kesenuma City, off Karakuwa, NSMT-P 74973 (1, 22.5 cm SL); Motoyoshi

County, off Motoyoshi Town, NSMT-P 74615 (1, 25.1 cm SL), 74666 (1, 27.1 cm SL), 77034 (1, 26.7 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 74399 (1, 18.8 cm SL), 74662 (1, 24.6 cm SL).

Takifugu rubripes (Temminck & Schlegel, 1850)

[Japanese name: Tora-fugu]

Akita: Nikaho City, off Konoura, NSMT-P 74664 (1, 30.9 cm SL).

Takifugu snyderi (Abe, 1988) [Japanese name:

Shousai-fugu]

Fukushima: Iwaki City, Onahama, NSMT-P 74661 (1, 25.4 cm SL), 75069 (4, 13.7–14.6 cm SL), 77031 (1, 22 cm SL).

Takifugu stictonotus (Temminck & Schlegel, 1850) [Japanese name: Goma-fugu]

Fukushima: Iwaki City, Onahama, NSMT-P 74668 (1, 25.8 cm SL).

Family Diodontidae

Chilomycterus reticulatus (Linnaeus, 1758)

[Japanese name: Ishigaki-fugu]

Fukushima: Iwaki City, Onahama, NSMT-P 74881 (1, 22.7 cm SL).

Diodon holocanthus Linnaeus, 1758 [Japanese name: Hari-senbon]

Aomori: Aomori City, off Yunoshima Island, NSMT-P 73962 (1, 6.8 cm SL); Higashitsugaru County, Sotogahama Town, NSMT-P 74115 (1, 12.2 cm SL).

Fukushima: Iwaki City, Onahama, NSMT-P 73888 (1, 8.4 cm SL).

Remarks

The fish collection of the Saito Ho-on Kai Museum of Natural History includes some noteworthy specimens from a zoogeographical viewpoint. As stated in the “Introduction”, aquatic environments in the Tohoku District were drastically changed in the 1950s through the 1970s, which resulted in the destruction of many habitats for freshwater fishes. For example, the cyprinid fish, *Pseudorasbora pumila pumipla* described as a new species by Miyadi (1930), had been widely distributed from the central to northern parts of Honshu Island, but it disappeared in many areas including the type locality. Although the type specimens of this species are not extant, the specimens of the Saito Ho-on Kai Museum of Natural History came from many places of the Tohoku District including the type locality (Fig. 3), Akita Prefecture (Hachiro-gata and Yokote City), Iwate Prefecture (Morioka City, Shiwa County, and Waga County), and Miyagi Prefecture (Izu-numa Pond, Kurihara City, Shinai-numa Pond [type locality], Sendai City, Bagyu-numa Pond, Tome City, and Naga-numa Pond).

In addition to freshwater fishes, the fish collection of Saito Ho-on Kai Museum of Natural History showed northern range extensions of the following fishes: *Ophichthus altipennis* (Ophichthidae, previously known as far north as Tokyo Bay), *Caelorinchus anatrostris* (Macrouridae, previously known as far north as Sagami Bay); *Antigonia capros* (Caproidae, previously known as far north as Sagami Bay); *Hoplichthys gilberti*



Fig. 3. *Pseudorasbora pumila pumila* Miyadi, 1930, collected from Shinai-numa Pond, Miyagi Prefecture, Japan (NSMT-P 73379, 6.3 cm SL).

(Hoplichthyidae, previously known as far north as Sagami Bay); *Sphyraena japonica* (Sphyraenidae, previously known as far north as Sagami Bay); *Kentrocapros aculeatus* (Ostraciidae, previously known as far north as Sagami Bay).

Acknowledgments

We are grateful to Mr. Onjiro Saito, Director of the Saito Ho-on Kai Museum of Natural History, for donating the precious natural history collection to the National Museum of Nature and Science. We would thank to Koichi Shibukawa (Nagao Natural Environment Foundation), Takashi P. Sato (Ocean Research Institute, University of Tokyo), Toshio Kawai and Yohko Takata (NSMT) for help in identifying and registering the specimens. Our thanks go to Tomoko Machida for illustrating Figures 1 and 2. Edward O. Murdy (National Science Foundation) kindly reviewed the manuscript. This study was supported in part by Grant-in-Aids for Scientific Research (A) by the Japan Society for the Promotion of Science, Tokyo (no. 19208019).

References

- Arai, R., H. Fujiwara and Y. Nagata, 2007. Four new subspecies of *Acheilognathus* bitterings (Cyprinidae: Achelilognathinae) from Japan. *Bulletin of the National Museum of Nature and Science, Series A (Zoology)*, Supplement 1: 1–28.
- Gentry, A., J. Clutton-Brock and C. P. Groves, 2004. The naming of wild animal species and their domestic derivatives. *Journal of Archaeological Science*, **31**: 645–651.
- Ichthyological Society of Japan, 2007. Nihon-san gyorui no sabetseteki hyojun wamei no kaimei saishu kankoku [Amendments of discriminative Japanese fish names by the Ichthyological Society of Japan]. *Japanese Journal of Ichthyology*, **54**: 102–103. (In Japanese.)
- Kai, Y. and T. Nakabo, 2008. Taxonomic review of the *Sebastes inermis* species complex (Scorpaeniformes: Scorpaenidae). *Ichthyological Research*, **55**: 238–259.
- Katafuchi, H. and T. Nakabo, 2007. Revision of the East Asian genus *Ditrema* (Embiotocidae), with description of a new subspecies. *Ichthyological Research*, **54**: 350–366.
- Miyadi, D., 1930. Notes on a new cyprinid fish, *Pseudorasbora pumila*, sp. nov. From Shinai-numa, Prov. Rikuzen. *Annotationes Zoologicas Japonenses*, **12**: 445–448.
- Nakabo, T. (ed.), 2000. Fishes of Japan with Pictorial Keys to the Species, 2nd Edition. Ivi+1748 pp. Tokai University Press, Tokyo. (In Japanese.)
- Nelson, J.S., 1994. Fishes of the World, 3rd Edition. xvii +600 pp. Wiley, New York.
- Okada, Y. and H. Ikeda, 1938. Notes on the fresh water fishes of the Tōhoku District in the collection of the Saitō Hō-on Kai Museum. *Saito Ho-on Kai Museum Research Bulletin*, **15**: 85–139, plates IV–VII.
- Yoshino, T. and H. Kishimoto, 2008. *Plotosus japonicus*, a new eeltail catfish (Siluriformes: Plotosidae) from Japan. *Bulletin of the National Museum of Nature and Science, Series A (Zoology)*, Supplement 2: 1–11.