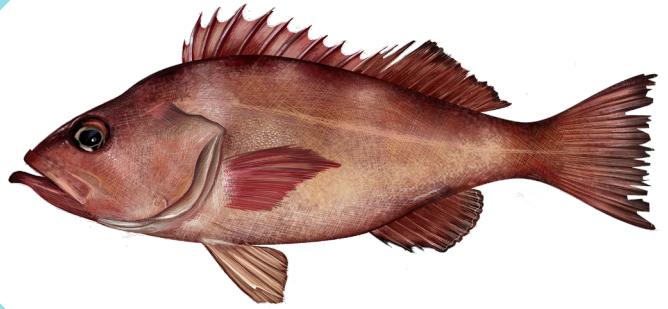


# A WORKING FIELD GUIDE TO TRAWL-CAUGHT FISHES



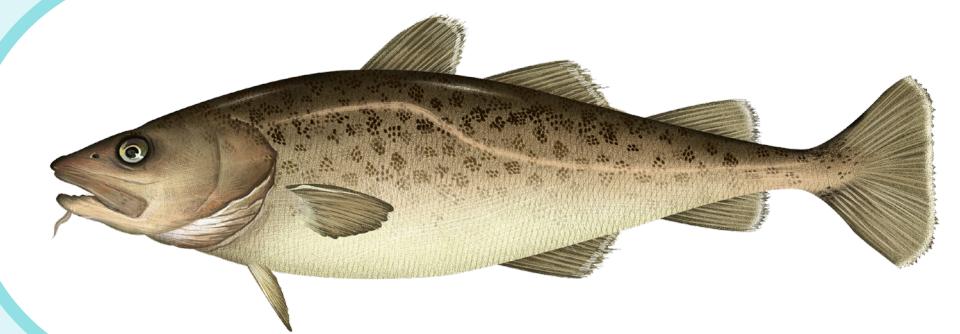
2024



**NOAA**  
**FISHERIES**

Alaska Fisheries Science Center

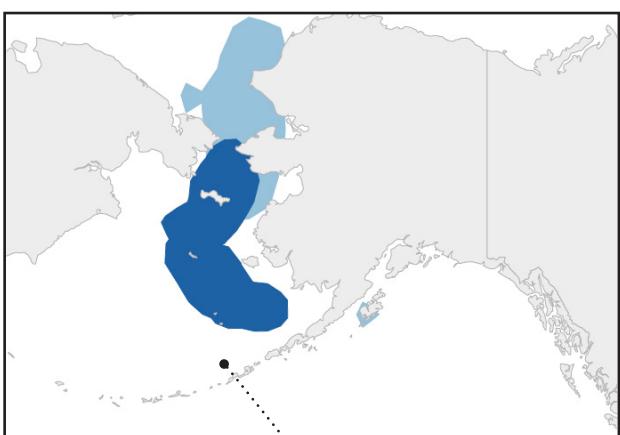
Resource Assessment and  
Conservation Engineering





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Outlier GAP records or too few GAP records to draw polygon

■ GAP locality (polygon drawn from GAP catch records for species)

■ Known locality (polygon drawn from external records for species)

# A WORKING FIELD GUIDE TO TRAWL-CAUGHT FISHES

based on D. W. Kessler's  
Alaska's Saltwater Fishes and Other Sea Life

Updated and Maintained by Staff of the  
Resource Assessment and Conservation Engineering Division  
Alaska Fisheries Science Center / National Marine Fisheries Service / NOAA

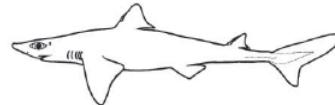
Last updated March 2024

## **DISCLAIMER**

This guidebook is meant to serve as a practical guide  
to common species encountered on GAP surveys.  
You may encounter species not detailed here.  
When in doubt, always photograph and voucher  
specimens for expert identification.

## SHARKS

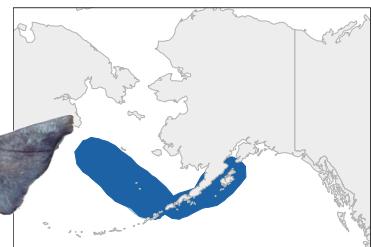
- No anal fin
- Five gill openings
- Heterocercal tail

**Pacific Sleeper Shark** *Somniosus pacificus*

Gray brown to black; large flabby body with soft bones; no spines on dorsal fins; low lateral keel on caudal peduncle

RANGE: Bering Sea to California

DEPTH: 0-2000m SIZE: 400cm



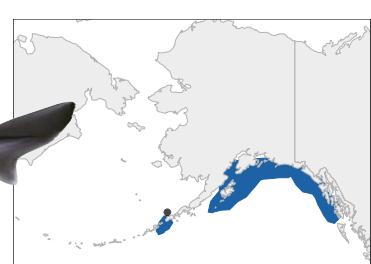
320

**Spiny Dogfish** *Squalus suckleyi*

Dorsal gray with silvery white ventral; body firm and rough textured; sharp spines at posterior margin of 1st and 2nd dorsal fins; single lateral keel on caudal peduncle

RANGE: Bering Sea to California

DEPTH: 50-900m SIZE: 160cm



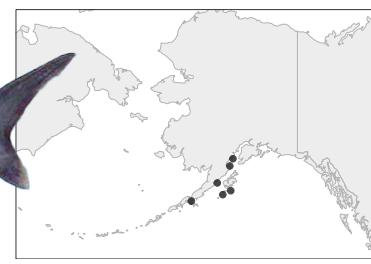
310

**Salmon shark** *Lamna ditropis*

Dorsal gray with white ventral; body stout; short conical snout; first dorsal fin located above pectoral fin; small secondary keel on caudal base

RANGE: Bering Sea to California

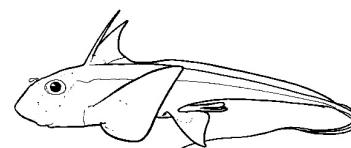
DEPTH: 0-1864m SIZE: 305cm



232

## RATFISH

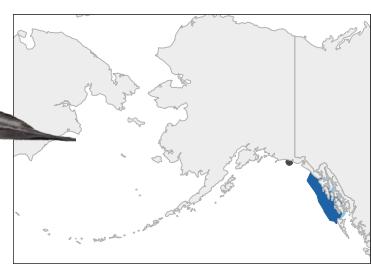
- Strong dorsal spine
- Single gill opening
- Tail long & pointed

**Spotted Ratfish** *Hydrolagus colliei*

Silvery color with various underlying colors; wavy lateral line branching on head area; scaleless body; males with claspers and projection on head

RANGE: SE Alaska to Baja California

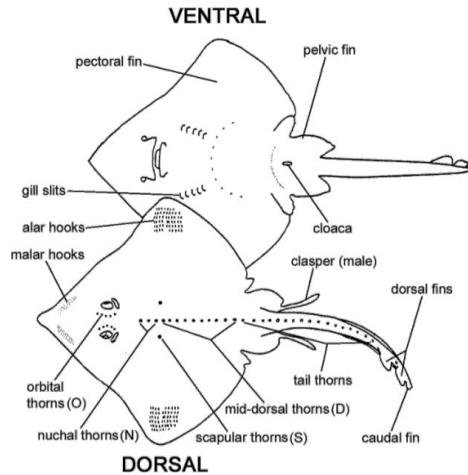
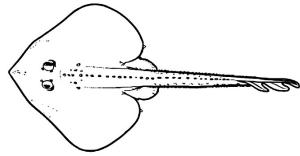
DEPTH: 3-900m SIZE: 97cm



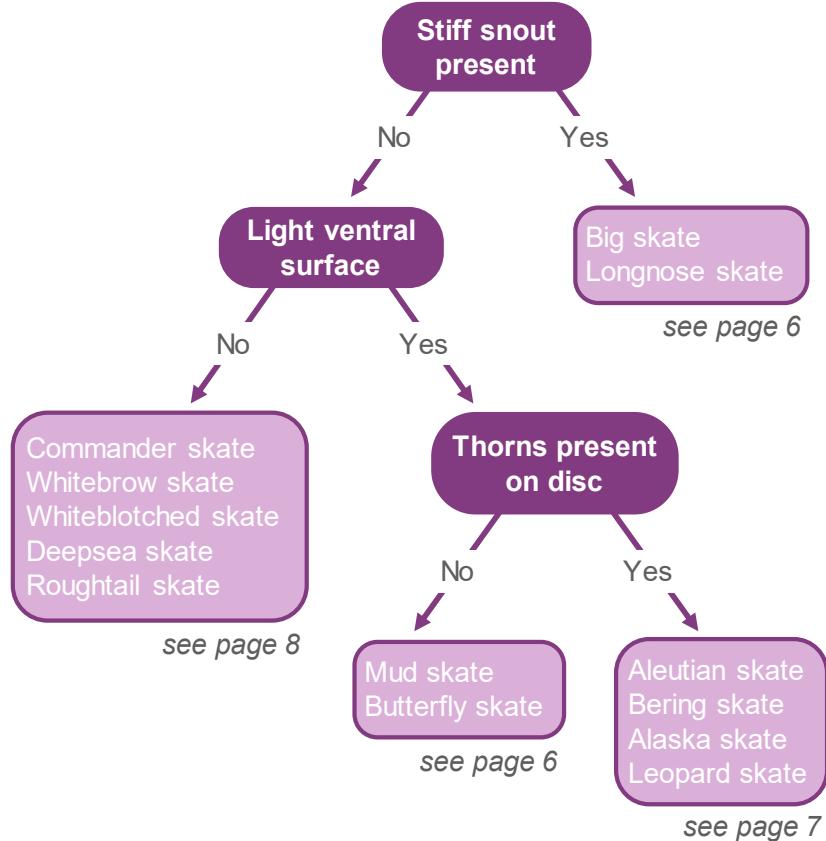
710

## SKATES

- Dorso-ventrally depressed body
- Enlarged pectoral fins

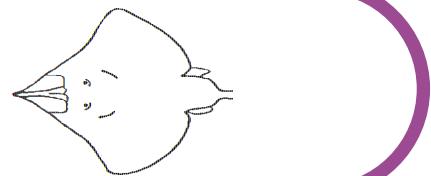


## SKATES



## STIFF SNOUT SKATES

- Stiff snout

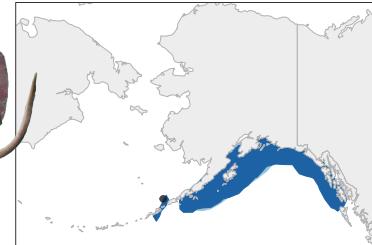


### Longnose Skate *Beringraja rhina*

Dorsal brown with dark blotches; dark gray to black ventrally; may have spots or ocelli on disc; elongated disc with pronounced snout; deeply notched pelvic fin; tail thorns strong and unevenly spaced

RANGE: Bering Sea to California

DEPTH: 55-675m SIZE: 137cm



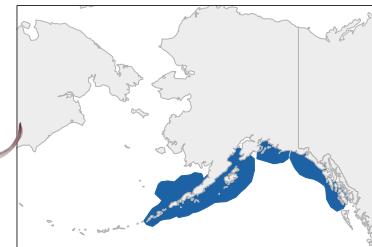
440

### Big Skate *Beringraja binoculata*

Dorsal gray, brown, or reddish brown; often with large ocellus surrounded by smaller spots on pectoral fins; white to light gray ventrally; may have orbital spines; may have one nuchal spine; mid-dorsal thorns start mid body; disc wide; shallow notch in pelvic fins

RANGE: Bering Sea to California

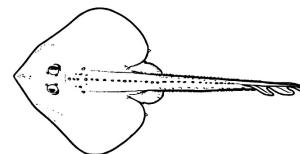
DEPTH: 23-800m SIZE: 244cm



420

## SOFT SNOUT SKATES

- Flexible snout
- LIGHT ventral surface
- Thorns ABSENT on disc



### Butterfly Skate *Bathyraja mariposa*

Dorsal distinctively mottled with bright yellow blotches and smaller black spots on a greenish brown background, distinct yellow band near base of tail; ventral surface white; orbital, scapular, nuchal, and mid-dorsal thorns absent; thorns on tail small; dorsal surface and tail covered in fine denticles; ventral side smooth; tail longer than precaudal length

RANGE: Aleutian Islands

DEPTH: 90-448m SIZE: 76cm



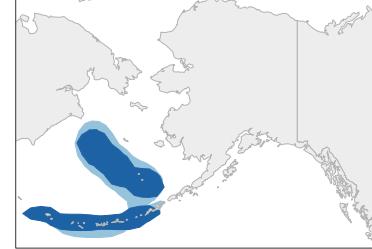
483

### Mud Skate *Bathyraja taranetzi*

Dorsal brown-gray with numerous small darker blotches; white or cream colored ventrally; light spot usually present on posterior pectoral fin; orbital, scapular, nuchal, and mid-dorsal thorns absent; thorns on tail small; dorsal surface and tail covered in fine denticles; ventral side smooth; tail longer than precaudal length

RANGE: Aleutian Islands; Bering Sea

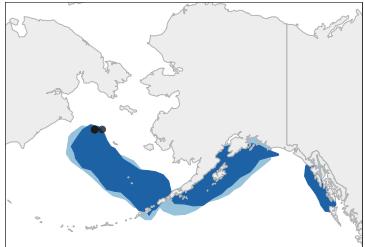
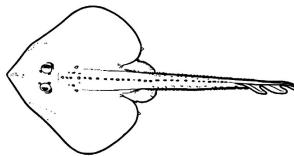
DEPTH: 190-590m SIZE: 70cm



455

## SOFT SNOUT SKATES

- Flexible snout
- LIGHT ventral surface
- Thorns PRESENT on disc



435



### Bering Skate *Bathyraja interrupta*

Dorsal light to dark brown; white ventrally; orbital thorns absent; scapular and nuchal thorns present; mid-dorsal thorns variable from complete row to absent; tail thorns present; fine denticles covering dorsal disc; tail length longer than precaudal length; thorn size decreases the length of the tail; no thorns between dorsal fins

**RANGE:** Bering Sea to California  
**DEPTH:** 55-1372m **SIZE:** 80cm

### Aleutian Skate *Bathyraja aleutica*

Dorsal light gray to dark gray, may have vague black ocellus on pectoral fins; ventral white with grayish margins; snout elongated; orbital thorns absent; scapular and nuchal thorns present; mid-dorsal thorns extend from nuchal area to dorsal fins and are continuous or interrupted; tail thorns present; dorsal side covered with fine denticles; tail length equal to or longer than precaudal length

**RANGE:** SE Alaska to Bering Sea; Japan  
**DEPTH:** 49-950m **SIZE:** 150cm

### Leopard Skate *Bathyraja panthera*

Dorsal greenish brown, with black and yellow vermiculations and blotches; creamy white ventrally; strong orbital, scapular, nuchal, mid-dorsal, and tail thorns present; total thorn count 31-42; large denticles on dorsal disc edges, with patches of smooth skin mid-body; tail thorns surrounded by naked area.

**RANGE:** western Aleutians  
**DEPTH:** 51-258m **SIZE:** 111cm

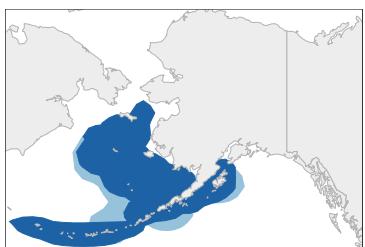
### Alaska Skate *Arctoraja parmiifera*

Dorsal dark brown to golden brown; may have lighter spots or be entirely blotchy; brown to white ventrally; strong orbital, scapular, nuchal, mid-dorsal, and tail thorns present; large denticles on dorsal disc edges with patches of smooth skin mid-body; tail length shorter than precaudal length; thorns strong the complete tail length with 1-2 strong thorns between dorsal fins

**RANGE:** Bering Sea to SE Alaska  
**DEPTH:** 18-600m **SIZE:** 112cm



477

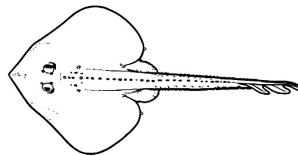


471



## SOFT SNOUT SKATES

- Flexible snout
- DARK ventral surface
- Thorns PRESENT on disc

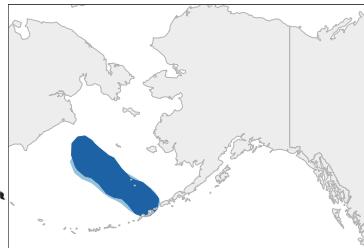
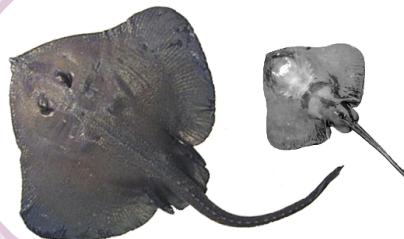


### Roughtail Skate *Bathyraja trachura*

Plum brown to black dorsally, ventral side plum brown to black; mouth and cloaca whitish; tail length shorter than precaudal length; scapular and orbital thorns absent; 0-3 nuchal thorns present; dorsal thorns absent; tail thorns present; dorsal surface covered in fine denticles; ventral side smooth

RANGE: Bering Sea; California; Japan

DEPTH: 490-1504m SIZE: 85cm



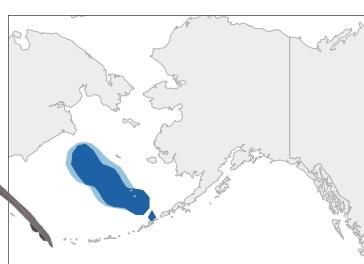
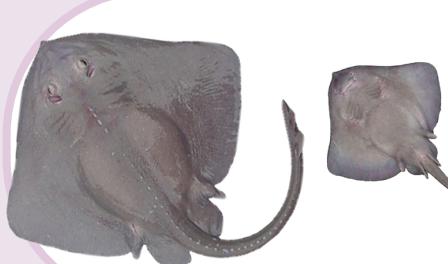
460

### Commander Skate *Bathyraja lindbergi*

Gray brown to black dorsally, ventral side gray to black, darker around pectoral and pelvic fin margins, white around mouth and nostrils; orbital and scapular thorns absent; mid-dorsal thorns present and continuous from scapular region to dorsal fins; enlarged claspers in males; few scattered dorsal denticles

RANGE: Bering Sea; Japan

DEPTH: 160-950m SIZE: 93cm



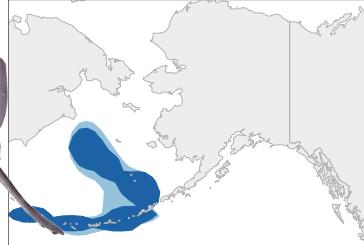
475

### Whiteblotched Skate *Bathyraja maculata*

Gray with scattered white or cream blotches dorsally; ventral side blotchy gray; no scapular or orbital thorns; tail thorns present; more than one strong nuchal thorn present; no mid-dorsal thorns; dorsal surface covered with denticles; ventral surfaces smooth

RANGE: Aleutian Islands to Bering Sea; Russia

DEPTH: 190-570m SIZE: 120cm



480

### Whitebrow Skate *Bathyraja minispinosa*

Gray brown to dark brown dorsally; ventral side brown or lighter; lips white; interorbital region generally white with white margins to orbits; orbital and scapular thorns absent; tail thorns present; several nuchal thorns present; mid-dorsal row of thorns discontinuous; minute fine denticles on dorsal side of disk

RANGE: Bering Sea; Japan

DEPTH: 160-1420m SIZE: 82cm



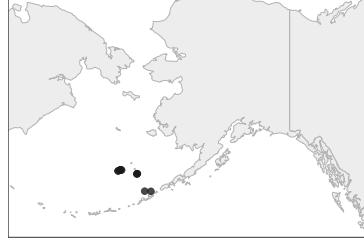
485

### Deepsea Skate *Bathyraja abyssicola*

Gray brown dorsally, ventral side gray brown; mouth and cloaca whitish; may have white blotches on ventral surface; snout elongate and pointed; tail length longer than precaudal length; scapular and orbital thorns absent; tail thorns present; 0-3 nuchal thorns present; mid-dorsal row of thorns present or absent; dorsal and ventral sides of disc and posterior portion of tail covered in fine denticles

RANGE: Bering Sea; California; Japan

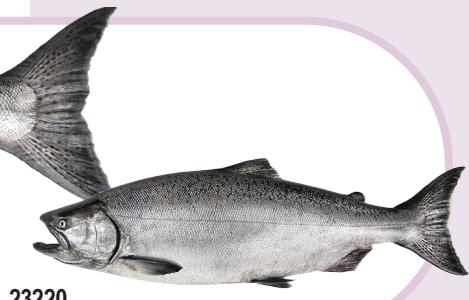
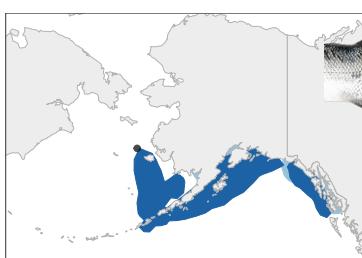
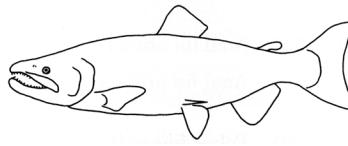
DEPTH: 362-2904m SIZE: 140cm



410

## SALMON & TROUT

- Adipose fin
- No spines in fins
- Pelvic axillary process present



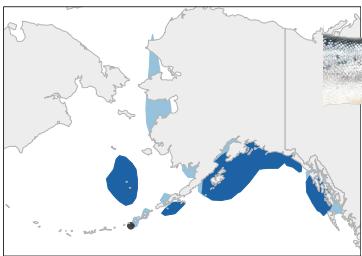
23220

### Chinook Salmon *Oncorhynchus tshawytscha*

Caudal fin with spots on both lobes and silver wash. Black gums; large scales (140 - 153 in first row above lateral line). Sea-run coloration closely resembles steelhead trout, dark tongue is good distinguishing characteristic.

**RANGE:** Abundant north and south of the Alaska Peninsula.

**SIZE:** 147cm



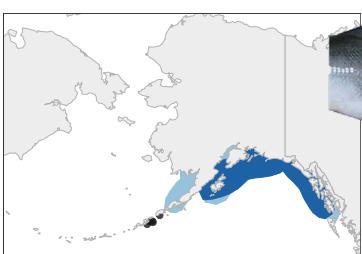
23230

### Pink Salmon *Oncorhynchus gorbuscha*

No silver on caudal fin; large oval blotches on both lobes of caudal fin; light gums; small scales (170-229 in first row above lateral line).

**RANGE:** Abundant north and south of the Alaska Peninsula.

**SIZE:** 76cm



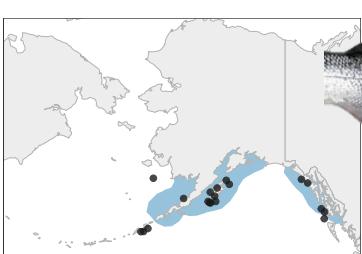
23225

### Coho Salmon *Oncorhynchus kisutch*

Silver wash on caudal fin rays and membranes; spots on upper lobe of tail only; light gums; large scales (118-147 in first row above lateral line).

**RANGE:** Abundant north and south of the Alaska Peninsula.

**SIZE:** 99cm



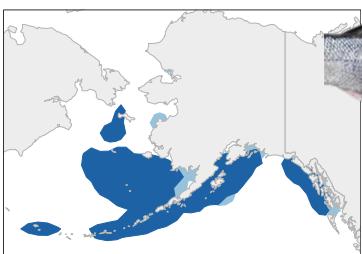
23240

### Sockeye Salmon *Oncorhynchus nerka*

No spots or silver on caudal fin; Dorsal fin, anal fin, and tail not edged with black; tail base not slender; gill rakers long, slender, closely spaced (28-40 on first arch); large scales (125-143 in first row above lateral line).

**RANGE:** Abundant north and south of the Alaska Peninsula.

**SIZE:** 84cm



23235

### Chum Salmon *Oncorhynchus keta*

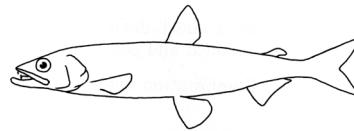
No spots on caudal fin; silver streaking on caudal fin rays only; no silver on caudal membranes. Dorsal fin, anal fin, and tail edged with black; slender tail base; gill rakers short, stout, not closely spaced (18-26 on first arch); large scales (130-153 in first row above lateral line).

**RANGE:** Abundant north and south of the Alaska Peninsula.

**SIZE:** 102cm

## SMELT

- Adipose fin
- No pelvic axillary process
- Lower jaw protruding

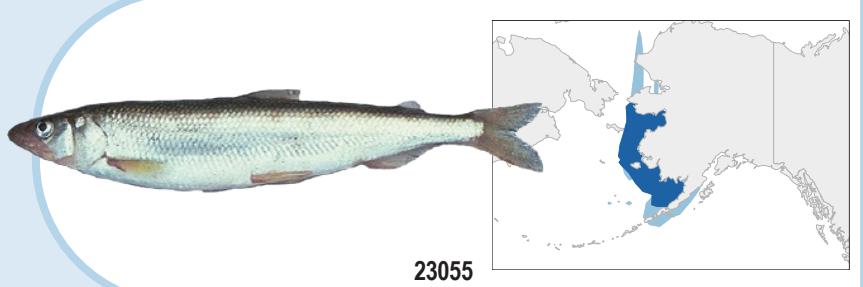


### Rainbow Smelt *Osmerus mordax*

Pelvic fin starting behind the origin of the dorsal fin; medium sized scales (62-72 along the lateral line); no concentric striae on gill covers. Adipose fin rounded, attached only in front.

RANGE: Bering Sea to Vancouver, B. C.

DEPTH: coastal SIZE: 33cm

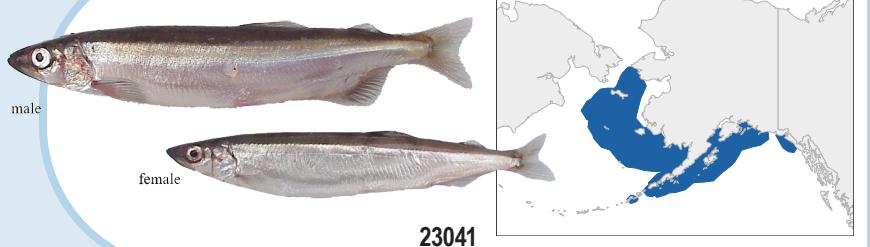


### Pacific capelin *Mallotus villosus*

Bright silver color; small scales (more than 125 along lateral line); cucumber smell when fresh.

RANGE: Korea to Strait of Juan de Fuca, Bering Sea

DEPTH: pelagic SIZE: 23cm

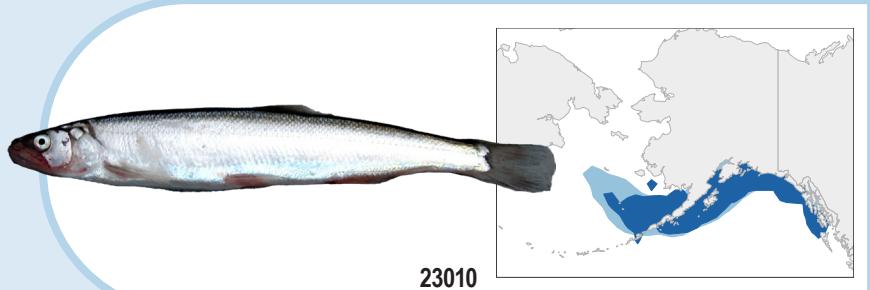


### Eulachon *Thaleichthys pacificus*

Pelvic fin starting in front of the dorsal fin; medium-sized scales (70-80 along lateral line); concentric striae on gill covers. Adipose fin rounded, attached only in front.

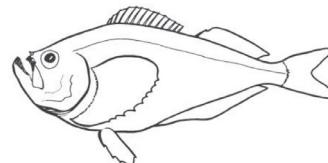
RANGE: Bering Sea to Monterey Bay.

DEPTH: coastal SIZE: 25cm



## SANDFISH

- Two separated dorsal fins
- Large, upward mouth with fringed lips

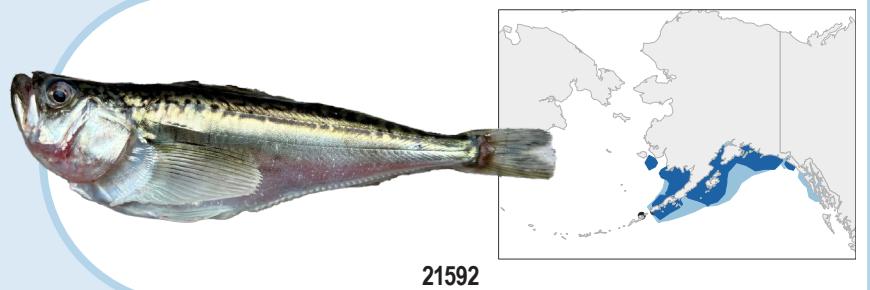


### Pacific Sandfish *Trichodon trichodon*

Fringed lips; low first dorsal fin with 13-15 spines.

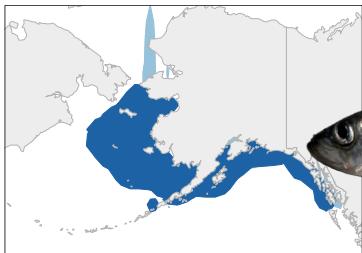
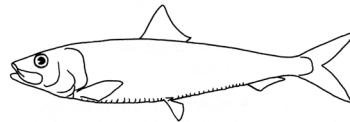
RANGE: Japan to California; Bering Sea

DEPTH: 3-375m SIZE: 31cm



## HERRING

- Ventral scutes present
- No scales on head
- Large scales on body



21110



21130

### Pacific Herring *Clupea pallasii*

Single, short dorsal fin; large scales; silver-blue color; no lateral line.

RANGE: Korea to Baja California, Bering Sea.

DEPTH: pelagic SIZE: 46cm

### Pacific Sardine *Sardinops sagax*

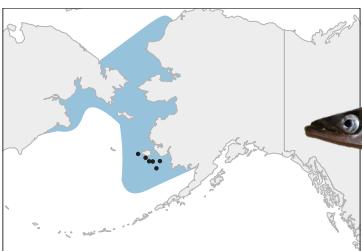
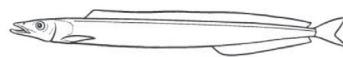
Single, short dorsal fin; large scales; dark spots on sides; gill cover striated.

RANGE: Kamchatka, SE Alaska to Mexico

DEPTH: pelagic SIZE: 41cm

## SANDLANCE

- Elongate body
- Single elongate dorsal fin
- Projecting lower jaw



20203

### Arctic Sandlance *Ammodytes hexapterus*

Long slender body; silver or silver-blue color; elongate flap of skin on either side of abdominal ridge.

RANGE: Sea of Japan to southern California, Bering Sea.

DEPTH: 0-40m SIZE: 28cm



20204

### Pacific Sandlance *Ammodytes personatus*

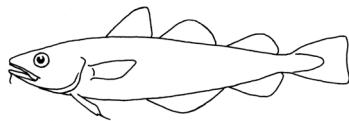
Long slender body; silver or silver-blue color; elongate flap of skin on either side of abdominal ridge.

RANGE: Eastern Bering Sea, Aleutian Islands to Calif

DEPTH: 0-40m SIZE: 28cm

## CODS

- Three dorsal fins
- Fins without spines
- Caudal fin not tapering to point

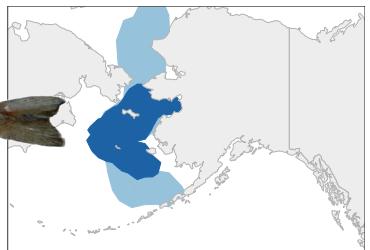


### Arctic Cod *Boreogadus saida*

Barbel present, but minute; caudal fin deeply forked; eye smaller, snout shorter, and head profile more rounded than walleye pollock; teeth in upper jaw in a spaced series; 9-11 gill rakers in upper arch.

**RANGE:** Bering Sea from Bristol Bay north, Arctic.

**DEPTH:** 0-731m **SIZE:** 40cm



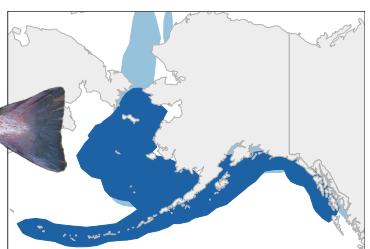
21725

### Walleye Pollock *Gadus chalcogrammus*

Barbel absent; caudal fin slightly forked or truncate; eyes large; snout long, head profile flattened; teeth in upper jaw in a velvet-like band; 5-7 gill rakers on upper arch.

**RANGE:** Japan to central California, Bering Sea.

**DEPTH:** 0-366m **SIZE:** 91cm



21740

### Pacific Cod *Gadus macrocephalus*

Barbel about as long as eye diameter; anus below second dorsal fin

**RANGE:** Japan to southern California, Bering Sea.

**DEPTH:** 12-549m **SIZE:** 114cm



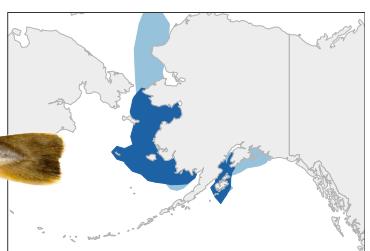
21720

### Saffron Cod *Eleginor gracilis*

Barbel length approximately equal to pupil diameter; anus under space between first and second dorsal fin, or under rear edge of first dorsal fin; first dorsal fin not high, tip barely reaching origin of second dorsal fin when depressed

**RANGE:** Japan to British Columbia, Bering Sea

**DEPTH:** 0-60m **SIZE:** 55cm



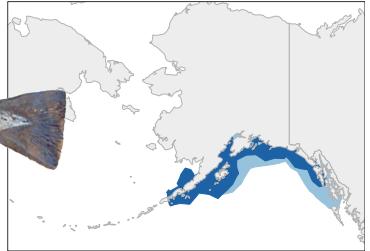
21735

### Pacific Tomcod *Microgadus proximus*

Barbel length approximately equal to pupil diameter; anus below last quarter of first dorsal fin; eye smaller than Pacific cod; first dorsal fin high, tip extends past origin of second dorsal fin when depressed

**RANGE:** Bering Sea to central California.

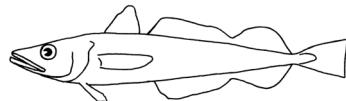
**DEPTH:** 27-219m **SIZE:** 30cm



21710

## HAKE

- Two dorsal fins
- Small deciduous scales
- No chin barbel



### Pacific Hake *Merluccius productus*

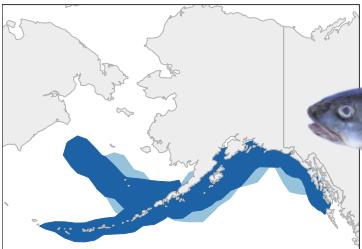
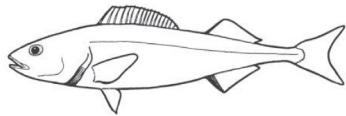
Two dorsal fins and one anal fin, the second dorsal and anal both deeply notched; barbel absent.

RANGE: Sea of Japan to Mexico, Bering Sea.

DEPTH: 0-914m SIZE: 91cm

## SABLEFISH

- Two dorsal fins
- Head without ridges or spines
- Spines in fins



### Sablefish *Anoplopoma fimbria*

Streamlined body shape; two short dorsal fins and one short anal fin, without deep notches; body color in small specimens blue-green to copper-brown, in larger specimens black to dark gray.

RANGE: Japan to Baja California, Bering Sea

DEPTH: 305-1829m SIZE: 99cm

CODS, HAKES, &  
SABLEFISH

## GRENADIERS

- Two dorsal fins (second elongate)
- Chin barbel present
- No distinct caudal fin

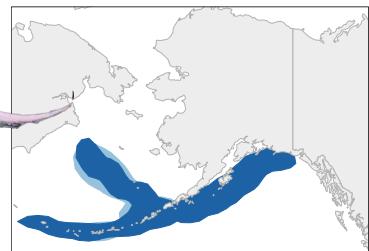


### Giant Grenadier *Albatrossia pectoralis*

Scales very deciduous, body silvery gray scaled, white to gray without scales; maxillary reaching posterior edge of eye or beyond; snout with rounded spine becoming embedded in large specimens; 2 spinous and 6-10 (usually 8-9) soft rays in the 1st dorsal fin; 6-8 (usually 7) pelvic fin rays; 13-15 long pyloric caeca; large watery body; comb-shaped otolith.

RANGE: Bering Sea to S Calif; Japan

DEPTH: 140-1200m SIZE: 150cm



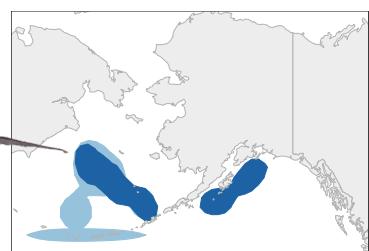
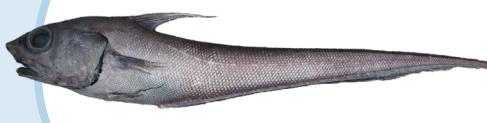
21230

### Pacific Grenadier *Coryphaenoides acrolepis*

Scales stout and adherent; body light gray to jet black with scales; maxillary to mid-orbit; prominent snout armed with tubercular scales; suborbital shelf completely covered with scales; 2 spinous and 9-12 (usually 9 or 10) soft rays in the 1st dorsal fin; 8-9 (usually 8) pelvic fin rays; 12-15 long pyloric caeca; otolith a rounded disk; large swim bladder which often everts stomach out of the mouth.

RANGE: Bering Sea to S Calif; Japan

DEPTH: 600-2500m SIZE: 90cm



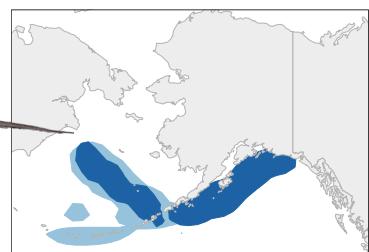
21220

### Popeye Grenadier *Coryphaenoides cinereus*

Scales somewhat deciduous, body gray with scales, white without scales; maxillary to mid-orbit; prominent snout spine; narrow suborbital shelf with few scales; 2 spinous and 10-12 (usually 10 or 11) soft rays in the 1st dorsal fin; 8-10 (usually 9) pelvic fin rays; 5-8 short pyloric caeca (shorter than eye diameter); otolith a rounded disk.

RANGE: Bering Sea to Calif; Japan

DEPTH: 225-2832m SIZE: 56cm



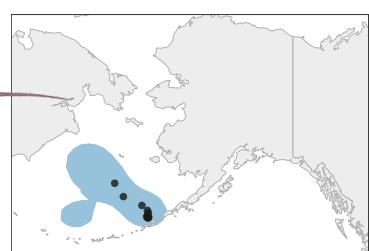
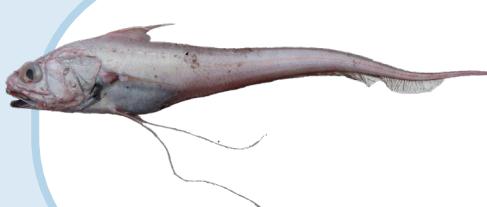
21232

### Longfin Grenadier *Coryphaenoides longifilis*

Scales small and somewhat adherent, body light brown with lighter head, maxilla to rear edge of eye; rounded blunt snout without spines; 2 spinous and 12-14 (usually 13) soft rays in the 1st dorsal fin; 9-10 pelvic fin rays; greatly elongated outermost pelvic ray (about 1.5 times head length); 10-12 long pyloric caeca; otolith a rounded disk.

RANGE: Bering Sea, Japan

DEPTH: 700-1700m SIZE: 79cm



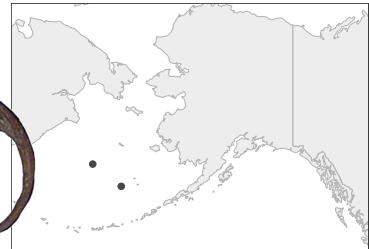
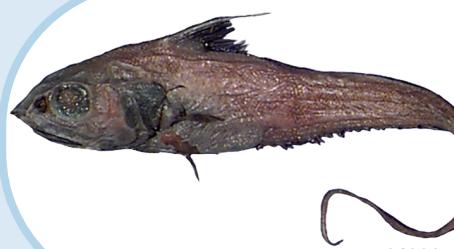
21239

### Filamented Grenadier *Coryphaenoides filifer*

Scales somewhat adherent, head and body dark brown with darker fin tips and chin area; maxillary to rear of orbit; prominent strong snout spine; narrow suborbital shelf with many scales; 2 spinous and 8-14 (usually 12-13) soft rays in the 1st dorsal fin; 9-10 pelvic fin rays; about 10 long pyloric caeca; otolith a rounded disk.

RANGE: Bering Sea to S Calif; Japan

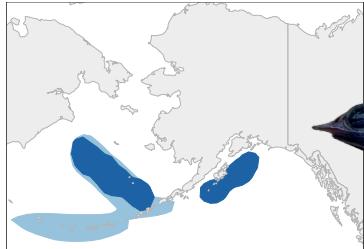
DEPTH: 2065-2904m SIZE: 71cm



21238

## CODLINGS

- Body tapering to narrow caudal peduncle
- Caudal fin distinct
- Small cycloid scales



21731



### Flatnose Codling *Antimora microlepis*

Head short; snout pointed; chin barbel short. Color variable from pale but definite blue gray or olive green throughout to deep violet or blue black; darker on outer edges of fins and very dark on edge of caudal and fins on ventral part of body; dark on lower part of gill cover and branchiostegals

RANGE: Bering Sea to Calif; Japan

DEPTH: 125-3000m SIZE: 75cm



21727



### Slender Codling *Halargyreus johnsonii*

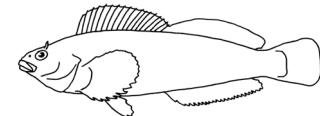
Eye large, its diameter about equal to snout length. Lower jaw slightly projecting; chin barbel absent. Anal fin originating at about the midlength of body, deeply indented; pectoral fins not reaching to anal fin origin. Outer 2 pelvic rays elongate. Anterior gill rakers of 1st arch longer than gill filaments. Ventral light organ absent. Color is generally pale, silvery in fresh specimen; urobranchial cavity black

RANGE: Bering Sea to Calif; Japan

DEPTH: 450-3000m SIZE: 56cm

## GREENLINGS

- Five lateral lines (except in lingcod)

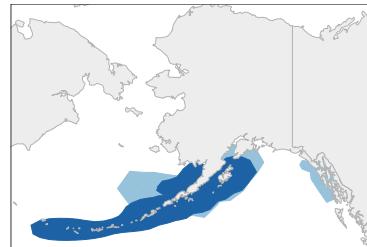


### Kelp Greenling *Hexagrammos decagrammus*

Two pairs of cirri; First pair of cirri prominent, second pair small and inconspicuous; males blueish or blue-gray; females yellow brown or golden; both sexes with black, brown or copper spots.

RANGE: Aleutian Islands to southern California.

DEPTH: 46m SIZE: 53cm



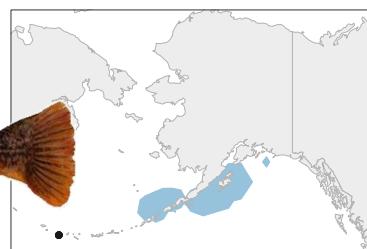
21935

### Rock Greenling *Hexagrammos lagocephalus*

One pair of cirri; Cirri short and fleshy or long and feather-like; color variable, females are often solid mahogany colored, males are often blotched with bright red and black with turquoise bands near the mouth.

RANGE: Bering Sea, Aleutian Islands to southern California; Japan.

DEPTH: 80m SIZE: 61cm



21934

### Masked Greenling *Hexagrammos octogrammus*

Tail rounded, Tail-base wide. Greater than snout length; color variable, white blotches if present are larger than those of white-spotted greenling (below).

RANGE: Bering Sea, Aleutian Islands to British Columbia; Japan.

DEPTH: 31m SIZE: 28cm



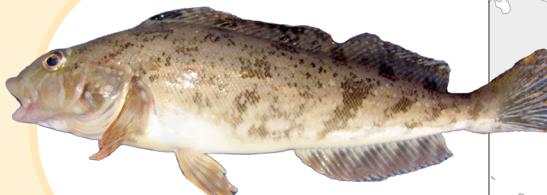
21931

### Whitespotted Greenling *Hexagrammos stelleri*

Tail slightly forked; Tail-base slender, less than snout length; small white spots on a dark background.

RANGE: Arctic, Bering Sea, Aleutian Islands, Puget Sound; Japan.

DEPTH: 175m SIZE: 41cm



21932

### Atka Mackerel *Pleurogrammus monopterygius*

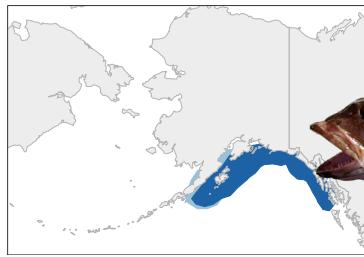
Tail strongly forked; Body with series of dark and light vertical bars; strongly forked caudal fin; single continuous dorsal fin; 5 lateral lines

RANGE: Bering Sea to California; Japan.

DEPTH: 0-300m SIZE: 51cm



21921



21910



**Lingcod** *Ophiodon elongatus*

Lateral line single; Large mouth with sharp teeth; color variable, usually with dark brown or copper blotches arranged in clusters.

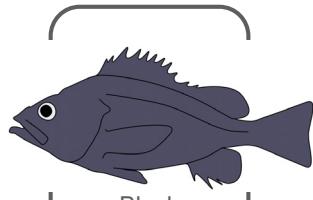
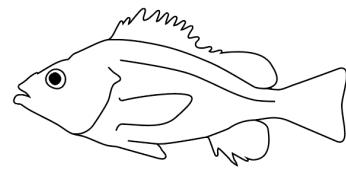
RANGE: Gulf of Alaska to Baja California.

DEPTH: 475m SIZE: 152cm

## ROCKFISHES

### ROCKFISHES

- Head usually with ridges and spines
- Body compressed
- Conspicuous spines in fins



**Peritoneum  
white**

No

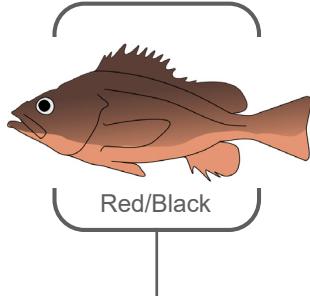
Widow Rockfish  
Dusky Rockfish  
Dark Rockfish

see page 24

Yes

Black Rockfish  
Silvergrey Rockfish  
Yellowtail Rockfish

see page 25



**Second anal spine  
longer than third**

No

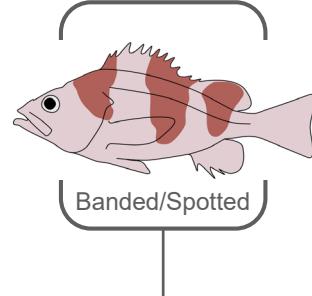
Northern Rockfish  
Quillback Rockfish  
Copper Rockfish

see page 26

Yes

Greenstriped Rockfish  
Puget Sound Rockfish

see page 25

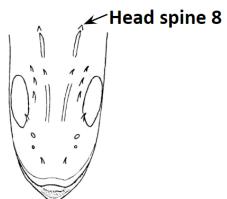
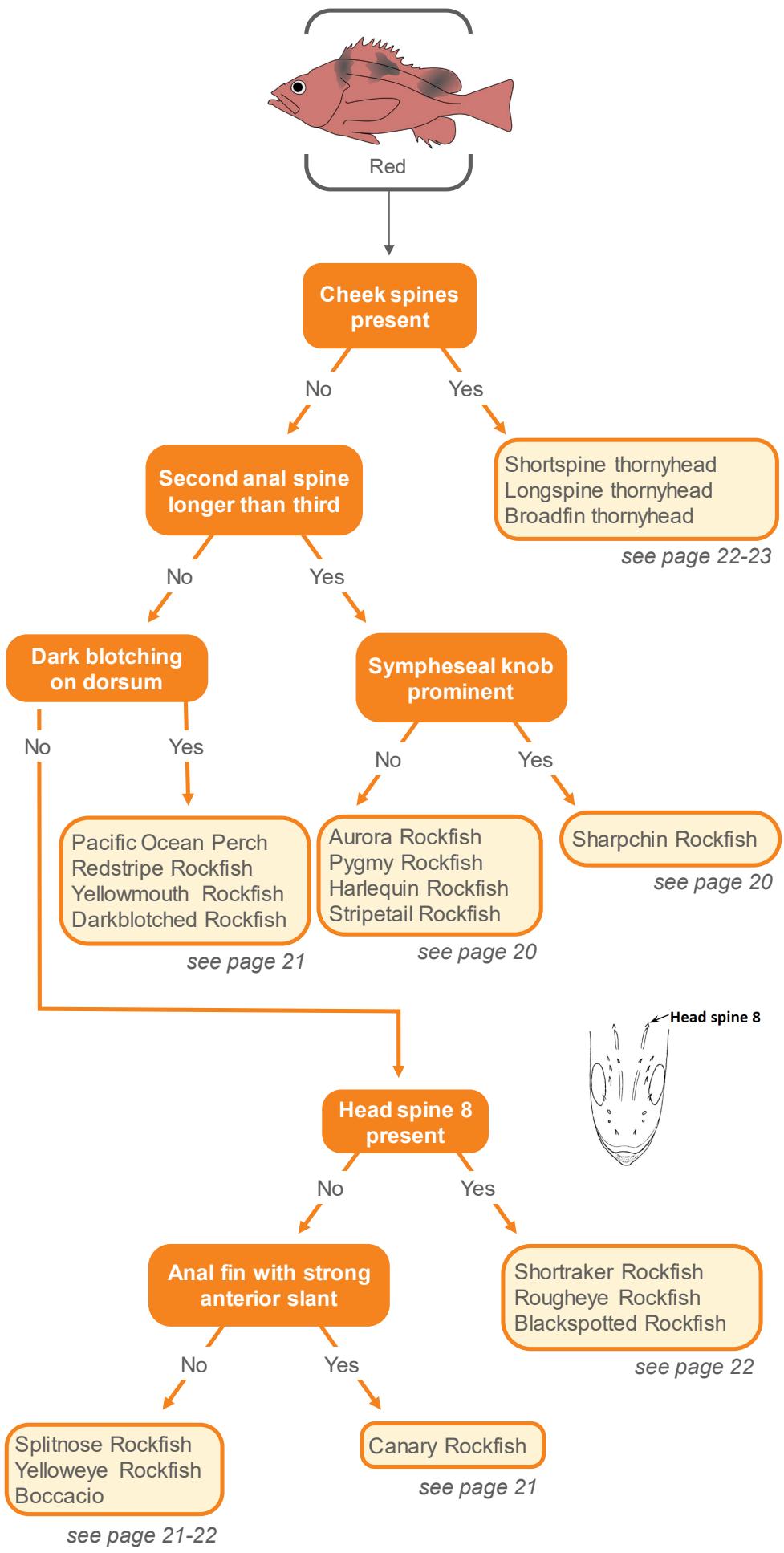


**Banded/Spotted**

Redbanded Rockfish  
Tiger Rockfish  
Rosethorn Rockfish

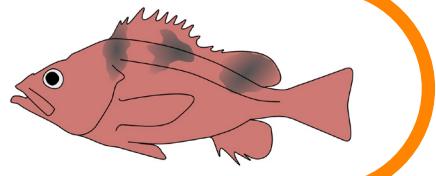
see page 23

## ROCKFISHES



## RED ROCKFISHES

A light background coloration of orange, yellow, or, most commonly, red. Typically, dark blotches are present on the back and often extend from the base of the dorsal fin to below the lateral line; these blotches may be diffuse or relatively discrete.



### Aurora Rockfish *Sebastodes aurora*

Body red-orange, peritoneum dark to spotted; symphyseal knob small, maxilla to mid eye; anal spine 2 longer than 3; head spines 1,2,4,5,7; lower operculum margin with out distinct spines.

**RANGE:** British Columbia - Southern California

**DEPTH:** 81-893m **SIZE:** 41cm



30090



### Stripetail Rockfish *Sebastodes saxicola*

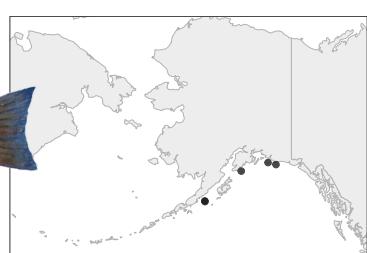
Body yellow-pink w/ light green, caudal-fin with broken dark greens stripes, dorsal blotches faint, peritoneum dark; symphyseal knob moderate, maxilla to mid eye; anal spine 2 longer than 3; head spines 1,2,4,5,7

**RANGE:** Gulf of Alaska - Baja California

**DEPTH:** 100-547m **SIZE:** 41cm



30490



### Harlequin Rockfish *Sebastodes variegatus*

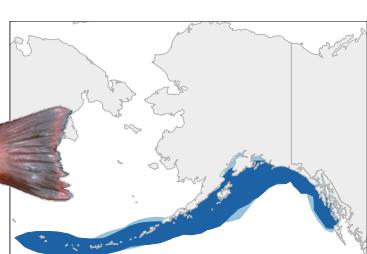
Body light red with yellow, dark forked bar from eye to operculum, posterior 3/4 of lateral line light; dark brown blotches on back broken by lateral line, gill cavity white with yellow mottling, peritoneum black; symphyseal knob moderate, maxilla to mid eye; anal spine 2 longer and stronger than 3; head spines 1,2,4,5,7.

**RANGE:** Bering Sea - Washington

**DEPTH:** 100-558m **SIZE:** 37cm



30535



### Pygmy Rockfish *Sebastodes wilsoni*

Body light brown, flushed w/ red, about 4 dark blotches along base of dorsal fin, a brownish red stripe below lateral line; peritoneum dark; maxilla to midorbit; symphyseal knob moderate; anal spine 2 longer than 3; anal fin margin perpendicular; head spines strong, count 1,2,4,5,7.

**RANGE:** Gulf of Alaska - Southern California

**DEPTH:** 30-274m **SIZE:** 23cm



30550



### Sharpchin Rockfish *Sebastodes zacentrus*

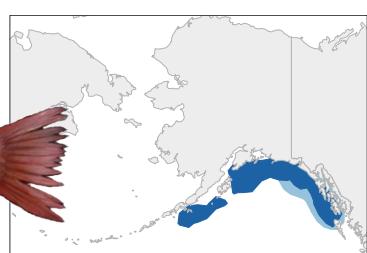
Body light red with yellow, dark forked bar from eye to operculum, dark blotches on back extending below lateral line, gill cavity white with yellow mottling, peritoneum black; symphyseal knob strong, maxilla to mid eye; anal spine 2 longer and stronger than 3; head spines 1,2,4,5,7

**RANGE:** Aleutian Islands - Southern California

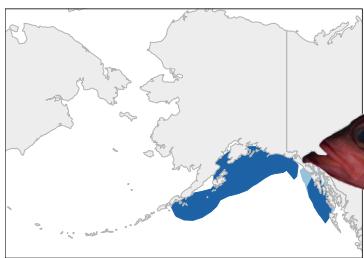
**DEPTH:** 25-444m **SIZE:** 39cm



30560



## ROCKFISHES



30430



### Redstripe Rockfish *Sebastodes proriger*

Body light red mottled with olive dorsally and yellow laterally, lateral line in a clear red zone bordered by yellow green, lips blackened, upper portion of spinous dorsal fin black, peritoneum dark; symphyseal knob long, sharp, and prominent; anal spine 2 about equal to 3; head spines 1,2,4,5,7.

**RANGE:** Bering Sea - Baja California

**DEPTH:** 100-425m **SIZE:** 52cm



30600

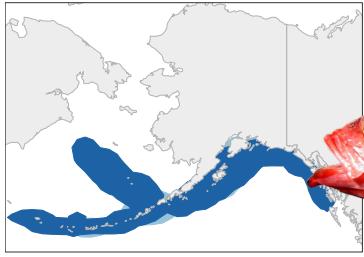


### Yellowmouth Rockfish *Sebastodes reedi*

Body red with yellow-orange, black blotch on operculum, diffuse mottling on dorsum, jaws red with black tips, oral cavity pinkish with yellow and black blotches, gill cavity black, peritoneum gray with black dots; symphyseal knob moderate blunt; maxilla to mideye or rear of orbit; anal spine 2 shorter than 3; anal fin margin slanted slightly posterior; head spines 1,2,3,4,5,7.

**RANGE:** Gulf of Alaska - Central California

**DEPTH:** 141-366m **SIZE:** 51cm



30060

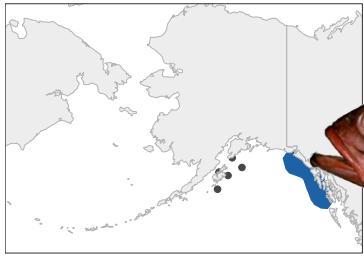


### Pacific Ocean Perch *Sebastodes alutus*

Body light red with yellow-orange, distinct short blotches at dorsal-fin base, diffuse black blotch on operculum; peritoneum gray with black dots or all black; symphyseal knob long, sharp, and prominent; maxilla to mideye or rear of orbit; anal spine 2 about equal to 3; head spines 1,2,(3),4,5,7.

**RANGE:** Bering Sea - Baja California

**DEPTH:** 100-825m **SIZE:** 55cm



30170



### Darkblotched Rockfish *Sebastodes crameri*

Body reddish w/ five black blotches, extending across lateral line; peritoneum dark; body deepest at origin of dorsal fin, symphyseal knob small, maxilla to mid eye; anal spine 2 equal to 3; head spines 1,2,3,4,5,7,(8).

**RANGE:** Bering Sea - Southern California

**DEPTH:** 100-600m **SIZE:** 45cm



30410



### Canary Rockfish *Sebastodes pinniger*

Body olive-gray mottled with bright orange, fins orange, peritoneum light; pelvic fins pointed often extending to vent; anal fin pointed with strong anterior slant; head spines 1,2,3,4,5,7.

**RANGE:** Gulf of Alaska - Baja California

**DEPTH:** 50-425m **SIZE:** 76cm



30470



### Yelloweye Rockfish *Sebastodes ruberrimus*

Body bright orange-yellow with some red on dorsum, peritoneum light; symphyseal knob small, maxilla posterior to eye; anal spine about equal to 3; head spines rough, count 1,2,3,4,5,7.

**RANGE:** Aleutian Islands - Baja California

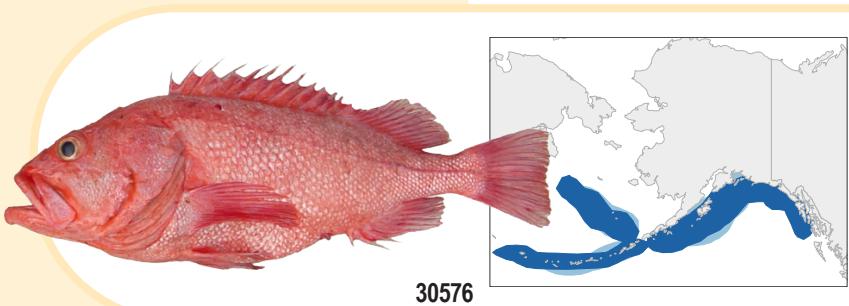
**DEPTH:** 50-475m **SIZE:** 91cm

**Shortraker Rockfish** *Sebastodes borealis*

Body red or pinkish with vague vertical red bars, fins reddish, pectoral and pelvic fins often edged with black, oral and gill cavities red or red-black, gill rakers short in larger fish; peritoneum silvery gray with black dots; anal fin rounded; suborbital spines 0-1; head spine strong, count 1,2,3,4,5,(6),7,8

RANGE: Bering Sea - Southern California

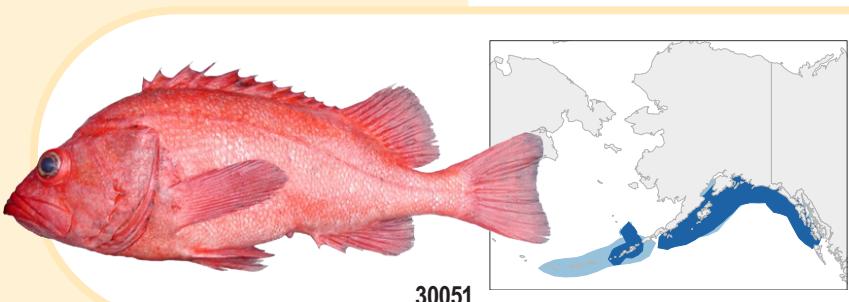
DEPTH: 100-875m SIZE: 108cm

**Rougheye Rockfish** *Sebastodes aleutianus*

Body red or pink red, w/ mottling and traces of dusky bars, fins red, all edged with black, oral, gill cavities, pectoral-fin base under operculum light, gill rakers and dorsal spines shorter than in *S. melanostictus*; peritoneum light with black dots; anal fin margin slightly rounded; suborbital spines 2-10; head spines strong, count 1, 2,3,4,5,6,7,8

RANGE: Bering Sea - Southern California

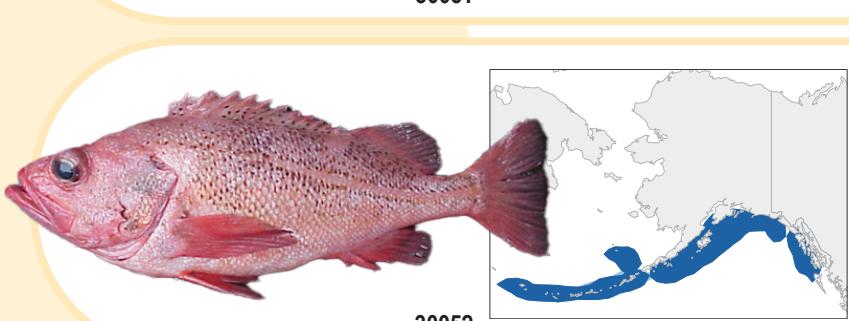
DEPTH: 100-600m SIZE: 97cm

**Blackspotted Rockfish** *Sebastodes melanostictus*

Body red or dark, w/ distinct spots above lateral line, fins reddish, w/ distinct spots, all fins edged with black, oral, gill cavities, pectoral-fin base under operculum dark, gill rakers and 1st dorsal spine longer than in *S. aleutianus*; peritoneum light with black dots; anal fin margin slightly rounded; suborbital spines 2-10; head spines strong, count 1, 2,3,4,5,6,7,8.

RANGE: Bering Sea to California; western Pacific

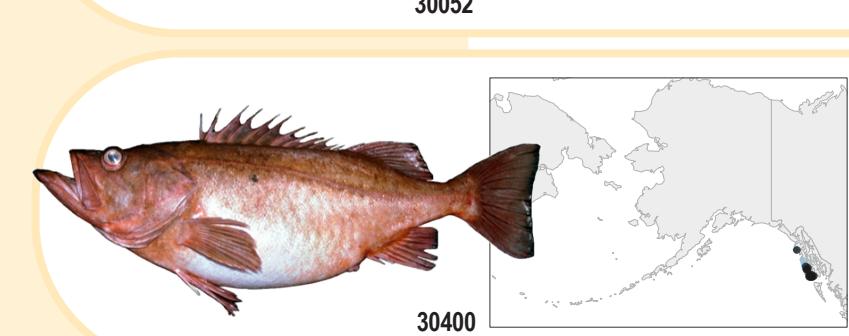
DEPTH: 250-875m SIZE: 97cm

**Bocaccio** *Sebastodes paucispinis*

Body brick red, bright red, light brown, copper brown, or golden; small brown spots laterally, peritoneum white (peritoneum with black dots in juveniles); symphyseal knob absent; lower jaw massive, strongly projecting; maxilla beyond rear edge of eye; anal spines small; head spines 1,7.

RANGE: Gulf of Alaska - Baja California

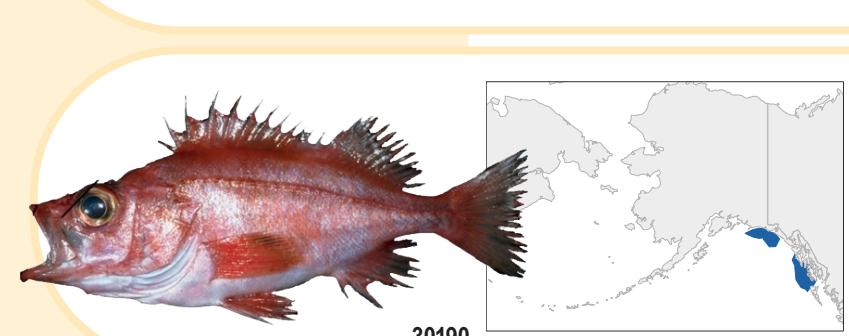
DEPTH: 50-475m SIZE: 91cm

**Splitnose Rockfish** *Sebastodes diploproa*

Body rose-red, peritoneum dark; upper jaw with deep notch, symphyseal knob small, maxilla to mid eye; anal spine 2 about equal to 3; head spines 1,2,4,5,7; lower operculum margin with distinct spines.

RANGE: Gulf of Alaska - Baja California

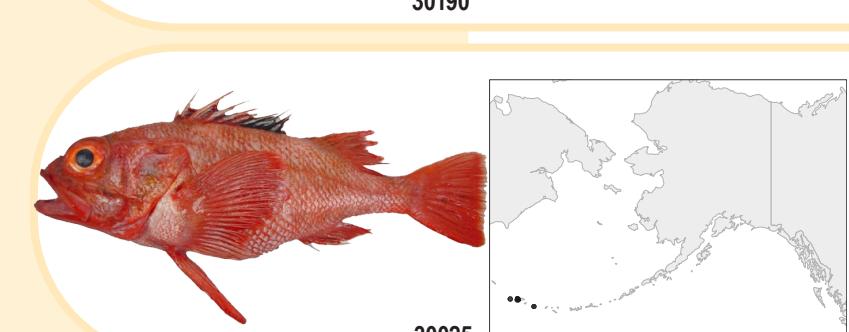
DEPTH: 150-800m SIZE: 45cm

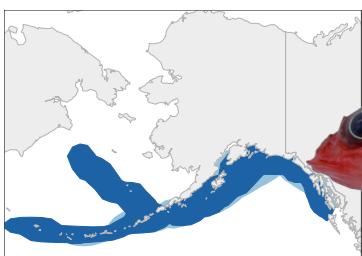
**Broadfin Thornyhead** *Sebastolobus macrochir*

Body bright red, one or more large black spots on posterior half of dorsal and anal fins, gill cavity red; dorsal spine 4 longer than 3; cheek spines strong, 8-10; pectoral fin notched with lower rays elongate and often with highly branched tips; body and caudal peduncle relatively deep; anal spine 2 longer than 3; head spines 1,2,3,4,5,7,8..

RANGE: Bering Sea to Aleutians; western Pacific-

DEPTH: 110-1504m SIZE: 35cm





30020

**Shortspine Thornyhead** *Sebastolobus alascanus*

Body bright red-orange to pink, one or more large black spots on posterior half of dorsal and anal fins, gill cavity red; dorsal spine 4 longer than 3; cheek spines strong, 8-10; pectoral fin notched with lower rays elongate; body and caudal peduncle relatively narrow; anal spine 2 longer than 3; head spines 1,2,3,4,5,7,8.

RANGE: Bering Sea - Baja California

DEPTH: 305-1775m SIZE: 75cm

**Longspine Thornyhead**
*Sebastolobus altivelis*

Body bright red, one or more large black spots on posterior half of dorsal and anal fins; gill cavity dark; dorsal spine 3 longer than 4; cheek spines strong, 8-10; pectoral fin notched with lower rays elongate; body and caudal peduncle relatively narrow; anal spine 2 longer than 3; head spines 1,2,3,4,5,7,8.

RANGE: Gulf of Alaska - Baja California

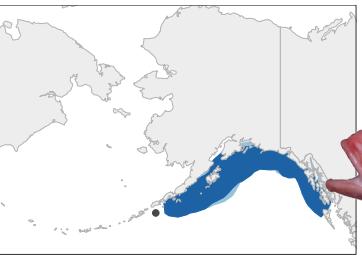
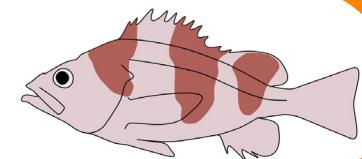
DEPTH: 305-1775m SIZE: 38cm



30030

**BANDED/  
SPOTTED  
ROCKFISHES**

Banded species possess 4-6 discrete vertical bands of dark color (red to black) on a light background of white, pink, or yellow. Spotted rockfishes possess a light colored body with 2-5 pale areas (spots) above the lateral line



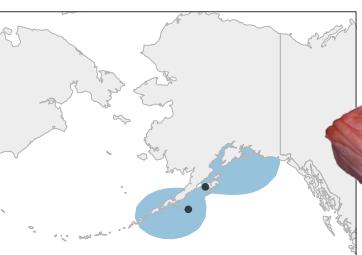
30475

**Redbanded Rockfish** *Sebastodes babcocki*

Body light pink w/ several broad vertical dark-red bands on white or pink background; anal spine 2 longer than 3; head spines 1,2,4,5,7.

RANGE: Bering Sea - Southern California

DEPTH: 49-625m SIZE: 56cm



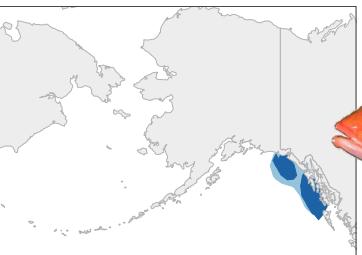
30380

**Tiger Rockfish** *Sebastodes nigrocinctus*

Body light red to orange w/ several narrow vertical black-red bands on pink to orange background; anal spine 2 longer than 3; head spine rough, count 1,2,4,5,7.

RANGE: Gulf of Alaska - Southern California

DEPTH: 10-274m SIZE: 61cm



30270

**Rosethorn Rockfish** *Sebastodes helvomaculatus*

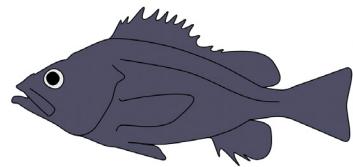
Body orange yellow with light olive olive mottling on back, 4-5 clear white blotches bordered with light pink or orange on upper part of body, lateral line pink, oral cavity yellow, opercle dusky, fins pink with some yellow-green, peritoneum dark to gray with spots; symphyseal knob moderately strong; maxilla to rear edge of pupil; anal spine 2 much longer than 3; head spines 1,2,3,4,5,7,(8).

RANGE: Gulf of Alaska - Baja California

DEPTH: 25-549m SIZE: 41cm

## BLACK ROCKFISHES

Species have predominantly dark background coloration. Most are a uniform dark color, ranging from black to brown with darker blotching or pale areas on the dorsum and lightening to white, gray, or pink ventrally.



### Dark Rockfish *Sebastodes ciliatus*

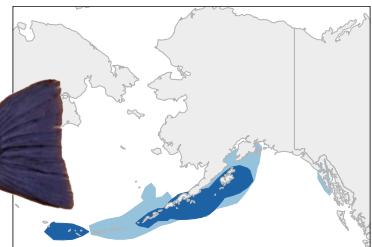
Body black to dark blue-gray, dark at anal-fin base; occasional pink on breast; peritoneum jet black; maxilla to rear edge of eye; symphyseal knob small to moderate; anal spine 2 shorter than 3; anal fin margin nearly vertical; head spines weak, count 1,7.

RANGE: Bering Sea, Aleutians to British Columbia

DEPTH: 6-160m SIZE: 47cm



30151



### Widow Rockfish *Sebastodes entomelas*

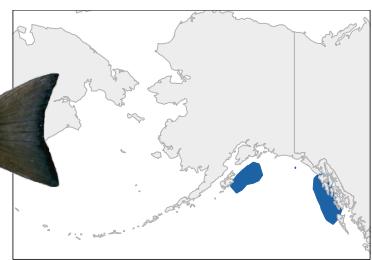
Body uniform dusky-brown, with traces of light yellow-red; fins brown to black; peritoneum dark; maxilla to midorbit; symphyseal knob small; anal spine 2 shorter than 3; anal fin membranes black, margin with strong posterior slant; head spines weak, count 1,2,(3),(4),(5),(7).

RANGE: Gulf of Alaska - Baja California

DEPTH: 100-375m SIZE: 59cm



30220



### Dusky Rockfish *Sebastodes variabilis*

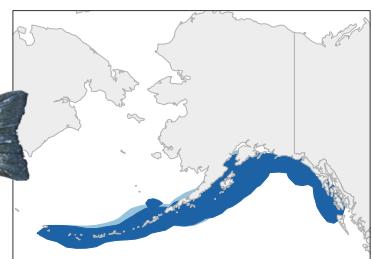
Body tan to dark gray, pinkish red to white ventrally, light at anal-fin base; peritoneum light to dark; maxilla to rear edge of eye; symphyseal knob strong; anal spine 2 shorter than 3; anal fin margin nearly vertical; head spines weak, count 1,7

RANGE: Bering Sea, Aleutians to Oregon; W Pacific

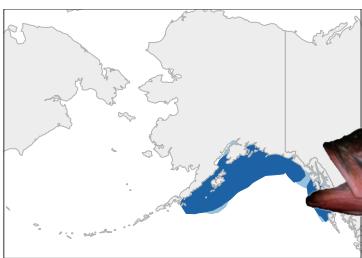
DEPTH: 6-675m SIZE: 59cm



30152



## ROCKFISHES



30100

### Silvergray Rockfish *Sebastodes brevispinis*

Body dark gray green to black dorsally with silver on sides and red-orange to white ventrally, lips washed with black, outer edges of lower fins washed with black, peritoneum light ed; maxilla to rear edge of eye; lower jaw massive and projecting; symphyseal knob large; anal spine 2 about equal to 3; anal fin margin nearly vertical to slightly slanting anteriorly; head spines 1,2,7.

**RANGE:** Bering Sea - Southern California

**DEPTH:** 100-375m **SIZE:** 71cm



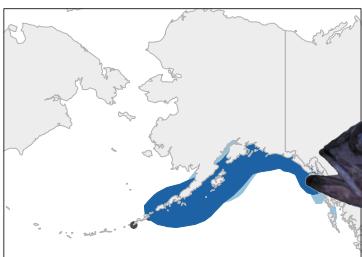
30240

### Yellowtail Rockfish *Sebastodes flavidus*

Body grayish brown with brassy yellow wash, especially on tail, becoming light gray on side and white ventrally, peritoneum white; maxilla to rear edge of orbit; symphyseal knob strong; anal spine 2 shorter than 3; anal fin membranes gray, margin nearly vertical; head spines weak, count 1,(2),(7).

**RANGE:** Gulf of Alaska - Southern California

**DEPTH:** 50-549m **SIZE:** 66cm



30330

### Black Rockfish *Sebastodes melanops*

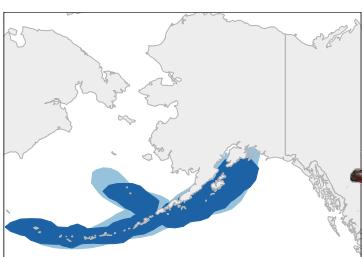
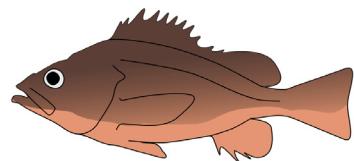
Body black dorsally, gray to white ventrally, dark at anal-fin base, peritoneum white; maxilla to rear edge of eye; symphyseal knob obsolete; anal spine 2 shorter than 3; anal fin margin rounded; head spines weak, count 1,(4).

**RANGE:** Bering Sea to Baja California

**DEPTH:** 0-366m **SIZE:** 64cm

## RED/BLACK ROCKFISHES

Species possess almost equal proportions of light and dark colors, as the label suggests, which makes selecting either the red or black category difficult. No unifying color pattern is apparent among these fishes.



30420

### Northern Rockfish *Sebastodes polispinus*

Body dark gray-green on reddish background; strong oblique light band on pectoral fin; peritoneum dark; dorsal fin spines 14; maxilla to rear edge of orbit; symphyseal knob strong; anal spine 2 shorter than 3; anal fin margin perpendicular; head spines strong, count 1,(2),(4),7.

**RANGE:** Bering Sea - British Columbia

**DEPTH:** 50-625m **SIZE:** 40cm



30210

### Puget Sound Rockfish *Sebastodes emphaeus*

Body copper-red w/ indefinite olivaceous blotches; peritoneum dark; maxilla to midorbit; symphyseal knob small; anal spine 2 longer than 3; anal fin margin perpendicular; head spines strong, count 1,2,4,5,7.

**RANGE:** Gulf of Alaska - Northern California

**DEPTH:** 10-366m **SIZE:** 18cm

## ROCKFISHES

### Copper Rockfish *Sebastodes caurinus*

Body dark brown to olive, washed with copper-pink and often splashed with yellow, posterior lateral line and lower side white, peritoneum light; maxilla to rear edge of orbit; symphyseal knob obsolete; anal spine 2 about equal to 3; anal fin margin rounded; head spines strong, count 1,2,4,5,7.



30120



RANGE: Gulf of Alaska - Baja California

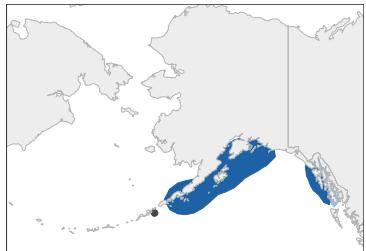
DEPTH: 183m SIZE: 58cm

### Quillback Rockfish *Sebastodes maliger*

Body gray to brown mottled w/ yellow on anterior portion of body, w/ orange-brown spotting on breast; peritoneum light; maxilla to rear edge of orbit; symphyseal knob obsolete; dorsal spines deeply incised; anal spine 2 about equal to 3; anal fin margin rounded; head spines strong, count 1,2,4,5,7.



30320

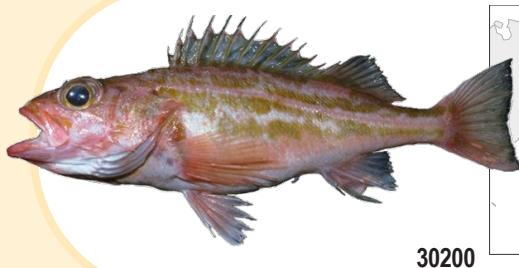


RANGE: Gulf of Alaska - Southern California

DEPTH: 9-274m SIZE: 61cm

### Greenstriped Rockfish *Sebastodes elongatus*

Body pink w/ four mottled, horizontal green stripes on sides of pinkish body; peritoneum dark; maxilla to midorbit; symphyseal knob obsolete; anal spine 2 longer than 3; anal fin margin perpendicular; head spines strong, count 1,2,4,5,7.



30200

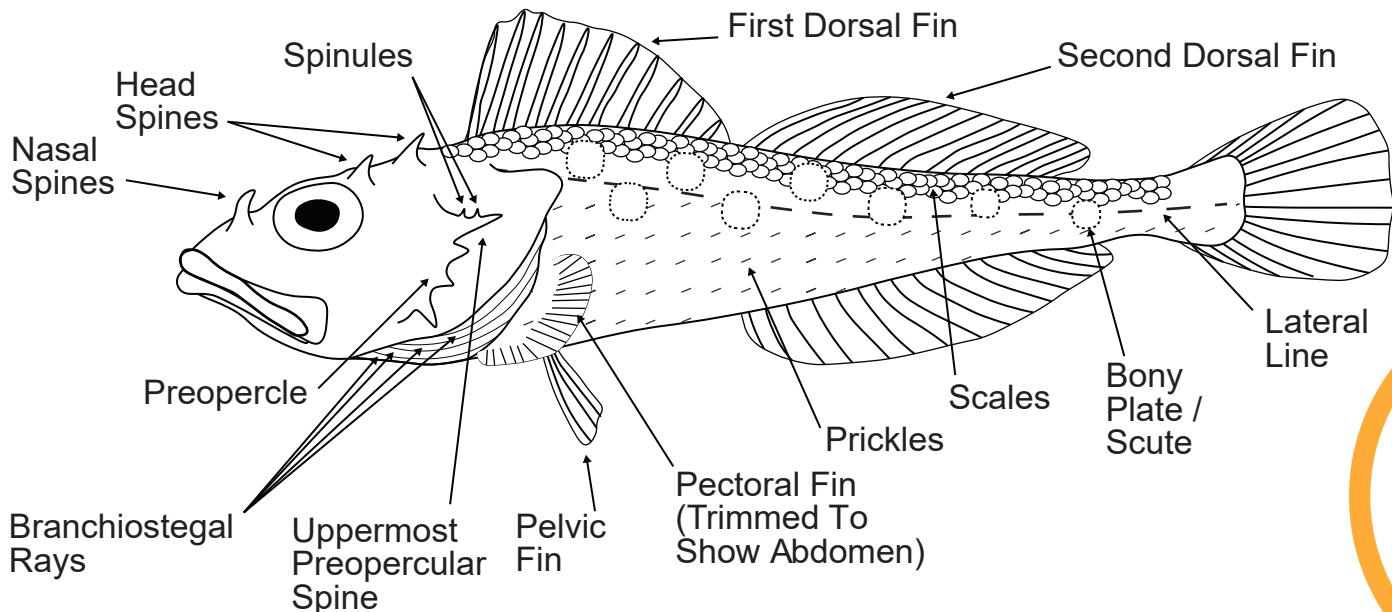
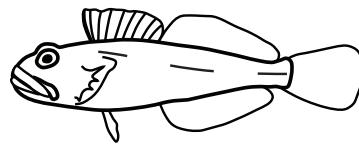


RANGE: Gulf of Alaska - Baja California

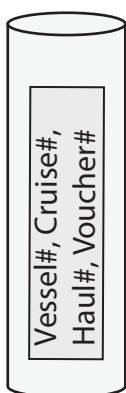
DEPTH: 100-491m SIZE: 43cm

## SCULPINS

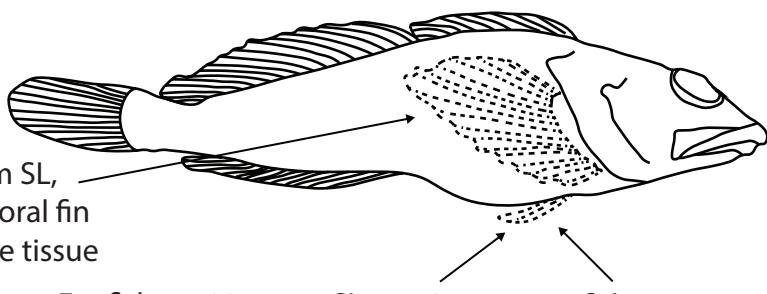
- Large head, tapering body
- Scales modified or absent
- Enlarged preopercular spines



**Tissue sample instructions:** tissue sample should be placed in an otolith vial filled with 95% ethanol along with the vessel, cruise, haul, and voucher number of the specimen. Tighten the cap and place the tissue vial into the same bag as the specimen before placing in formalin.



For fishes < 100 mm SL,  
remove entire pectoral fin  
from one side as the tissue  
sample.\*

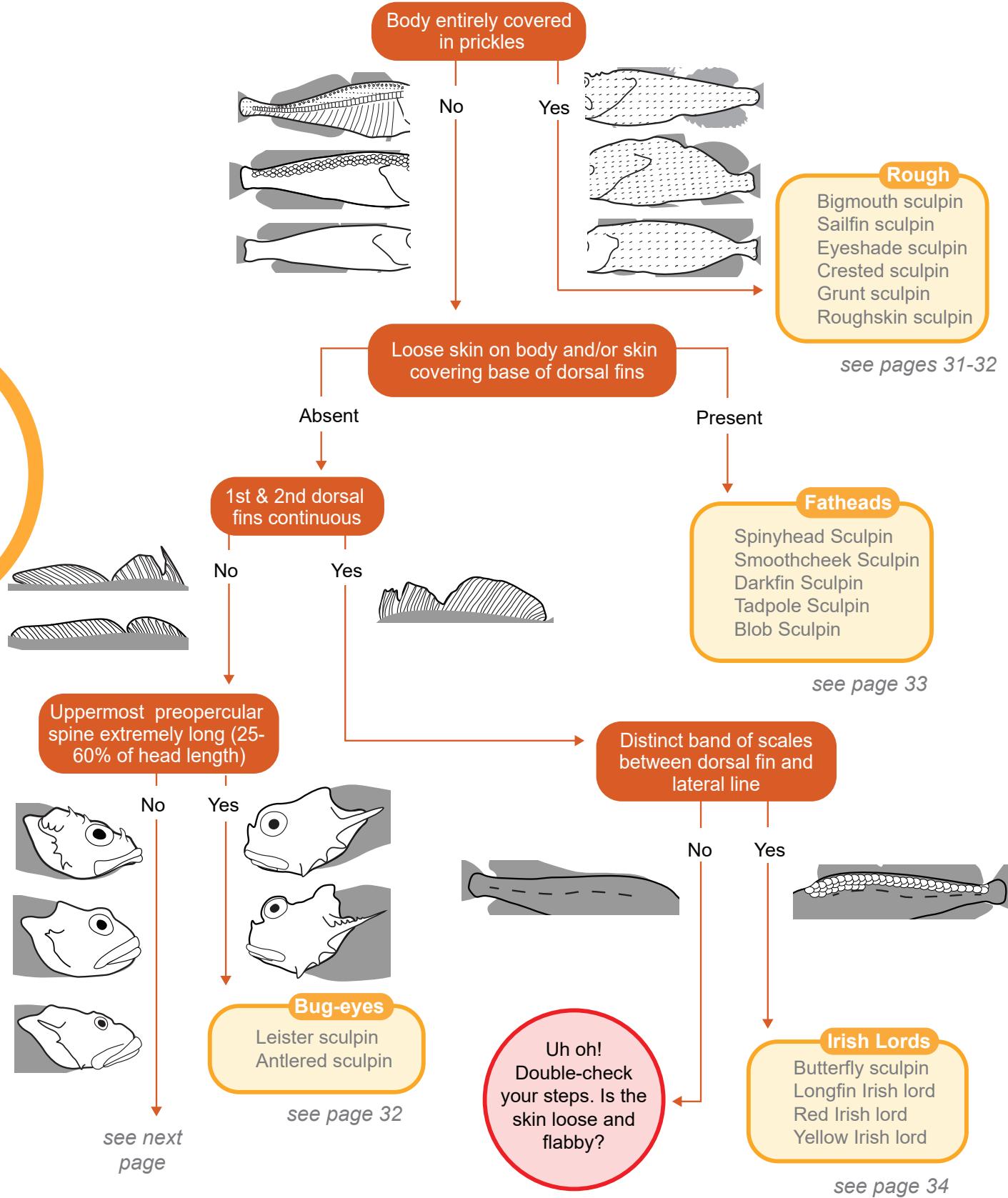


For fishes 100 mm < SL < 150  
mm, remove entire pelvic fin  
from one side as the tissue  
sample.\*

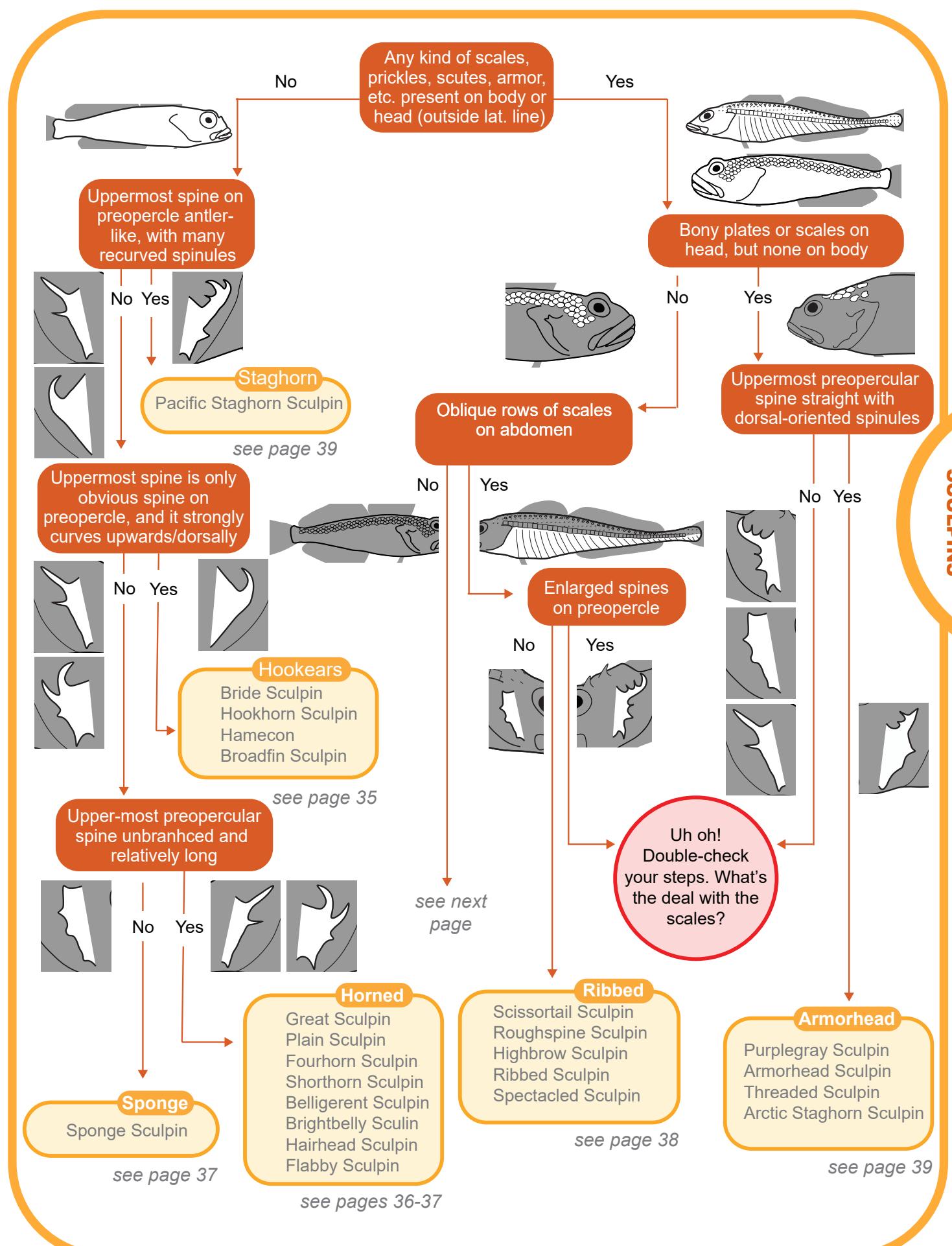
For fishes >150 mm SL , remove  
portion of the pelvic fin.\*

\*In all cases, the total volume of tissue should be approximately the size of the eraser on a pencil.

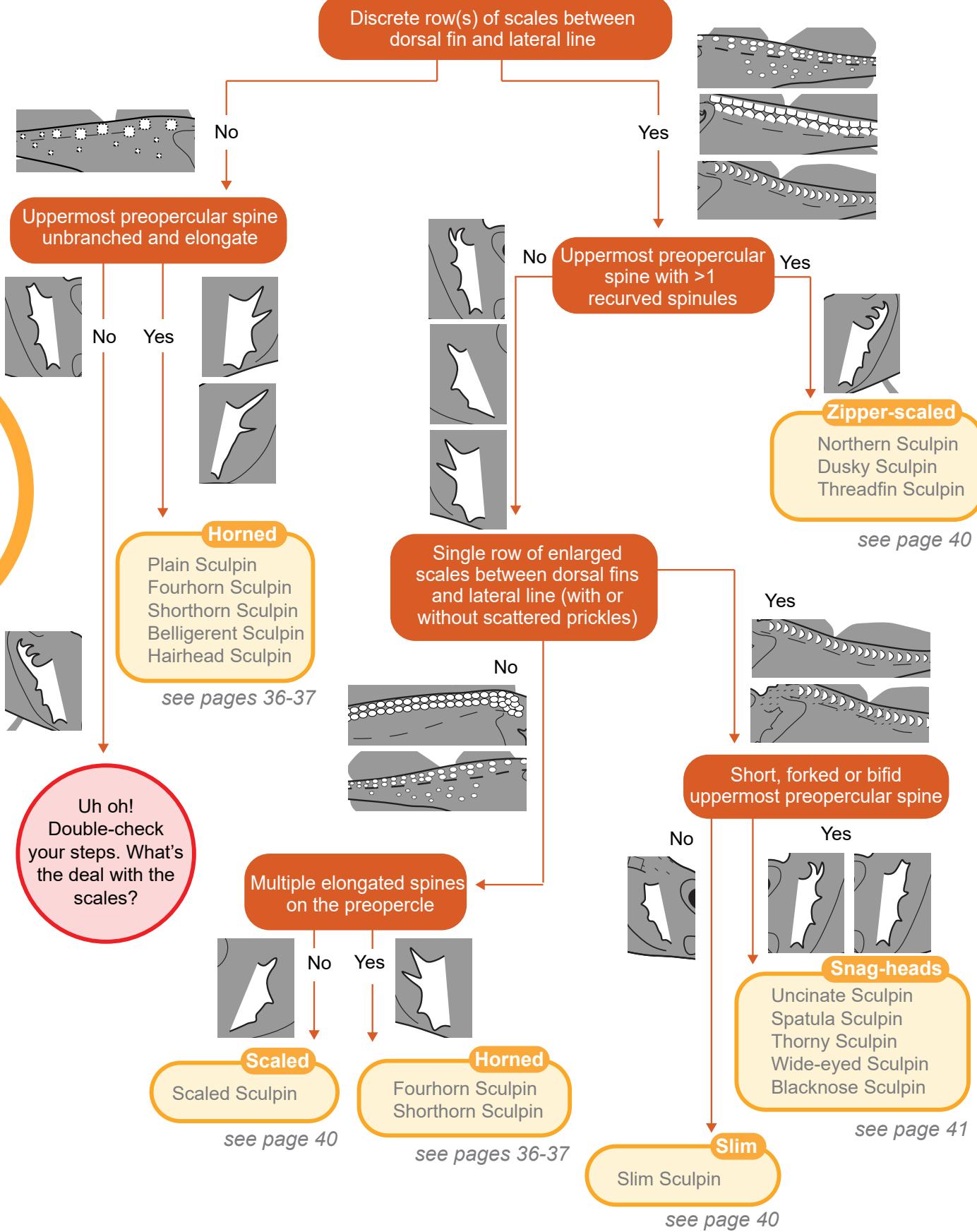
## SCULPINS



# SCULPINS

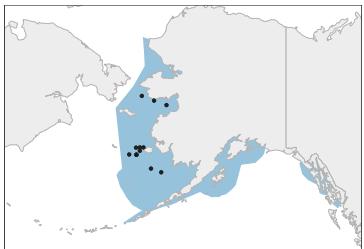
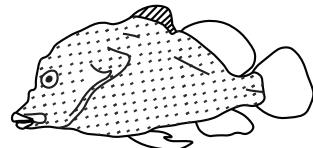


# SCULPINS



## ROUGH SCULPINS

- Entire body covered in prickles and small spines
- Prickles may be covered with skin, forming papillae



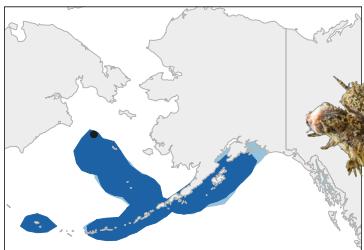
21397

### Crested Sculpin *Blepsias bilobus*

Body color orange to brownish with darker mottling, belly orange, red around mouth; cirri on snout and lower jaw; no notch in 1st dorsal fin; dense scales cover entire body; pectoral rays 15-17

RANGE: Bering Sea to BC; Japan

DEPTH: 0-90m SIZE: 27cm



21420

### Bigmouth Sculpin *Hemitripterus bolini*

Body color mottled gray to brown, 4-5 vague dark bars across body, 2 tan stripes across head; lower jaw projects beyond upper; head with many bumps; first few dorsal spines similar in size to succeeding ones; body covered with small papillae, pectoral rays 20-23

RANGE: Bering Sea to California

DEPTH: 75-300m SIZE: 73cm



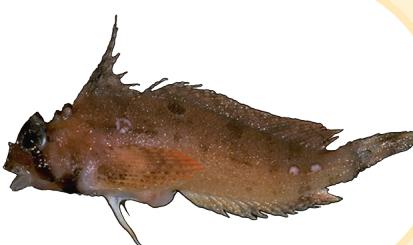
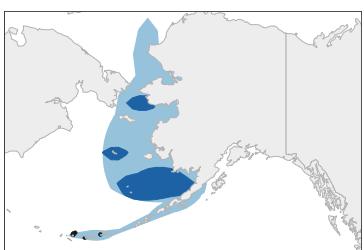
21406

### Sailfin Sculpin *Nautichthys oculofasciatus*

Body color yellowish brown to gray, black bars on back, 1st dorsal fin black, distinctive black diagonal line through eye; large dark cirrus on eyeball; 1st 4-5 dorsal spines greatly elongated; pectoral rays 13-14

RANGE: Bering Sea to California; Russia

DEPTH: 0-10m SIZE: 20cm



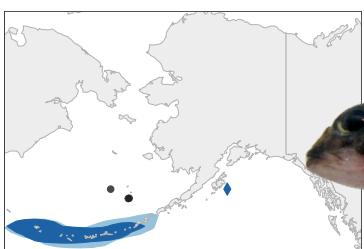
21405

### Eyeshade Sculpin *Nautichthys pribilovi*

Body color light brownish, 4 dorsal spots with dark rim, black band across eye; 1st dorsal spine longest; spiny scales on both dorsals and pectoral fins; rounded spines on top of head; pectoral rays 14-17

RANGE: Chukchi Sea to SE Alaska; Japan

DEPTH: 2-126m SIZE: 10cm



21444

### Roughskin Sculpin *Rastrinus scutiger*

Body color dark with four dark blotches dorsally, small white spots along lateral line, light patches around anus and base of caudal fin, two white spots at base of pectoral fin; preopercular spines short, upper simple or bifid; no row of scales or plates dorsally; body and head widely covered with small prickly scales

RANGE: Aleutian Islands to Gulf of Alaska

DEPTH: 120-512m SIZE: 10cm

**Grunt Sculpin** *Rhamphocottus richardsonii*

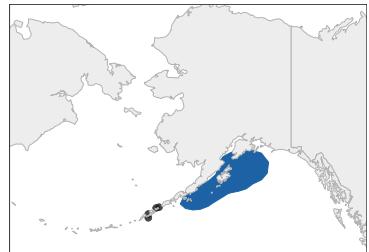
Body cream color with dark brown streaks and red blotches; elongate snout; 2 blunt ridges on head; body covered with embedded scales

**RANGE:** Gulf of Alaska to S California

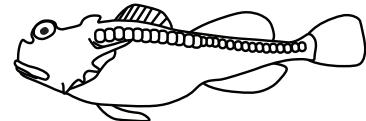
**DEPTH:** 0-165m **SIZE:** 8cm



21415

**BUG-EYED SCULPINS**

- Bony plates on lateral line
- Extremely elongate preopercular spine

**Antlered Sculpin** *Enophrys diceraus*

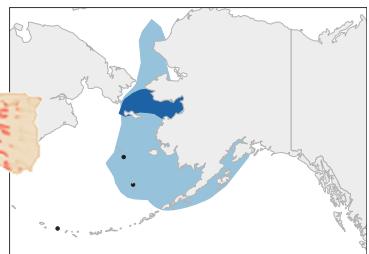
Body color highly variable, maroon after death with bluish bones; preopercle long and slender with strong barbs on outer edge; **lachrymal spine forked and extends well over upper lip**; lateral line scales as large raised plates with serrated keel or spine

**RANGE:** Bering Sea to SE Alaska; Japan

**DEPTH:** 25-100m **SIZE:** 28cm



21388

**Leister Sculpin** *Enophrys lucasi*

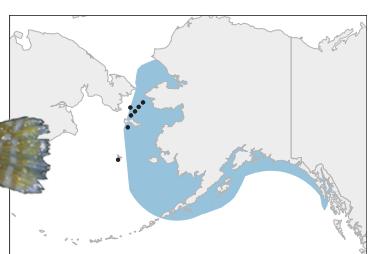
Body color brownish, light spots laterally each with cirri in the center, light spots ventrally without cirri in center; light spots with dark centers arranged in rows along anal rays; spots and bars on dorsal and caudal fins; bones and flesh bluish; preopercle long and slender with 2-5 small hooked spines on outer edge; **lachrymal spine slightly forked, extending somewhat over upper lip**; lateral line scales as large raised plates

**RANGE:** Bering Sea to BC; Russia

**DEPTH:** 0-60m **SIZE:** 24cm

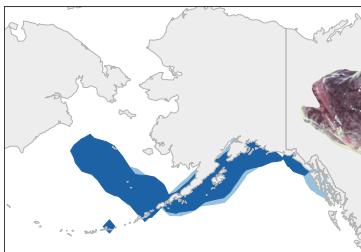


21387



## FATHEAD SCULPINS

- Loose skin (sometimes with prickles)
- Base of dorsal fins covered by skin
- Seven (7) branchiostegal rays (on each side)



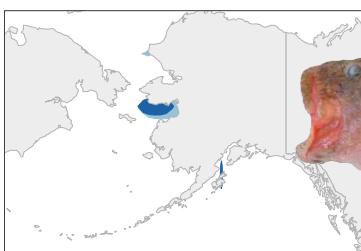
21390

### Spinyhead Sculpin *Dasy cottus setiger*

Body color pinkish with gray to brown diffuse spots, eye barred with brown; large upright blunt spines on head; spiny scales at base of 1st dorsal fin in 1-2 rows; scattered spiny plates below lateral line

RANGE: Bering Sea to Washington; Japan

DEPTH: 18-825m SIZE: 37cm



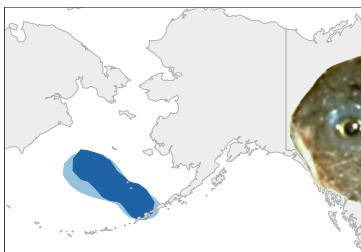
21423

### Smoothcheek Sculpin *Eury men gyrinus*

Body color highly variable; 3 pairs of flattened cirri with multiple tips on lower jaw; large pores on head and body; very small preopercular spine; dorsal fin continuous

RANGE: N Bering Sea to Gulf of Alaska

DEPTH: 14-494m SIZE: 42cm



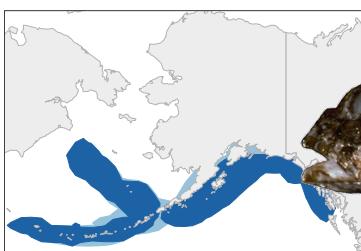
21395

### Blob Sculpin *Psychrolutes phrictus*

Body color gray to black, without bars or distinct markings; head very large; small cirri scattered over head and body; dorsal fin continuous, with spinous portion very low

RANGE: Bering Sea to S California; Japan

DEPTH: 480-2800m SIZE: 65cm



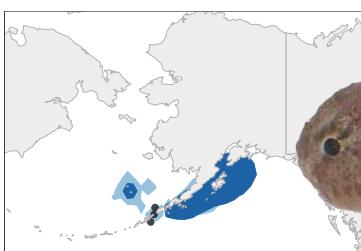
21341

### Darkfin Sculpin *Malacocottus zonurus*

Body color pinkish with dark mottlings; light margins to fins outside of dark band, white bar on caudal fin; distinct bump on head behind eye; outward projecting preopercular spine

RANGE: Bering Sea to Washington; Japan

DEPTH: 100-450m SIZE: 30cm



21394

### Tadpole Sculpin *Psychrolutes paradoxus*

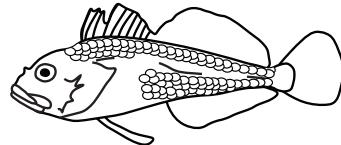
Body color brown to yellowish, 3 well defined bars on body, black bar on orange pectoral fin, black cross through eye; large smooth head; no preopercular spines; dorsal fin partially embedded in skin

RANGE: Bering Sea to Puget Sound; Japan

DEPTH: 9-240m SIZE: 6cm

## IRISH LORD SCULPINS

- 3-8 rows of scales dorsally
- 4-9 rows of scales below lateral line
- Dorsal fins connected



### Red Irish Lord *Hemilepidotus hemilepidotus*

Body color reddish dorsally, fins reddish, ventrally covered with small spots; dorsal spines 1-3 shorter than succeeding rays; scales above lateral line in 4-5 rows, scales below lateral line in 6-7 rows; maxillary cirrus broad

**RANGE:** Bering Sea to Central California; Russia

**DEPTH:** 0-50m **SIZE:** 51cm



21346

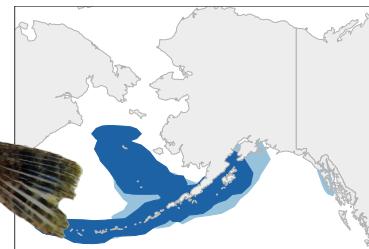
### Yellow Irish Lord *Hemilepidotus jordani*

Body color yellow brown, belly and throat white to yellow, spot on branchiostegals and tail distinctly yellow; dorsal spines 1-2 longer than succeeding; scales above lateral line in 4-5 rows, scales below lateral line in 6-8 rows; maxillary cirrus slender

**RANGE:** N Bering Sea to Gulf of Alaska;

Russia

**DEPTH:** 0-250m **SIZE:** 50cm



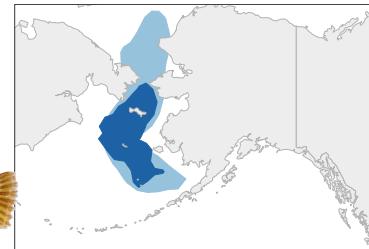
21347

### Butterfly Sculpin *Hemilepidotus papilio*

Body color in males yellowish to gray or black, females brownish to red, 4 darker vertical bands dorsally; **dorsal spines 3-4 longest**; males with elongate spotted pectoral and pelvic rays; scales above lateral line in 3-4 rows; scales below lateral line half the size of dorsal scales and widely scattered in about 4 rows; maxillary cirrus short and slender, or absent

**RANGE:** Bering Sea; Japan

**DEPTH:** 20-150m **SIZE:** 39cm



21348

### Longfin Irish Lord *Hemilepidotus zapus*

Body color yellow to brown with dark vertical bands; dorsal spines 1-3 shorter than succeeding rays; scales above lateral line in 4-5 rows, scales below lateral line in 8-9 rows; scales present on caudal peduncle between dorsal scale rows and lateral line; maxillary cirrus broad; sexually dimorphic and females without elongated pelvic fins

**RANGE:** Aleutian Islands; Russia

**DEPTH:** 61-128m **SIZE:** 29cm



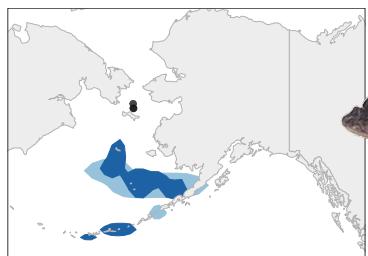
21345

## HOOKEAR SCULPINS

- Strongly-curved preopercular spine
- Body smooth without scales



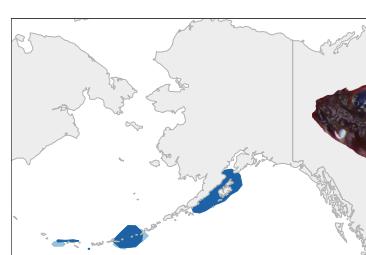
21332



21333



21334



21337



### Bride Sculpin *Artediellus miacanthus*

Body color brownish with lighter fins, white patch on head; upper preopercular spine strongly hooked; body smooth and naked without scales; no cirri on lateral line; **head without bony bumps**

**RANGE:** N Bering Sea; Japan

**DEPTH:** 33-293m **SIZE:** 20cm

### Hookhorn Sculpin *Artediellus pacificus*

Body color brownish; males with bright yellow bands on anal fins and black fleshy spine tips of 1st dorsal fin; upper preopercular spine strongly hooked; lateral line with cirri; head smooth without bumps

**RANGE:** Bering Sea to SE Alaska; Japan

**DEPTH:** 15-137m **SIZE:** 10cm

### Hamecon *Artediellus scaber*

Body color brown; males have dark spot anteriorly on 1st dorsal fin; upper preopercular spine strongly hooked upward; nasal spine absent; body and head with numerous cirri

**RANGE:** N Bering Sea; Russia

**DEPTH:** 10-53m **SIZE:** 9cm

### Broadfin Sculpin *Bolinia euryptera*

broad-winged sculpin Body color dark saddling dorsally and lighter ventrally, many light spots on body below lateral line; two distinct horizontal bands on 1st dorsal fin; upper preopercular spine strongly hooked; lateral line as two rows of pores; head and body smooth and naked; pectoral fin rays 27-31; anal fin rays 14-16

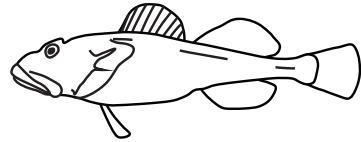
**RANGE:** Aleutian Islands

**DEPTH:** 201-410m **SIZE:** 20cm

## SCULPINS

### HORNED SCULPINS

- Upper preopercular spine unbranched
- Upper preopercular spine relatively long
- Multiple elongate spines on preopercle

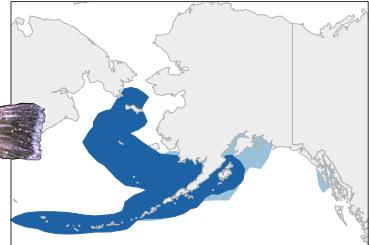


#### Great Sculpin *Myoxocephalus polyacanthocephalus*

Body color brown to gray, light ventrally with white, orange, or brown spots, may have orange or purple areas on head; dorsally with distinct dark saddle markings on body; large individuals with small spinate scales scattered above and below lateral line; 1st preopercular spine long, (about twice the length of the second preopercular spine); body shape robust; anal fin rays 8-13.

RANGE: Bering Sea to Puget Sound; Japan

DEPTH: 0-300m SIZE: 76cm



21370

#### Plain Sculpin *Myoxocephalus jaok*

Body color olive to greenish, ventrally white with white spots; large stellate shaped scales in single irregular line above lateral line starting mid first dorsal fin, small scattered scales below lateral line; 1st preopercular spine long, (about twice the length of the second preopercular spine); body shape slender; anal rays 12-16

RANGE: Bering Sea to Gulf of Alaska; Japan

DEPTH: 0-150m SIZE: 60cm



21371

#### Fourhorn Sculpin *Myoxocephalus quadricornis*

Body color brownish, light ventrally, pelvic and anal rays orange; occipital crests with fine spiny tops to completely smooth; 2nd dorsal fin with free ray tips in males, stellate scales above lateral line in 2-3 irregularly scattered lines, scattered scales below lateral line; upper and 2nd preopercular spine nearly the same length; body slender with somewhat flattened head; anal fin rays 13-17

RANGE: N Bering Sea to Gulf of Alaska; Atlantic

DEPTH: 0-22m SIZE: 25cm



21377

#### Shorthorn Sculpin *Myoxocephalus scorpius*

Body color in males dark with saddling, dorsal fins blackish with light spot, ventrally orange with white spots, females light gray/green reticulations dorsally and white ventrally; distinctive peppering on lips and tissue above maxillary; row of large stellate scales above lateral line starting anterior of 1st dorsal fin, scattered scales below lateral line; head often with prominent tubercles; preopercular spines nearly the same length the upper being slightly longer; rarely pigment between rays of caudal fin; body shape robust; anal fin rays 12-17.

RANGE: Bering Sea to BC; Russia

DEPTH: 0-550m SIZE: 54cm



21368

#### Belligerent Sculpin *Megalocottus platycephalus*

Body color dark greenish, ventrally dark with large white spots, fins dark with white spots; lower jaw projects beyond upper; interorbital space wide and flat; 3 lines of scales above and below lateral line; anal rays 11-14

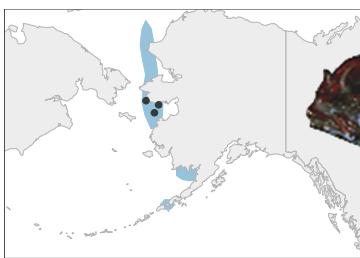
RANGE: Bering Sea, Russia; Japan

DEPTH: 0-30m SIZE: 30cm



21376

# SCULPINS



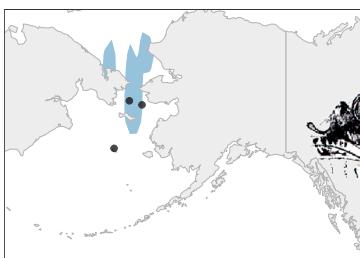
21360

### Brightbelly Sculpin *Microcottus sellaris*

Body color purplish with irregular black spots or reddish brown with white bars or blotches on body, belly white, male with orange spotted dorsal fin, white bar between dorsal fins laterally; many pores on head and along lateral line; preopercular spine curved upward; skin smooth

**RANGE:** Bering Sea to Aleutians; Japan

**DEPTH:** 0-55m **SIZE:** 17cm



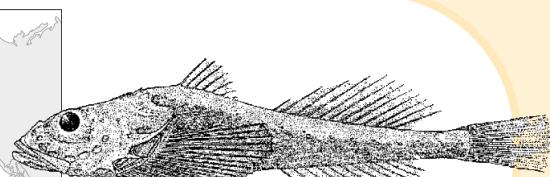
21379

### Hairhead Sculpin *Trichocottus brashnikovi*

Many flap-like cirri on head and body; head with rough bony region dorsally; preopercular spine long and straight; skin smooth.

**RANGE:** N Bering Sea; Japan

**DEPTH:** 45m **SIZE:** 20cm



21305

### Flabby Sculpin *Zesticelus profundorum*

Body color brownish, fins blackish, oral and gill cavities black; large pores under eye and on jaw; pores along lateral line; preopercular spines curved upward; skin smooth

**RANGE:** Aleutian Islands to Baja; Russia

**DEPTH:** 88-2580m **SIZE:** 6cm

## SPONGE SCULPIN

- Scales absent
- No elongate spines on preopercle



21308

### Sponge Sculpin *Thyriscus anoplus*

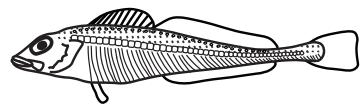
Scaleless except for lateral line scale row; 1st dorsal fin with free tips; 1st and 2nd dorsal fin connected by small membrane; lower pectoral rays with long free ends

**RANGE:** Aleutian Islands

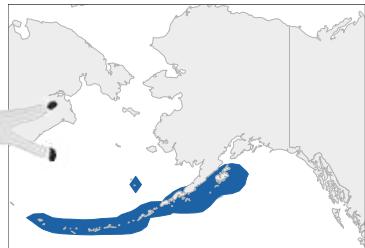
**DEPTH:** 211-256m **SIZE:** 14cm

**RIBBED SCULPINS**

- Diagonal scale rows below lateral line

**Scissortail Sculpin** *Triglops forficatus*

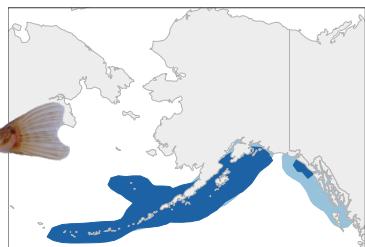
Black bar in front of pectoral fin; caudal fin deeply forked with black tips; 3-4 small white spots below lateral line; breast with 5-10 rows of scales; pectoral fin rays 20-23; anal fin rays 27-32



21352

**Roughspine Sculpin** *Triglops macellus*

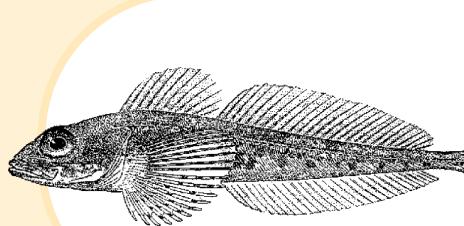
Body color olive-green to light brown; lower rays of pectoral fin free with first free ray being much longer than the rest; caudal fin rounded with dark bars; breast smooth, without scales or very few; pectoral fin rays 15-17, anal fin rays 27-31



21356

**Highbrow Sculpin** *Triglops metopias*

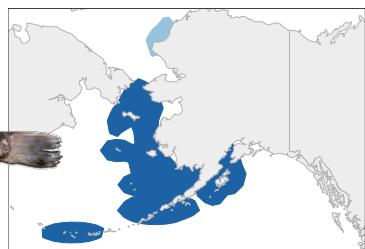
Caudal fin slightly indented without dark tips; breast with 0-9 scale rows; anal fin rays 22-27



21353

**Ribbed Sculpin** *Triglops pingellii*

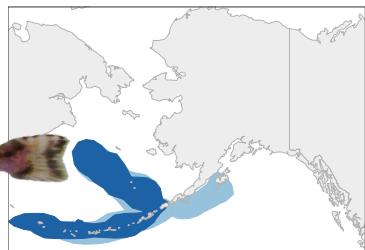
Body color olive-brown dorsally and lighter ventrally, dark saddling dorsally; caudal fin truncate with dark spots on top and bottom; black bar in front of pectoral fin in males; breast with 2-10 rows of scales; anal fin rays 20-28



21355

**Spectacled Sculpin** *Triglops scepticus*

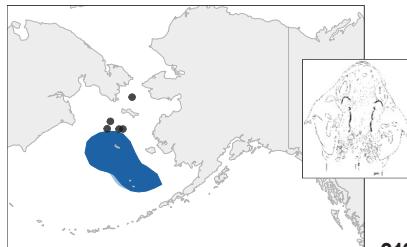
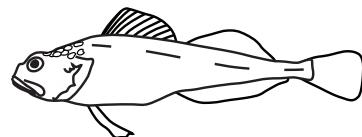
Body color brown dorsally and white ventrally, caudal fin white with black bar; prickly scales on maxillary; large eye (about equal in length to distance from eye to tip of snout), somewhat deep-bodied; breast with 14-23 rows of scales; anal fin rays 20-24



21354

## ARMORHEAD & STAGHORN SCULPINS

- Preopercular spine with recurved spinules
- Armorheads: Bony plates or scales on head but not on body
- Staghorn: No scales on head or body



21329

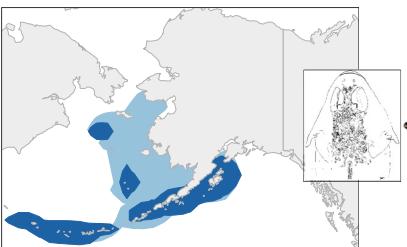


### Purplegray Sculpin *Gymnophanthus detrisus*

Brown dorsally with red-purple laterally, may have dusky throat and branchiostegal region; interorbital width about equal to snout length; plates on head large and continuous extending from nasal spine to about 2nd dorsal spine, plates between eyes extending onto orbit rims; two rows of 3-4 knobs on head and nape; cleithral spine not evident

**RANGE:** E. Bering Sea; Japan

**DEPTH:** 54-450m **SIZE:** 36cm



21316



### Armorhead Sculpin *Gymnophanthus galeatus*

Distinctive dark saddles dorsally on young becoming obscure in large adults; interorbital width about half distance of snout length; plates on head small yet prominent and extensive, extending from nasal spine to about 2nd dorsal spine, plates between eyes extending onto orbit rims; two rows with one knob each on head; cleithral spine not evident

**RANGE:** Bering Sea to SE Alaska; Japan

**DEPTH:** 50-165m **SIZE:** 39cm



21314

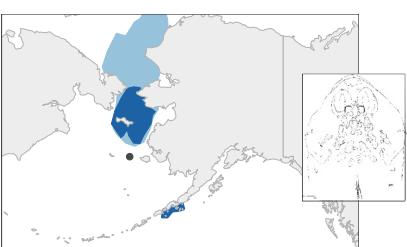


### Threaded Sculpin *Gymnophanthus pistilliger*

Dorsally brown reticulated without distinct saddles; interorbital width about half distance of snout length; plates on head highly variable from completely absent to numerous extending from posterior orbit ending before 1st dorsal spine, two rows of 3-4 prominent knobs on head and nape; cleithral spine emergent short and sharp; Males with long pelvic fins with ray tips free reaching to anus and beyond, sail like dorsal fin with white spots, bright white spots on belly, distinctive pistillae under pectoral fins

**RANGE:** Arctic to SE Alaska; Japan

**DEPTH:** 0-325m **SIZE:** 33cm



21315

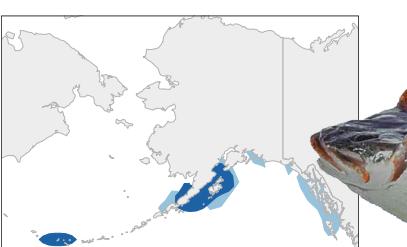


### Arctic Staghorn Sculpin *Gymnophanthus tricuspidis*

Dorsally brown reticulation without distinct saddles; interorbital width about half snout length; plates on head from completely absent to numerous extending from posterior orbit ending before 1st dorsal spine, plates rarely extend interorbitally and never onto orbit rims; nape area smooth with no obvious rows of knobs; cleithral spine emergent short and sharp

**RANGE:** St. Matthew I. to Arctic; Atlantic; Japan

**DEPTH:** 0-240m **SIZE:** 22cm



21380



### Pacific Staghorn Sculpin *Leptocottus armatus*

Distinctive dark spot on posterior part of 1st dorsal fin; preopercle with 4-6 cusps; interorbital wide >15% of head length; head and body smooth without plates or scales, pelvic fin rays 4-5

**RANGE:** SE Bering Sea to Baja CA.

**DEPTH:** 0-91m **SIZE:** 46cm

## ZIPPER-SCALED SCULPINS AND OTHERS

- Two or more rows of scales between dorsal fins and lateral line
- No scales below lateral line

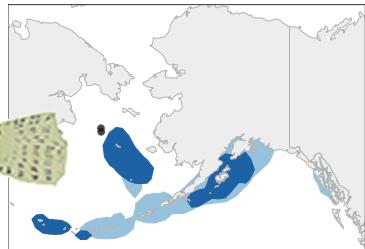


### Northern Sculpin *Icelinus borealis*

Body color brownish gray, 3 dark saddles dorsally, males with two dark patches on edge of 1st dorsal; 2 dorsal scale rows starting at 1st dorsal fin and extending onto caudal peduncle; lateral line pores with cirri; preopercular spine large antler-like; pectoral fin rays 14-17

RANGE: Aleutian Islands to Puget Sound

DEPTH: 9-213m SIZE: 11cm



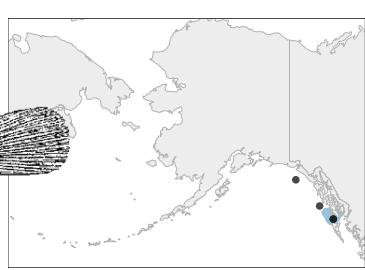
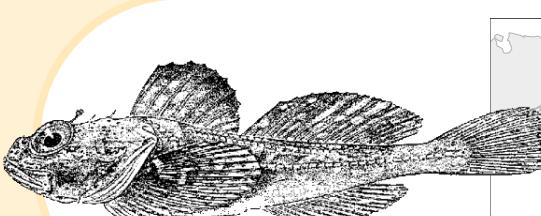
21311

### Dusky Sculpin *Icelinus burchami*

Body color brownish with lighter spots and blotches; dorsal scale rows starting at the middle of the first dorsal fin and extending to end of 2nd dorsal fin; pelvic fins very small; preopercular spine large antler-like; pectoral fin rays 16-19

RANGE: SE Alaska to S California

DEPTH: 61-567m SIZE: 12cm



21437

### Threadfin Sculpin *Icelinus filamentosus*

Body color olive green to light brown dorsally, yellow to light brown ventrally, 4 dark saddles across back, fins with dark blotches; first two dorsal spines greatly elongated; dorsal scale rows starting at 1st dorsal fin and extending to end of 2nd dorsal fin; preopercular spine large antler-like; pectoral fin rays 16-18

RANGE: Gulf of Alaska to S California

DEPTH: 18-373m SIZE: 30cm



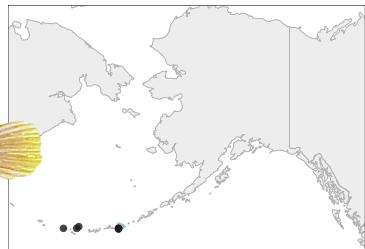
21310

### Scaled Sculpin *Archistes biseriatus* VOUCHER

Body with light spots and darker bars; patch of scales at beginning of 1st dorsal fin and extending as 2 rows ending before the end of 2nd dorsal fin; dorsal fins joined by small membrane; males with fringy free tips to 1st dorsal rays; lower pectoral rays with long free ends; preopercular spine simple and short; pectoral fin rays 16

RANGE: Aleutian Islands

DEPTH: 79-99m SIZE: 16cm



21359

### Slim Sculpin *Radulinus asprellus*

Body elongate; color brown to gray and lighter ventrally, dark spot at rear of first dorsal fin; scales in row above lateral line ending at middle of 2nd dorsal fin; without multiple rows of scales below lateral line; area between eyes naked without scales; preopercular spine simple and short; pectoral fin rays 17-20

RANGE: Aleutian Islands to California

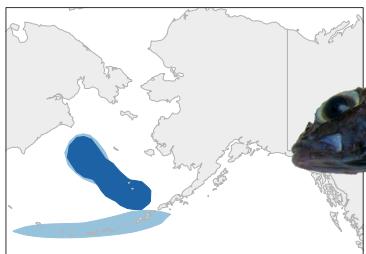
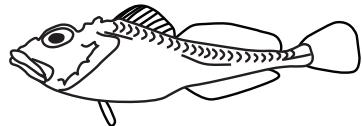
DEPTH: 18-283m SIZE: 16cm



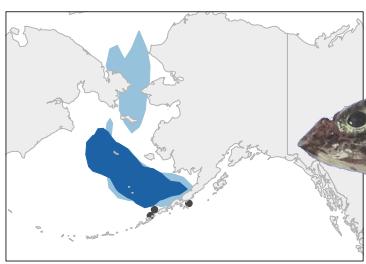
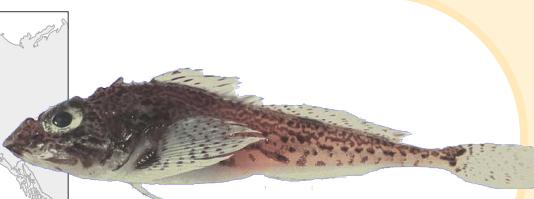
21320

## SNAG-HEAD SCULPINS

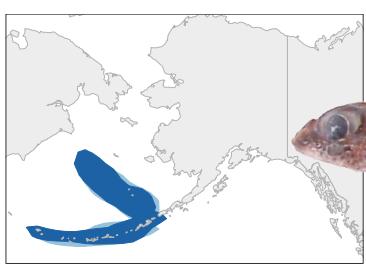
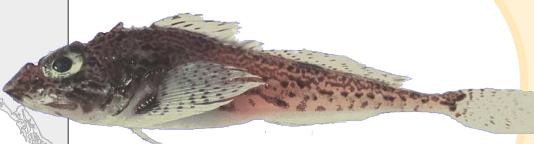
- Single dorsal scale row
- Lateral line scale rows
- Short, forked or bifid preopercular spine



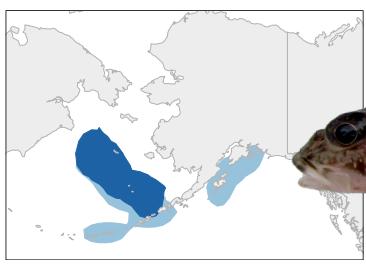
21439



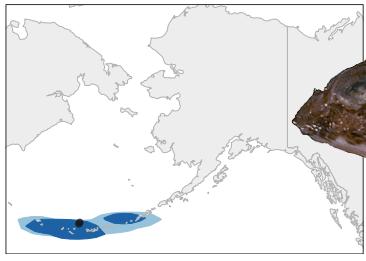
21441



21440



21438



21443



### Blacknose Sculpin *Icelus canaliculatus*

Body color black; nasal tubes and anal papillae black; preopercular spines short and upper bifid or trifid; large plate like row of scales below dorsal fin with a row of very small scales above it; scales absent between dorsal platelike scales and lateral line; ventral scale row with 0-15 scales; head smooth to very few scales; suborbital spine absent or present

RANGE: Bering Sea; Japan

DEPTH: 250-900m SIZE: 23cm

### Spatulate Sculpin *Icelus spatula*

Preopercular spines short and upper may have secondary barbs; large spiny plate like row of scales below dorsal fin with a band of very small scales above it; head with small prickly scales; anal papilla flattened or spatulate; row of 9 spines on eyeballs

RANGE: Bering Sea to Gulf of Alaska, Russia

DEPTH: 13-360m SIZE: 12cm

### Wide-Eye Sculpin *Icelus euryops*

Body color brown to gray, may have 4 dark bars dorsally; nasal tube and anal papillae white; preopercular spines short and upper bifid or trifid; large plate like row of scales below dorsal fin intermixed with 1- 3 rows of smaller similar plates; scales present between dorsal platelike scales and lateral line; most of head covered in small spiny scales; eyeball very large (30-40% of head length); suborbital spine present

RANGE: Bering Sea to Gulf of Alaska

DEPTH: 200-740m SIZE: 16cm

### Thorny Sculpin *Icelus spiniger*

Body color tan with 4 narrow brown bars dorsally; distinctive black spot on upper edge of first dorsal fin; preopercular spines short and upper bifid; large hooked row of scales below dorsal fin without smaller scales above it; no scales on head

RANGE: Bering Sea to Aleutians, Japan

DEPTH: 30-300m SIZE: 28cm

### Uncinate Sculpin *Icelus uncinaris*

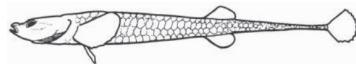
Body color brown and white; preopercular spines short and upper single or bifid; large spiny plate like row of scales below dorsal fin with a row of small scales above it; head with small prickly scales; anal papilla cylindrical

RANGE: Aleutian Islands

DEPTH: 79-247m SIZE: 10cm

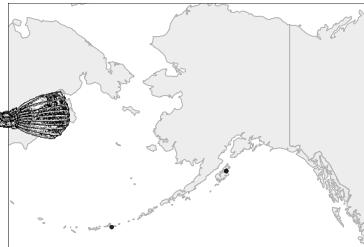
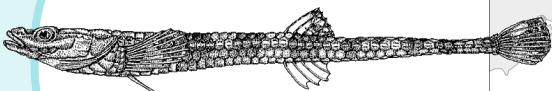
## POACHERS

- ONE dorsal fin
- Mouth TERMINAL



### Smooth Alligatorfish *Anoplagonus inermus*

Dark dorsally, two light patches on caudal fin; tiny plates surround anus; nasal spine absent; median row of dorsal plates extend to dorsal fin; anal fin rays 4-5, pectoral fin rays 8-11



20055

RANGE: Aleutian Islands to California

DEPTH: 5-108m SIZE: 15cm

### Aleutian Alligatorfish *Aspidophoroides monopterygius*

Prominent nasal spines; no median dorsal plates; 4-6 anal fin rays; 9-10 pectoral fin rays



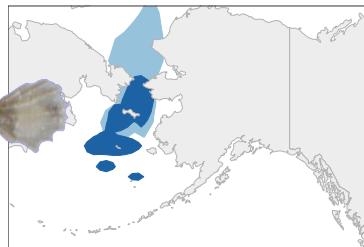
20050

RANGE: Arctic to Gulf of Alaska, Aleutians; Japan; Atlantic

DEPTH: 100-375m SIZE: 18cm

### Arctic Alligatorfish *Aspidophoroides olrikii*

Males with white tips on dorsal and anal fins; small barbel on underside of maxillary; mouth small and terminal; single dorsal fin; anal rays 5-7, pectoral rays 12-16



20051

RANGE: N Bering Sea to Arctic; Atlantic

DEPTH: 18-110m SIZE: 9cm

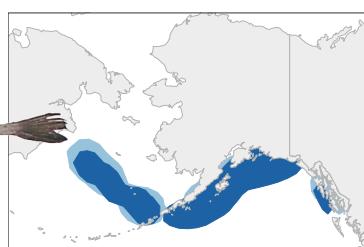
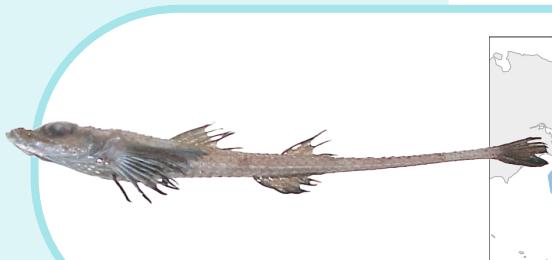
## POACHERS

- TWO dorsal fins
- Lower jaw projecting



### Blackfin Poacher *Bathyagonus nigripinnis*

All fins black; anal fin short, not extending beyond second dorsal fin, with 6-10 rays



20038

RANGE: Bering Sea to California, Aleutian Islands;

Kamchatka

DEPTH: 18-1247m SIZE: 20cm



20061

### Bering Poacher *Occella dodecaedron*

Body robust and depressed, tapering to slender tail; short maxillary barbel; anal fin base long, with 14-16 rays; pelvic fins in males not extending to anal fin base

RANGE: Bering Sea to Gulf of Alaska; Kamchatka to Japan

DEPTH: 5-47m SIZE: 21cm



20001

### Tubenose Poacher *Pallasina barbata*

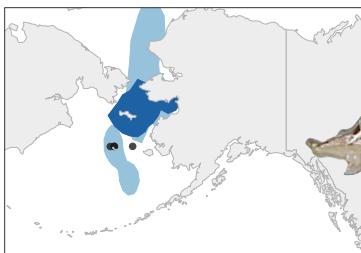
Long, anteriorly directed barbel on lower jaw

RANGE: Bering Sea to California, Aleutian Islands; Japan

DEPTH: 0-27m SIZE: 13cm

## POACHERS

- TWO dorsal fins
- Mouth VENTRAL



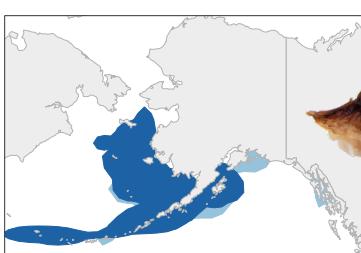
20041

### Veteran Poacher *Podothecus veteranus*

Two anteriorly directed spines at tip of snout; 6-11 yellow barbels in patch on underside of snout

RANGE: N Bering Sea to Arctic; Sea of Okhotsk, Japan

DEPTH: 15-345m SIZE: 30cm



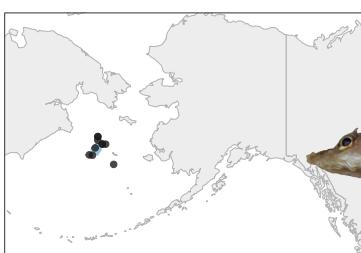
20040

### Sturgeon Poacher *Podothecus accipenserinus*

Two anteriorly directed spines at tip of snout; 13-19 yellow barbels in patch on underside of snout

RANGE: Bering Sea to California; Aleutian Islands; Kamchatka

DEPTH: 15-345m SIZE: 30cm



20007

### Atlantic Poacher *Leptagonus decagonus*

No anteriorly directed spines at tip of snout; several white barbels on jaws, barbel on underside of snout rudimentary or absent; snout length less than postorbital length of head

RANGE: Bering Sea; Sea of Okhotsk; Arctic

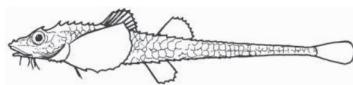
DEPTH: 24-930m SIZE: 20cm

POACHERS

## POACHERS

### POACHERS

- TWO dorsal fins
- Mouth TERMINAL



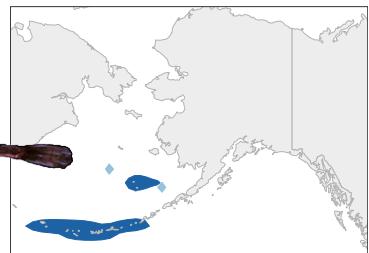
#### **Longnose Poacher** *Sarritor leptorhynchus*

No anteriorly directed spines at tip of snout; several white barbels on jaws, and one on underside of snout; snout length greater than postorbital length of head, rostrum with smooth margins and a hooked spine on tip.

**RANGE:** SE Bering Sea, Aleutians to Gulf of Alaska;

Japan

**DEPTH:** 15-345m **SIZE:** 23cm



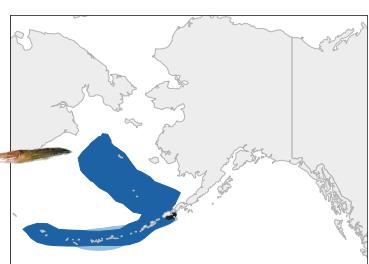
20005

#### **Sawback Poacher** *Sarritor frenatus*

No anteriorly directed spines at tip of snout; several white barbels on jaws, and one on underside of snout; snout length less than postorbital length of head

**RANGE:** Bering Sea to British Columbia; Japan

**DEPTH:** 40-450m **SIZE:** 24cm



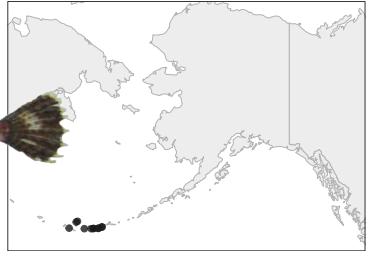
20006

#### **Northern Spearnose Poacher** *Agonopsis vulsa*

Tip of snout with two pairs of spines - one directed forward and upward and one curving upward and posteriorly; barbels and cirri on lower part of opercular bones, jaws, and gill membranes

**RANGE:** northern GOA to southern California

**DEPTH:** 5-180m **SIZE:** 18cm



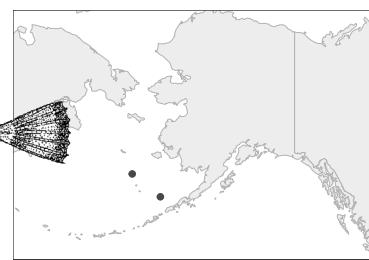
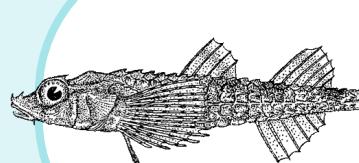
20015

#### **Pygmy Poacher** *Odontopyxis trispinosa*

Olive brown with dark blotches laterally; spine at tip of snout; single maxillary barbel; free tips on lower pectoral rays; anal fin rays 5-7

**RANGE:** Gulf of Alaska to Baja California

**DEPTH:** 5-373m **SIZE:** 9cm



20018

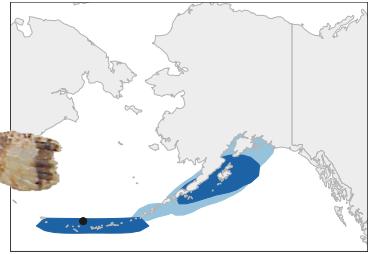
#### **Fourhorn Poacher** *Hypsagonus quadricornis*

Body rises steeply behind head; prominent cirrus on top of snout; eyes set high on head; often has a fungus-like growth on sides of body

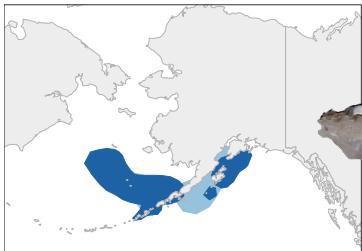
**RANGE:** Bering Sea and Aleutian Islands to Puget

Sound; Japan

**DEPTH:** 15-452m **SIZE:** 10cm



20071



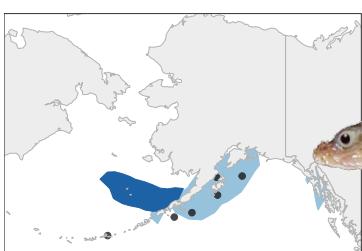
20035

**Gray Starsnout** *Bathyagonus alascanus*

Anal fin starting between first and second dorsal fin; smooth cheek (i.e. margin of bone above upper lip without spines); one pair of plates immediately in front of pelvic fins; dark blotches on dorsum

**RANGE:** SE Bering Sea and eastern Aleutian Islands to California

**DEPTH:** 18-252m **SIZE:** 13cm



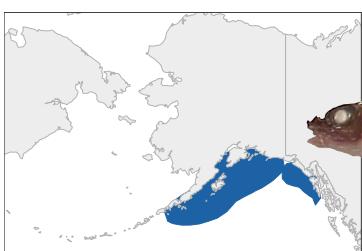
20036

**Spinycheek Starsnout** *Bathyagonus infraspinatus*

Anal fin starting below first dorsal fin; spiny cheek (determine by running a fingernail over lower margin of bone above upper lip); one pair of plates immediately in front of pelvic fins; dark saddles on dorsum

**RANGE:** SE Bering Sea and eastern Aleutian Islands to California

**DEPTH:** 6-183m **SIZE:** 13cm



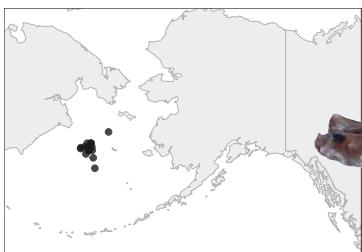
20037

**Bigeye Poacher** *Bathyagonus pentacanthus*

Olive brown dorsally, pale ventrally, 5-6 dark dorsal blotches; deeply notched pectoral fin with thick lower rays; small white maxillary barbels; lateral line plates >43; anal fin rays 6-9

**RANGE:** Gulf of Alaska to S California

**DEPTH:** 100-375m **SIZE:** 26cm



20002

**Dragon Poacher** *Percis japonicus*

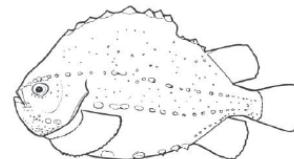
Flat bony plates above each eye; upper and lower body plates each with a knob-like bony process

**RANGE:** Bering Sea to GOA, Aleutian Islands; Japan

**DEPTH:** 87-450m **SIZE:** 30cm

## LUMPSUCKERS

- Rounded body
- Two dorsal fins (first embedded in smooth lumpsucker)
- Large pelvic disc

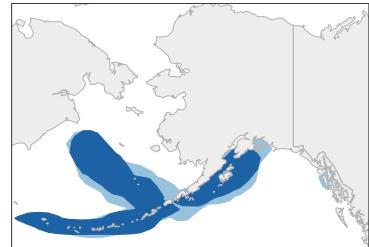


### Smooth Lumpsucker *Aptocyclus ventricosus*

Skin smooth, without scales; body color gray, lighter ventrally, small black spots dorsally; 1st dorsal fin embedded and not evident

RANGE: West Pacific, Bering Sea to BC

DEPTH: 0-500m SIZE: 42cm



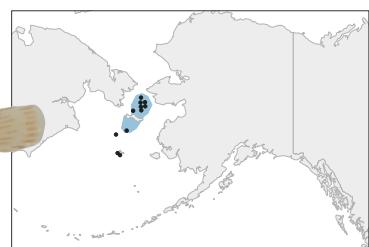
22175

### Pimpled Lumpsucker *Eumicrotremus andriashevi*

Body with large and small tubercles; 6 or more rows of tubercles between eyes; largest pair of tubercles just anterior to second dorsal fin; chin covered with small tubercles.

RANGE: Arctic to Bering Sea

DEPTH: 20-83m SIZE: 9cm



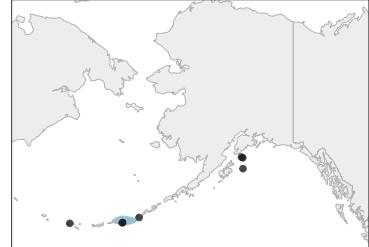
22182

### Papillose Lumpsucker *Eumicrotremus barbatus*

Body deep; tubercles low and large, with weak spinules; fleshy papillae present over most of anterior portion of body; pores on mandible with long, barbel-like tubes; first dorsal fin high, as long or longer than second and covered with thick skin; skin between disk and anus with low tubercles; teeth in a single row, flattened to form a continuous cutting surface

RANGE: West Pacific, Aleutians

DEPTH: 74-210m SIZE: 4cm



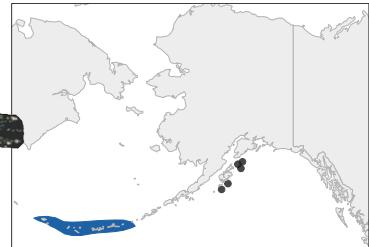
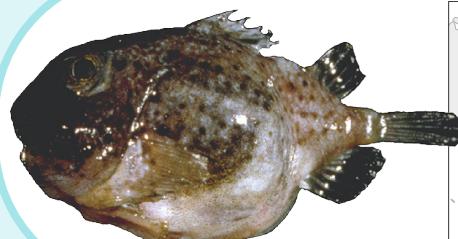
22184

### Alaskan Lumpsucker *Eumicrotremus gyrinops*

Head and body smooth except for small distantly spaced conical tubercles; pores on mandible with long, barbel-like tubes; first dorsal fin as long as second and covered at base with thick skin; skin between disk and anus smooth

RANGE: Bering Sea to Gulf of Alaska

DEPTH: shallow SIZE: 4cm



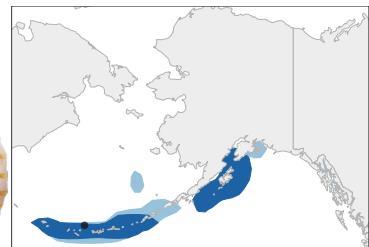
22180

### Pacific Spiny Lumpsucker *Eumicrotremus orbis*

Body with large tubercles, tubercles in 4 rows between eyes; body color dark brown to red to blue green, eye yellow; chin with many small tubercles

RANGE: West Pacific, Bering Sea to Puget Sound

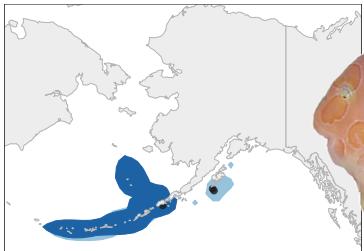
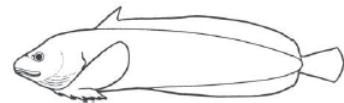
DEPTH: 0-200m SIZE: 13cm



22178

## SNAILFISHES

- Single dorsal fin
- Soft scaleless body
- LARGE pelvic disc



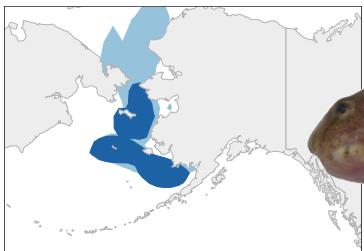
22206

### Blotched Snailfish *Crystallichthys cyclospilus*

Body color yellowish or pinkish with ovate to round pink or orange or red blotches; dorsal and anal rays extending onto caudal fin; pectoral fin distinctly lobed with thickened free tips to the lower rays; gill opening entirely above pectoral fin; snout rounded and slightly projecting; no opercular flap; pectoral fin rays 33-35.

RANGE: SE Bering Sea to Aleutians Islands

DEPTH: 54-250m SIZE: 28cm



22238

### Kelp Snailfish *Liparis tunicatus*

Body yellowish brown, often with wavy lines; peritoneum pale; dorsal fin not notched; dorsal and anal fin extending well onto caudal fin; gill opening small, above pectoral fin or extending to 4-6 pectoral fin rays; pectoral fin distinctly lobed; maxilla reaching below front of eye to mideye.

RANGE: N Bering Sea to Arctic

DEPTH: 0-150m SIZE: 17cm



22265

### Festive Snailfish *Liparis marmoratus*

Body with strong brassy or brown bars and stripes, on white background, often with wavy lines; peritoneum pale; dorsal fin not notched; dorsal and anal fin extending well onto caudal fin; gill opening small, above pectoral fin or extending to 4-6 pectoral fin rays; pectoral fin distinctly lobed; maxilla not reaching vertical with eye.

RANGE: N Bering Sea; Russia

DEPTH: 27-165m SIZE: 9cm



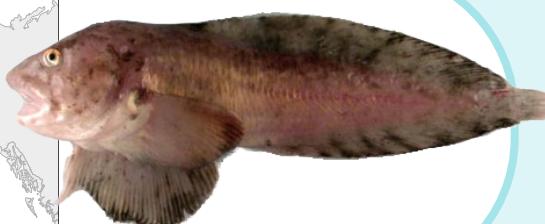
22205

### Variegated Snailfish *Liparis gibbus*

Variable color: gray, brown, pink, with spots, stripes, mottling, reticulations; anal and dorsal fins dusky, peritoneum pale; dorsal and anal fin extending well onto caudal fin; pectoral fin distinctly lobed with free ray tips on lower lobe; gill opening large, extending to 9-20 pectoral rays; pectoral fin rays 36-39

RANGE: Arctic to British Columbia, w Pacific

DEPTH: 0-300m SIZE: 53cm



22254

### Nebulous Snailfish *Liparis bathyarticus*

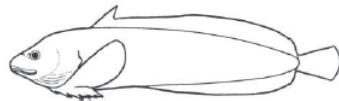
Previously a subspecies of *Liparis gibbus*, now recognized as a distinct species. Nearly identical to *L. gibbus*, except for the size of the anterior nostril, which is two times larger than posterior nostril

RANGE: Arctic to Bering Sea; circumpolar

DEPTH: 50-300m SIZE: 53cm

## SNAILFISHES

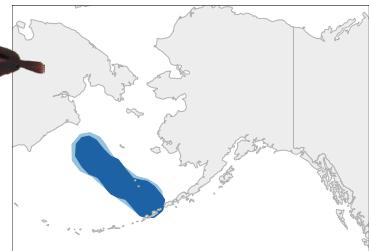
- Pelvic disc tiny or absent


**Racoon Snailfish** *Elassodiscus nyctereutes*

Body pink to red, dark posteriorly; pectoral fin deeply notched with rays of lower lobe almost completely free, about twice length of upper lobe rays; mouth and pyloric caeca pale; branchial cavity, peritoneum, and stomach black; gill slit short, to pectoral ray 2; pectoral rays 27-29

**RANGE:** SE Alaska to central California

**DEPTH:** 335-616m **SIZE:** 22cm



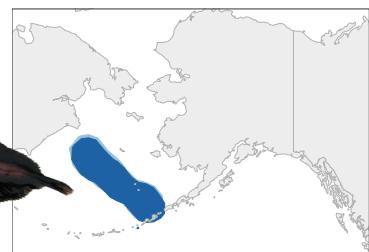
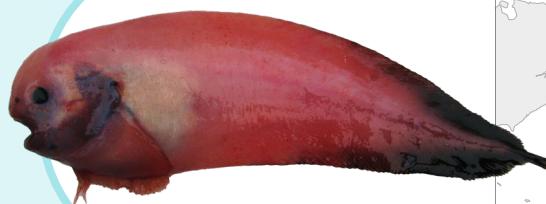
22267

**Blacklip Snailfish** *Elassodiscus tremebundus*

Body red to purple, dark posteriorly; pectoral fin with moderate notch with lower rays about half the length of upper rays; gill slit short, to upper pectoral ray; pectoral rays 32-34.

**RANGE:** Bering Sea to Kamchatka

**DEPTH:** 375m **SIZE:** 30cm



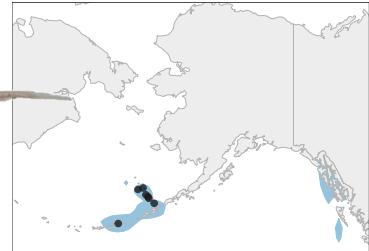
22216

**Pygmy Snailfish** *Lipariscus nanus*

Transparent skin with scattered small spots, mouth, gill cavity, peritoneum, stomach, and pyloric caeca black; skin thin and loose; pectoral fin notched with membranes connecting lower rays; gill slit entirely above pectoral fin; pectoral rays 12-15; caudal fin small, elongate.

**RANGE:** Bering Sea to central California, Japan

**DEPTH:** 58-910m **SIZE:** 6cm



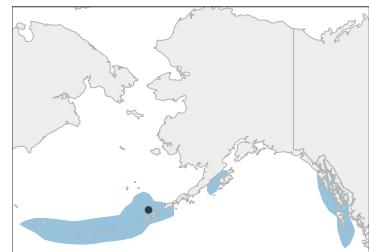
22253

**Tadpole Snailfish** *Nectoliparis pelagicus*

Transparent skin with scattered small spots, mouth, gill cavity, peritoneum, and stomach dark; pyloric caeca pale; skin thin and loose; pectoral fin notched with lower rays free; gill slit entirely in front of pectoral fin; pectoral rays 19-25; anus in adults far forward.

**RANGE:** Bering Sea to S California, Sea of Okhotsk

**DEPTH:** 58-910m **SIZE:** 6cm



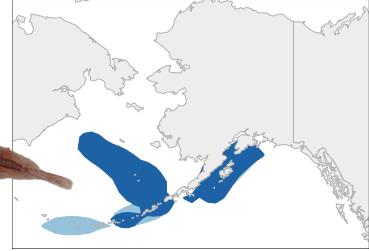
22255

**Smalldisk Snailfish** *Careproctus gibberti*

Body color pink and translucent, darker posterior; pectoral fin deeply lobed with lower rays partially free; gill slit extending down in front of about 14 pectoral fin rays; pectoral fin rays 30-33.

**RANGE:** Aleutian Islands to Oregon

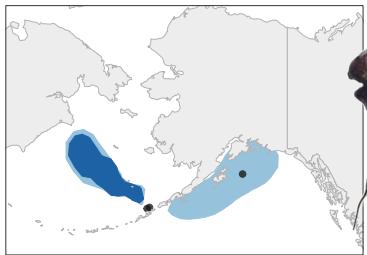
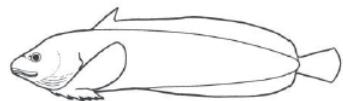
**DEPTH:** 172-886m **SIZE:** 12cm



22233

## SNAILFISHES

- Small to moderate pelvic disc
- Pink to red body color



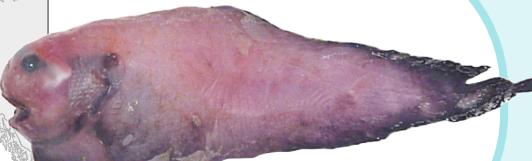
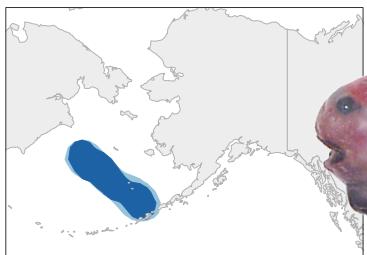
22235

### Alaska Snailfish *Careproctus colletti*

Body color reddish black, finely dotted with black; posterior portions of dorsal, caudal, and anal fins black; lips, mouth and gill cavity dusky; peritoneum black; lower rays of pectoral fin free and elongate; pelvic disk triangular; gill opening entirely above base of pectoral fin; pectoral fin rays 25-31.

RANGE: Bering Sea to Gulf of Alaska; Japan

DEPTH: 64-1350m SIZE: 40cm



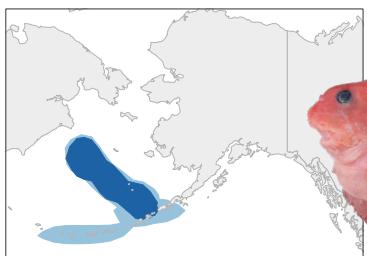
22228

### Blackfin Snailfish *Careproctus cypselurus*

Body color purplish indigo with red anteriorly and black fins; dorsal and anal connected to caudal fin slightly, caudal fin forked; pectoral fin notched, lower rays of pectoral fin free for much of their length; pelvic disk triangular; gill opening entirely above pectoral fin; pectoral fin rays 32-40.

RANGE: Bering Sea to Oregon; Japan

DEPTH: 300-1993m SIZE: 37cm



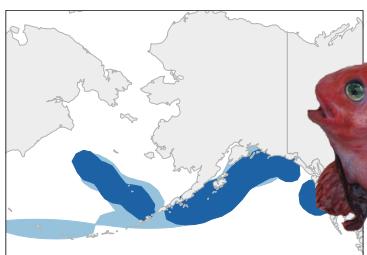
22229

### Emarginate Snailfish *Careproctus furcellus*

Body color pinkish-red with black fins; mouth projects beyond mouth; dorsal and anal slightly connected to caudal fin; caudal fin truncate; pectoral fin not notched with only tips of lower rays free; gill opening entirely above pectoral fin; pectoral fin rays 32-37.

RANGE: Bering Sea to Gulf of Alaska; Japan

DEPTH: 175-700m SIZE: 46cm



22290

### Blacktail Snailfish *Careproctus ambustus*

Body color pink or reddish, posterior portions of dorsal and anal fins black; dorsal and caudal fin extend onto truncate caudal fin; pectoral fin slightly notched, lower rays of pectoral fin nearly free; pelvic disk longitudinally oval; gill opening entirely above base of pectoral fin; pectoral fin rays 27-33.

RANGE: S Bering Sea to Baja California; Japan

DEPTH: 89-2286m SIZE: 35cm



22240

### Bigeye Snailfish *Careproctus candidus*

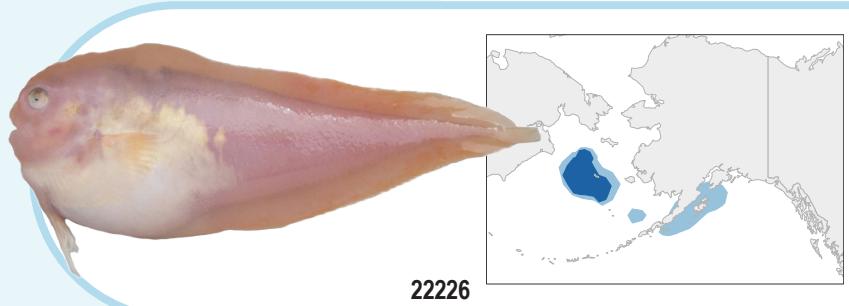
Body color light red dorsally, pale ventrally, peritoneum and stomach pale; dorsal fin with anterior lobe; eye large; pelvic disk moderate size; gill opening entirely above base of pectoral fin; pectoral fin rays 33-37

RANGE: Aleutians to Bering Sea and GOA

DEPTH: 170-247m SIZE: 7cm

## Spectral Snailfish *Careproctus phasma*

Body color yellow pink to salmon, abdominal flash extending only to anal-fin origin, fins light; skin transparent, loose, naked or with few prickles; body very deep and laterally compressed; dorsal and anal rays slightly connected to caudal fin; pectoral fin deeply notched with lower rays partially free; gill opening extending down in front of 1-6 pectoral fin rays; pectoral rays 27-36.



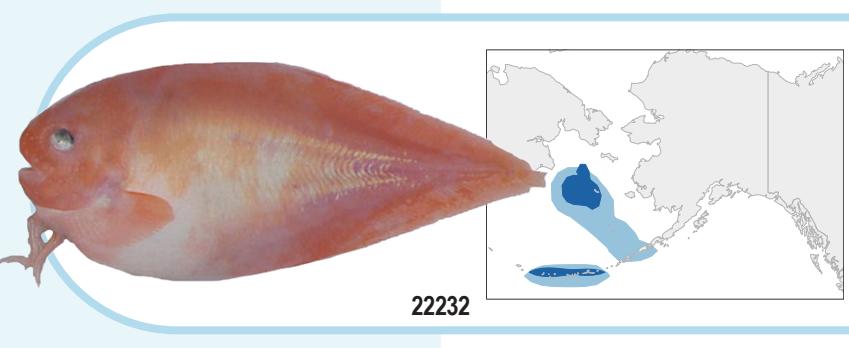
22226

RANGE: Bering Sea to SE Alaska

DEPTH: 57-184m SIZE: 33cm

## Salmon Snailfish *Careproctus scottae*

Body color yellow pink to salmon, abdominal flash extending well beyond anal-fin origin, fins light; skin transparent, rough with small prickles; body very deep and laterally compressed; dorsal and anal rays connected to caudal fin slightly; pectoral fin deeply notched with lower rays partially free; gill opening extending down in front of 1-6 pectoral fin rays; pectoral rays 31-39.



22232

RANGE: Bering Sea, Aleutians to SE Alaska

DEPTH: 71-421m SIZE: 33cm

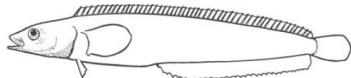
## WHEN IN DOUBT: VOUCHER

This is not an exhaustive list of snailfishes and many species look alike.

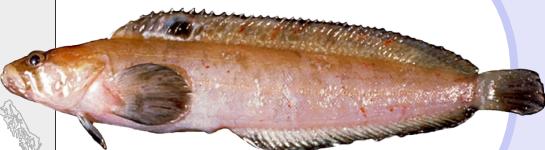
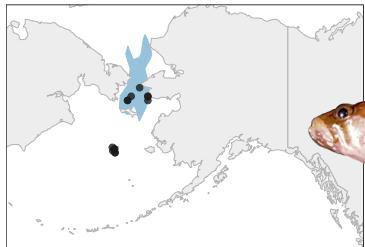


## PRICKLEBACKS

- Eel-like body
- Small round head and tail
- Single dorsal fin with many spines



## PRICKLEBACKS



23803

### Fourline Snakeblenny

*Eumesogrammus praecisus*

Blackish fins, black dot on posterior dorsal; head pointed; two 2 lateral lines that branch dorsally and ventrally

RANGE: N Bering Sea to Arctic; Atlantic

DEPTH: 16-400m SIZE: 23cm



23804

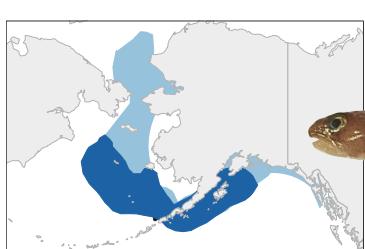
### Arctic Shanny

*Stichaeus punctatus*

Body color yellow-brown to bright scarlet, brown streaks and blotches on body, 5-6 large black spots on dorsal fin, 8 dark spots on anal fin; head pointed

RANGE: West Pacific, Bering Sea to Atlantic

DEPTH: 1-100m SIZE: 22cm



23805

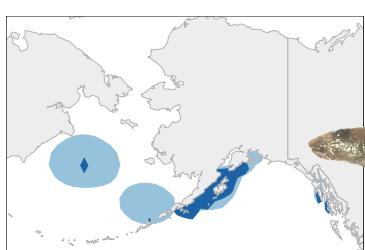
### Daubed Shanny

*Leptoclinus maculatus*

Blotches irregular and extend down lower side; Lower pectoral fin rays elongate, extending past the middle rays

RANGE: Japan to Puget Sound, Bering Sea, Atlantic.

DEPTH: 0-400m SIZE: 18cm



23836

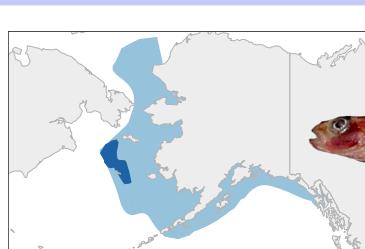
### Longsnout Prickleback

*Lumpenella longirostris*

Dark grey blotches faint or absent; stiff dorsal spines with naked tips; two to five anal fin spines

RANGE: northern Japan to British Columbia, Bering Sea.

DEPTH: 25-1140m SIZE: 41cm



23806

### Stout Eelblenny

*Anisarchus medius*

Indistinct eye-sized brown spots on body; upper jaw not projecting in front of lower; dorsal and anal fin membranes attached to caudal fin.

RANGE: SE Alaska to Arctic, Atlantic, Japan

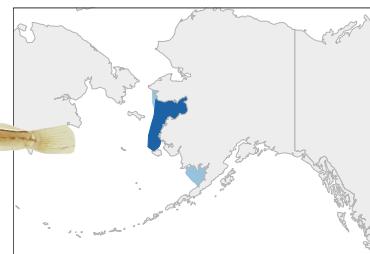
DEPTH: 15-160m SIZE: 28cm

**Pighead Prickleback** *Acantholumpenus mackayi*

Lower side unmarked, bounded by a row of horizontal blotches; Solid black line along base of dorsal fin; orange pectoral fins; more than two anal fin spines.

RANGE: northern Japan to Gulf of Alaska, Bering Sea, Arctic.

DEPTH: 0-56m SIZE: 36cm



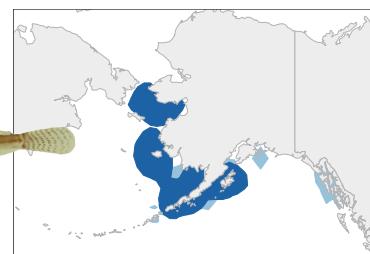
23809

**Snake Prickleback** *Lumpenus sagitta*

Lower side unmarked, bounded by a row of horizontal blotches; small dark blotches in slanting rows on upper body; middle pectoral fin rays the longest; one anal fin spine

RANGE: Japan to northern California, Bering Sea.

DEPTH: 0-425m SIZE: 51cm



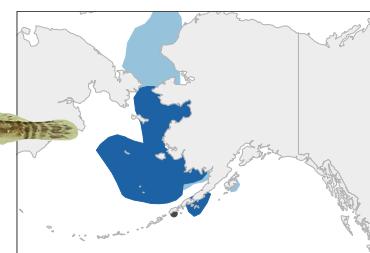
23808

**Slender Eelblenny** *Lumpenus fabricii*

Blotches irregular extending down lower side; middle pectoral fin rays longest; upper jaw projecting in front of lower jaw; dorsal and anal-fin membranes not joined to caudal fin

RANGE: Sea of Japan to SE Alaska, Bering Sea, Arctic.

DEPTH: 0-175m SIZE: 36cm



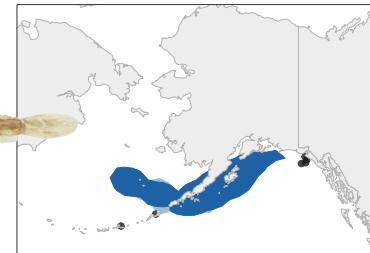
23807

**Whitebarred Prickleback** *Poroclinus rothrocki*

White vertical bars edged with brown; three anal fin spines

RANGE: SE Bering Sea and Aleutians to southern California.

DEPTH: 46-128m SIZE: 25cm



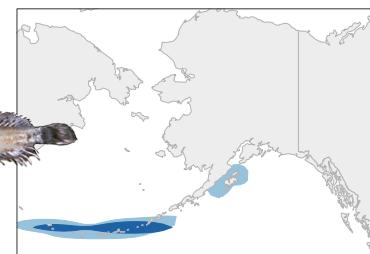
23850

**Nutcracker Prickleback** *Bryozichthys lysimus*

Body color brown, two long cirri on head above orbit, few cirri behind eye; single pair of small cirri on chin near dentary symphysis; pores around eye; caudal fin with scaled patch.

RANGE: West Pacific, Aleutians to Gulf of Alaska; Bering Sea

DEPTH: 80-335m SIZE: 20cm



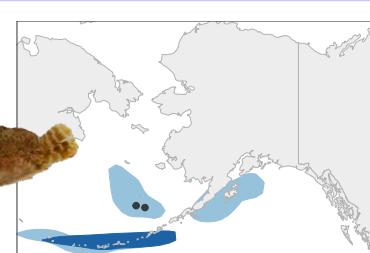
23861

**Pearly Prickleback** *Bryozichthys marjorius*

Body color brown, black vertical bar below eye; long cirri on head above orbit, few cirri behind eye, cirri on maxilla; no cirri on chin near dentary symphysis; pores around eye; lateral line with 6-7 large pores followed by 6-8 small pores.

RANGE: Aleutian Islands to British Columbia

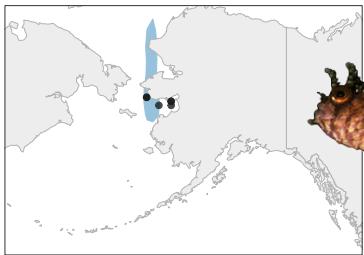
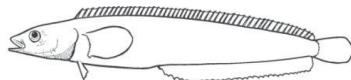
DEPTH: 183-611m SIZE: 32cm



23862

## CHIROLOPHIS PRICKLEBACKS

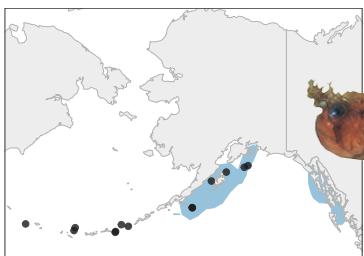
- Many cirri on head
- Teeth in jaw flattened, forming a continuous cutting edge



23843



23851



23841



23844



### Bearded Warbonnet *Chirolophus snyderi*

Body color dark, orange and white spots on dorsal fin, orange bars on caudal fin; many large cirri on head and onto first dorsal fin spines.

RANGE: West Pacific, Aleutians to Gulf of Alaska, Bering Sea

DEPTH: 17-68m SIZE: 24cm

### Mosshead Warbonnet *Chirolophus nugator*

Pale pelvic fins, spots on dorsal fin of males, bars on dorsal fin of females; many cirri of about equal length on head extending to near the first dorsal fin.

RANGE: Aleutian Islands to S California

DEPTH: 0-80m SIZE: 15cm

### Decorated Warbonnet *Chirolophus decoratus*

Body color dark brown with many spots, dorsal fin mottled black and yellow, black spots anteriorly on dorsal fin, red streak on caudal fin; long cirrus above eye and many large fringed cirri on head and first dorsal fin spines.

RANGE: West Pacific, Aleutians to California, Bering Sea

DEPTH: 0-91m SIZE: 42cm

### Matcheek Warbonnet *Chirolophus tarsodes*

Pelvic fins dark; head and cheeks covered in cirri, cirri extend onto first dorsal fin spines

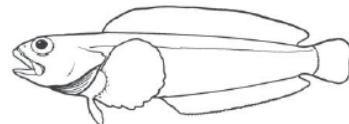
RANGE: Aleutian Islands to British Columbia

DEPTH: 0-90m SIZE: 19cm

## RONQUILS

### RONQUILS

- Single long dorsal fin separate from caudal fin
- Large round pectoral fins
- Distinct sensory pores on head and cheeks

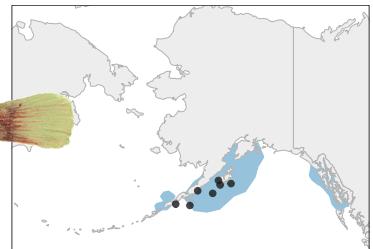


#### Northern Ronquil *Ronquilus jordani*

Body color orange dorsally and green ventrally, may have black patch at front of dorsal fin, yellow stripe below lateral line and eye; very small scales on body and cheeks; first 20-30 dorsal rays unbranched; gill rakers on lower 1st arch 11-12

RANGE: Aleutian Islands to California

DEPTH: 50-150m SIZE: 18cm



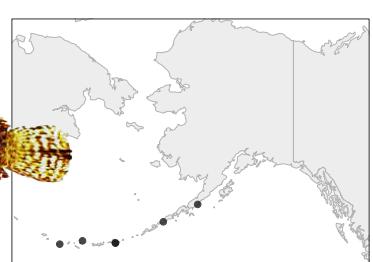
20702

#### Smallmouth Ronquil *Bathymaster leurolepis*

Reddish brown body with 9-14 dark blue bars laterally, anal fin with oblique bluish bars; caudal fin scaled for less than half its length, skin nearly smooth with small embedded scales; maxillary reaches mid-orbit; gill rakers on lower 1st 10-14

RANGE: SE Bering Sea to Gulf of Alaska; Japan

DEPTH: 0-53m SIZE: 22cm



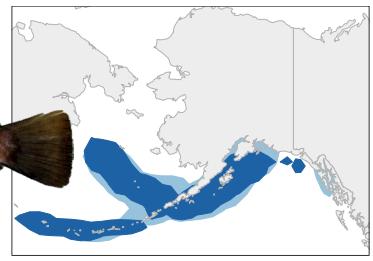
20713

#### Searcher *Bathymaster signatus*

Black spot on 1st dorsal fin, body color light brown and paler below, black pelvic fins, many orange pores on head; scales on body but absent from head and cheeks; first 4-5 dorsal rays unbranched; gill rakers on lower 1st arch 15-18

RANGE: Bering Sea to Washington; Russia

DEPTH: 50-200m SIZE: 38cm



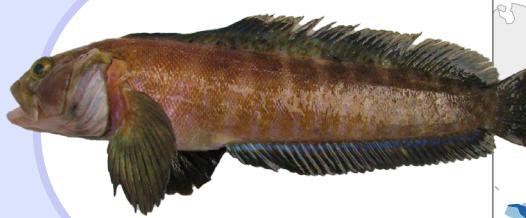
20720

#### Alaskan Ronquil *Bathymaster caeruleofasciatus*

Typically dark brown with black fins and blue spots on pectoral fins; females and young(?) orange brown with bluish bars on sides and black fins; operculum often with prominent blue-black spots that become obscured in adults; pelvics with blue centers; maxillary to rear of orbit or beyond; caudal fin scaled for at least half its length, scales evident on body, no scales on cheek; gill rakers on lower 1st arch 10-14

RANGE: Aleutian Islands to N British Columbia

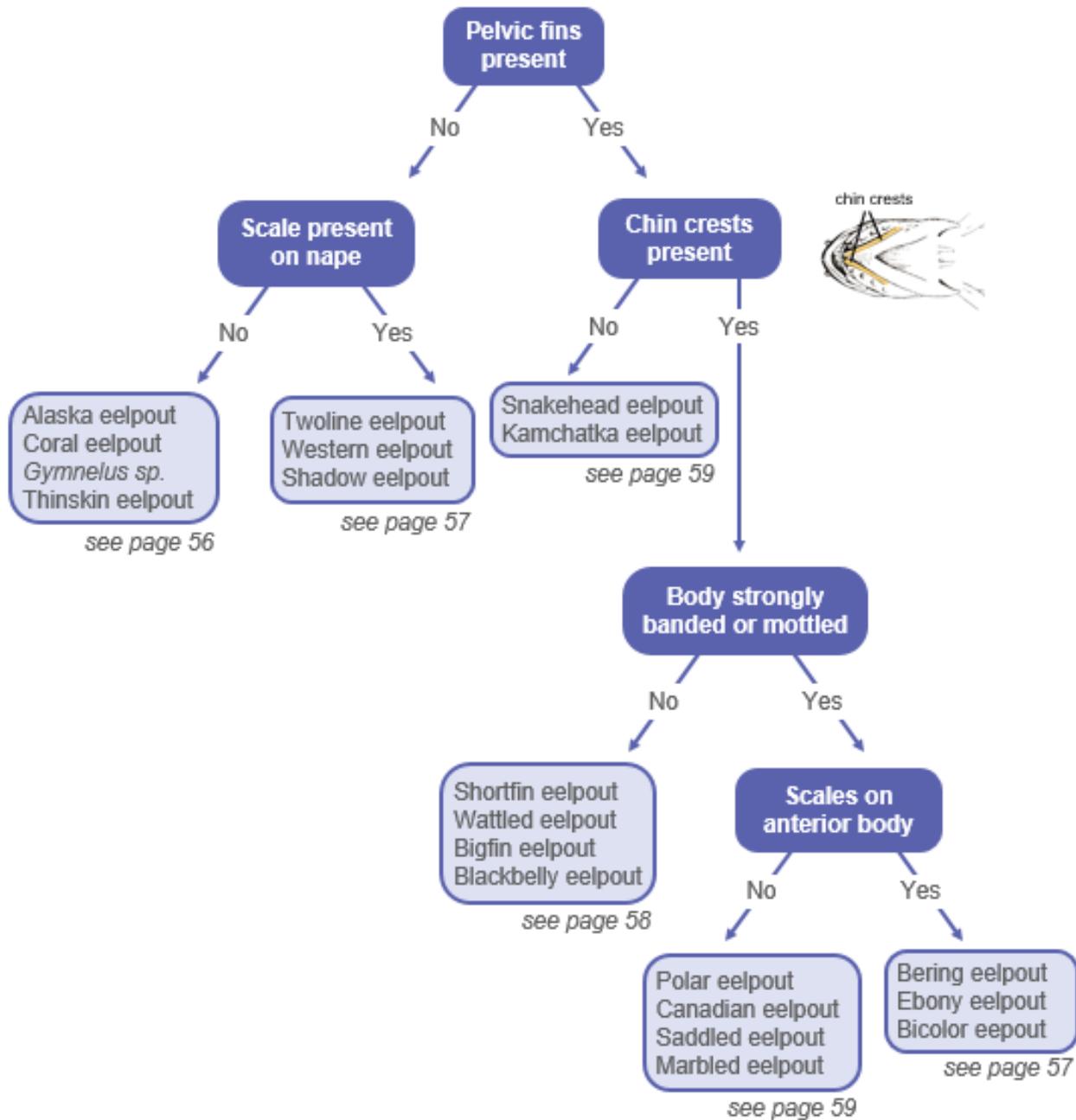
DEPTH: 0-130m SIZE: 29cm



20712

## EELPOUTS

- Eel-like body with continuous, pointed tail
- No spines in dorsal or anal fins



## EELPOUTS

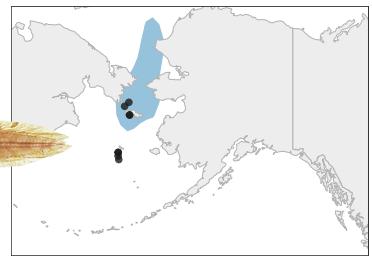
*Gymnelus* sp.

### VOUCHER

No scales or pelvic fins; body color variable, pale to bright orange, gray anal fins, may have ocelli on anterior portion of dorsal fin, faint vertical bars on body.

RANGE: Arctic, Bering Sea to Gulf of Alaska; Russia

DEPTH: 0-320m SIZE: 56cm



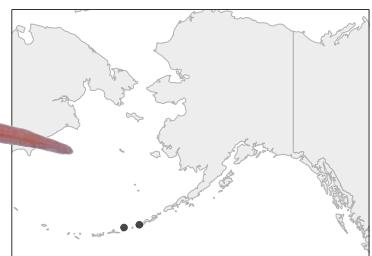
24192

**Thinskin Eelpout** *Nalbantichthys elongatus*

Body elongate, orange; head robust; pectoral fin minute; gill slit above pectoral fin.

RANGE: Bering Sea and Aleutian Islands

DEPTH: 300-520m SIZE: 14cm



24395

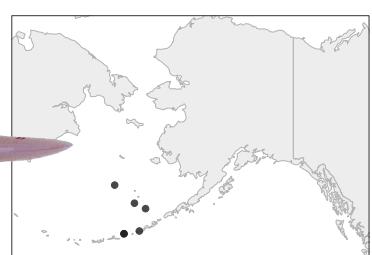
**Coral Eelpout** *Puzanovia rubra*

Body elongate, orange; head robust; pectoral fin moderate sized; gill slit extends to base of pectoral fin.

RANGE: Bering Sea and Aleutian Islands,

Japan

DEPTH: 200-610m SIZE: 21cm



24394

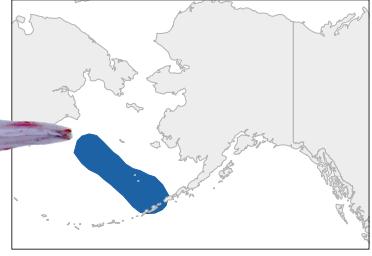
*Lycodapus* sp.

### VOUCHER

No scales or pelvic fins; gill membranes free from isthmus.

RANGE: Bering Sea to Panama South America

DEPTH: 0-2000m SIZE: 20cm



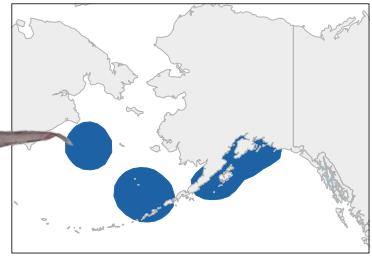
24230

**Alaska Eelpout** *Bothrocara pusillum*

No pelvic fins; lateral line absent

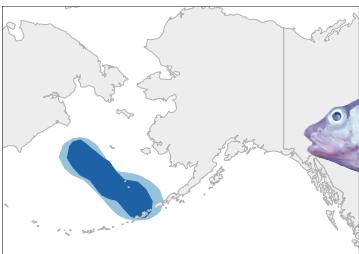
RANGE: Bering Sea to British Columbia

DEPTH: 55-642m SIZE: 18cm



24111

## EELPOUTS



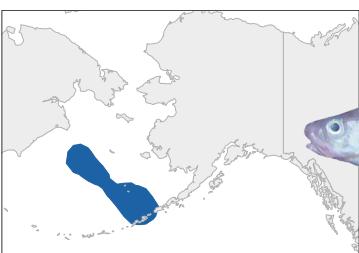
24110

### Twoline Eelpout *Bothrocara brunneum*

No pelvic fins; two lateral lines; gill rakers short and blunt; pectoral fin rays usually 16-17

RANGE: Sea of Okhotsk to Baja Cal., Bering Sea

DEPTH: 199-1829m SIZE: 66cm



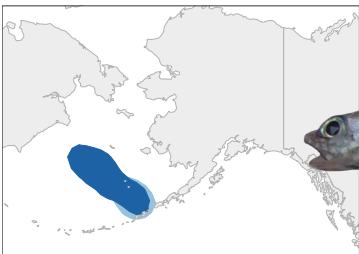
24112

### Western Eelpout *Bothrocara zetsum*

Gill membranes to isthmus; two lateral lines; pectoral rays 15 or less; body very elongate with black caudal fin.

RANGE: Sea of Okhotsk to GOA

DEPTH: 199-1,620m SIZE: 66cm



24114

### Shadow Eelpout *Bothrocara nyx*

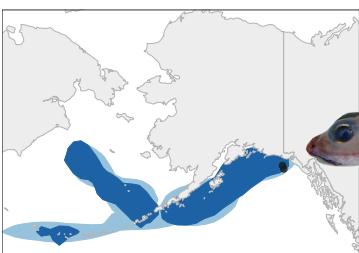
Gill membranes attached to isthmus; no visible lateral line; snout shorter than eye; inside of mouth dusky or dark.

RANGE: Bering Sea

DEPTH: 790-1508m SIZE: 20cm

## EELPOUTS

- Eel-like body with continuous, pointed tail
- No spines in dorsal or anal fins
- Pelvic fins PRESENT



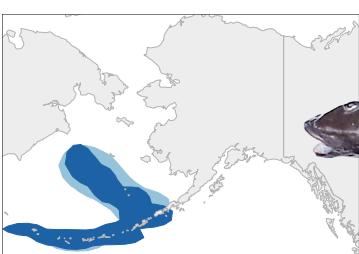
24195

### Bering Eelpout *Lycodes beringi*

Dusky brown dorsally, with small light colored spots and faint narrow bands, ventrally bluish, blue to black fins; mouth, peritoneum, gill cavity, and nasal tube black; pectoral fin strongly notched; scales extending onto dorsal and anal fins; mouth inferior; maxillary to mid-orbit; mandibular pores small; mental crests present.

RANGE: Bering Sea to S California

DEPTH: 13-1300m SIZE: 33cm



24187

### Ebony Eelpout *Lycodes concolor*

Body uniform gray-brown to black; lateral line single, curving down along anal-fin base; pectoral fin rounded; mandibular pores small; mental crests present; pelvic fins small and tabular; mouth inferior.

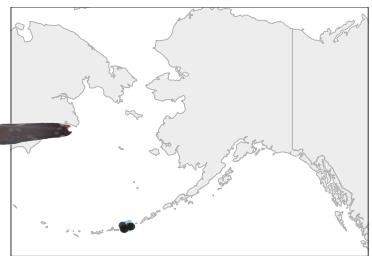
RANGE: Bering Sea to Aleutian Islands

DEPTH: 42-1025m SIZE: 61cm

## EELPOUTS

### Bicolor Eelpout *Lycodes akuugun*

Gray-brown to black dorsally, head with a sharp line on cheek dividing dark dorsum from light ventrum, continuing onto pectoral fin; 6-8 faint light bands on dorsum, extending onto dorsal fin, and a light blotch near tip of tail; scales covering entire body, extending onto median fins.

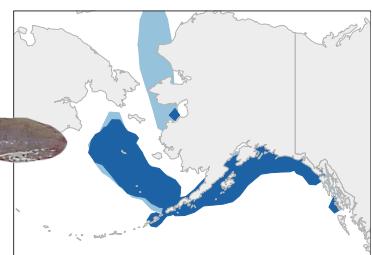


RANGE: Aleutian Islands

DEPTH: 121-357m SIZE: 29cm

### Wattled Eelpout *Lycodes palearis*

Small pelvic fins (1.5 into eye diameter); rounded pectoral fin; cartilaginous ridges under head prominent; teeth on vomer (central bone in roof of mouth) and palatines; body gray, may have a black spot on front of dorsal fin.

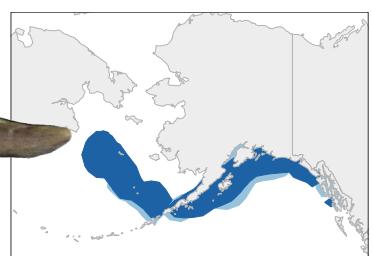


RANGE: Bering Sea to Oregon

DEPTH: 55-283m SIZE: 51cm

### Shortfin Eelpout *Lycodes brevipes*

Minute pelvic fins (2.5 into eye diameter); rounded pectoral fin; cartilaginous ridges under head not prominent; peritoneum white; teeth on vomer (central bone in roof of mouth) and palatines; body gray, with or without light vertical bars; dorsal fin with black margin along its entire length.



### Bigfin Eelpout *Lycodes cortezianus*

Small pelvic fins (1.5 into eye diameter); large, rounded pectoral fin; cartilaginous ridges under head not prominent; peritoneum black; teeth absent on vomer (central bone in roof of mouth), but present on palatines; body brown to blue-black, without vertical bars; dorsal and anal fins edged in black.



RANGE: SE Alaska to San Diego

DEPTH: 73-620m SIZE: 50cm

### Blackbelly Eelpout *Lycodes pacificus*

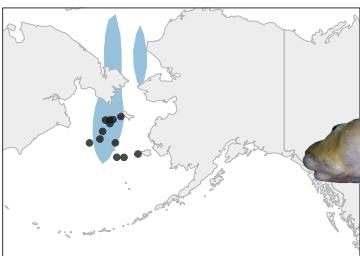
Small pelvic fins (1.5 into eye diameter); large, rounded pectoral fin; cartilaginous ridges under head not prominent; peritoneum black; teeth absent on vomer (central bone in roof of mouth) and palatines; body light gray to reddish brown, often with pale vertical bars; dorsal and anal fins edged in black, and a large dark spot on anterior of dorsal fin.



RANGE: Gulf of Alaska to Baja California

DEPTH: 9-399m SIZE: 46cm

## EELPOUTS



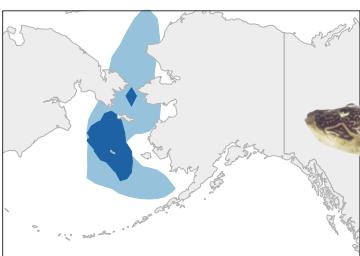
24188

### Canadian Eelpout *Lycodes polaris*

Scales usually absent, but may be present posteriorly; light bands on body outlined by dark edges; second light band passes onto dorsal fin; 15 pectoral fin rays.

RANGE: Bering Sea, Arctic

DEPTH: 5-236m SIZE: 50cm



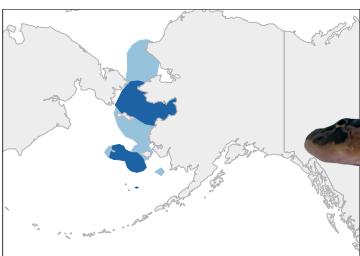
24184

### Marbled Eelpout *Lycodes ravidens*

Partially scaled, scales reaching forward of rear edge of pectoral fin; light blotches on head forming a strongly marbled pattern; 18-19 pectoral fin rays.

RANGE: Bering Sea, Arctic

DEPTH: 40-130m SIZE: 53cm



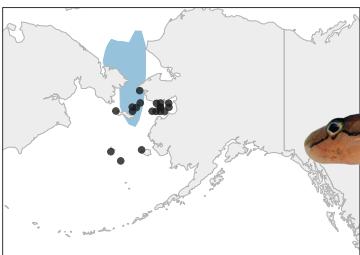
24189

### Polar Eelpout *Lycodes turneri*

Scales absent; wide, flattened head; bands outlined by distinct dark edges; first light band on head arched forward, often broken dorsally; second light band passes dorsally in front of dorsal fin and joins third band under pectoral fin; 18 pectoral fin rays.

RANGE: Bering Sea, Arctic

DEPTH: 5-130m SIZE: 64cm



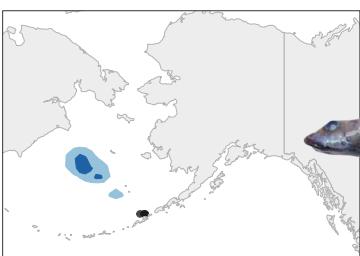
24186

### Saddled Eelpout *Lycodes mucosus*

Partially scaled, scales not reaching forward of rear edge of pectoral fin; light cheeks sharply differentiated from head by a line from snout to end of gill cover; first light band distinctly outlined, arched forward, not broken; second light band passes onto dorsal fin; bands distinctly outlined, with light spots in the center starting at base of dorsal fin; 17-18 pectoral fin rays.

RANGE: Bering Sea, Arctic

DEPTH: 5-70m SIZE: 48cm



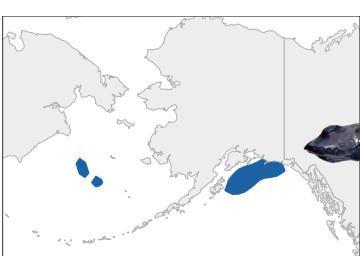
24152

### Kamchatka Eelpout *Lycenchelys camchatica*

Body light brown to gray; mandibular pores large; mental crests absent; vomerine teeth absent.

RANGE: Bering Sea to S California

DEPTH: 200-1230m SIZE: 29cm



24130

### Snakehead Eelpout *Lycenchelys crotalinus*

Body dark brown, with metallic blue highlights around head and pectoral fin; mandibular pores large; mental crests absent; vomerine teeth present.

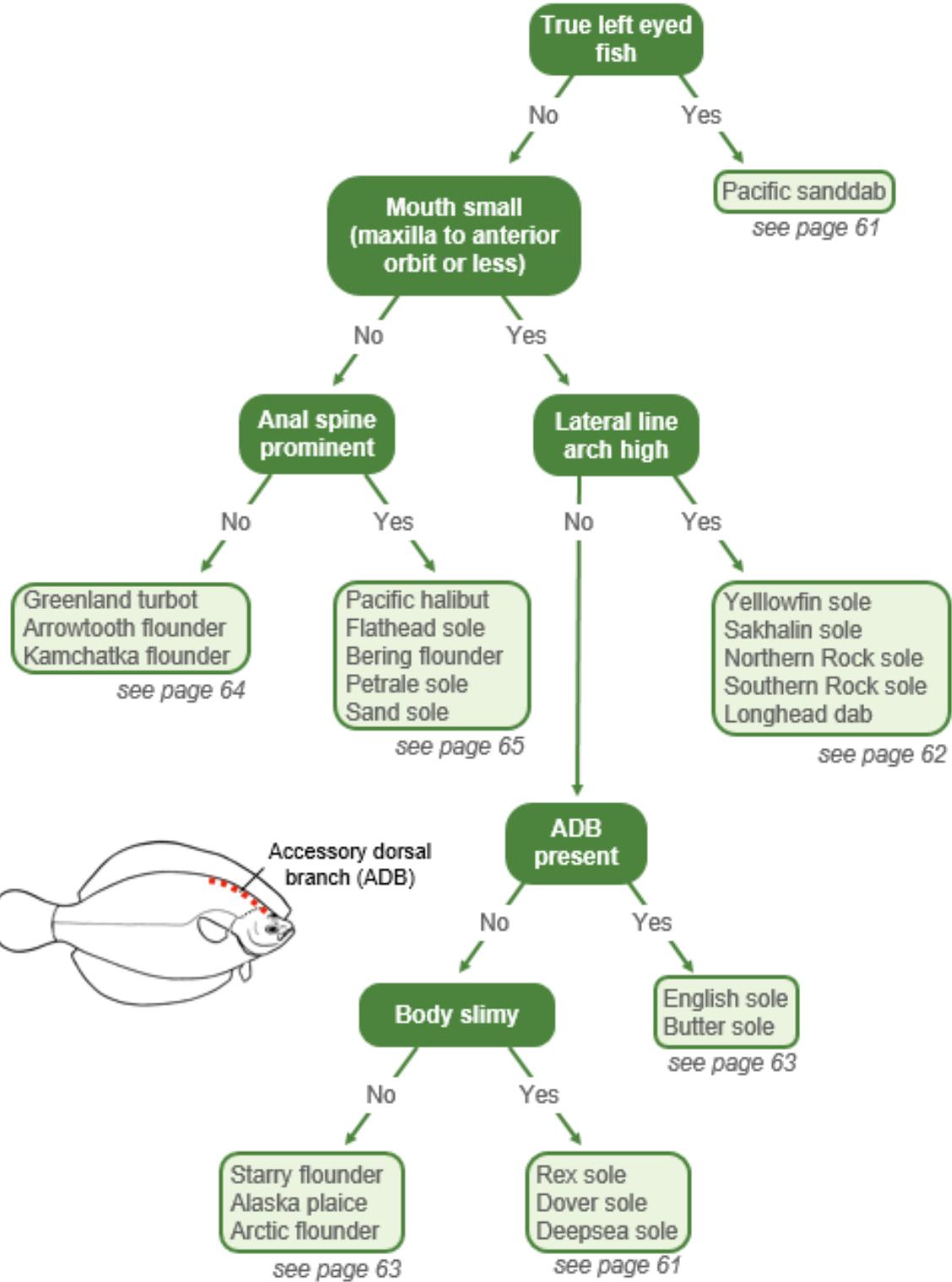
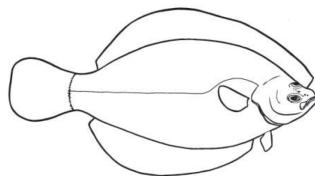
RANGE: Bering Sea to S California

DEPTH: 200-1920m SIZE: 47cm

## FLATFISHES

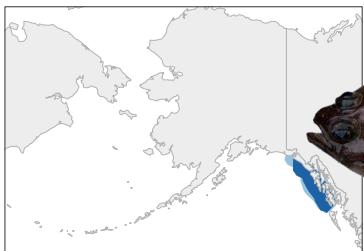
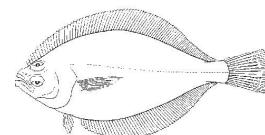
### FLATFISH

- Eyes on one side of head
- Laterally flattened body



## LEFT-EYE FLATFISH

- Eyes typically on left side of body
- Pelvic fins inserted asymmetrically



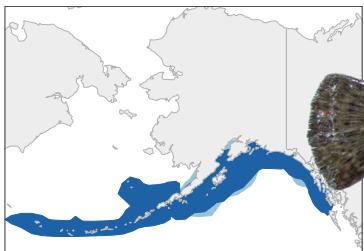
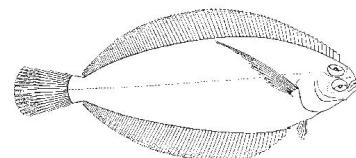
### Pacific Sanddab *Citharichthys sordidus*

Eyes typically on left side of body; pelvic fins asymmetrical in size and placement, one fin often on the abdominal ridge.

RANGE: Aleutians to Baja California, SE Bering Sea  
DEPTH: 9-549m SIZE: 41cm

## RIGHT-EYE FLATFISH

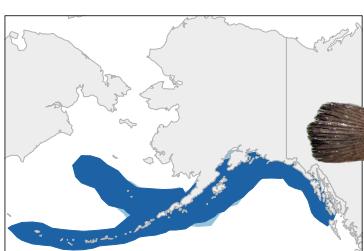
- Eyes typically on right side of body
- Low or no arch in lateral line
- ADB absent
- Slimy body



### Dover Sole *Microstomus pacificus*

Short, rounded pectoral fin on eyed side of body; eyed side uniform brown; blind side white.

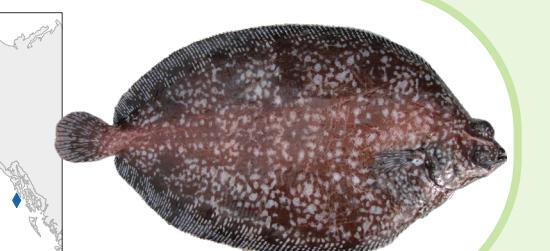
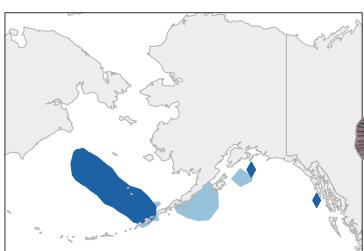
RANGE: Aleutians to Baja California, SE Bering Sea  
DEPTH: 9-1244m SIZE: 76cm



### Rex Sole *Glyptocephalus zachirus*

Long, narrow dark pectoral fin on eyed side of body; eyed side uniform brown or gray; blind side white or dusky.

RANGE: Aleutians to Baja California, SE Bering Sea  
DEPTH: 0-850m SIZE: 61cm



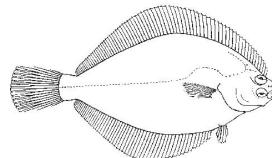
### Deepsea Sole *Microstomus bathybius*

Mouth very small; caudal fin small and circular; eyed side of body brown to maroon, with blue to white mottling, blind side dark.

RANGE: Japan to southern California, Bering Sea  
DEPTH: 320-1433m SIZE: 47cm

## RIGHT-EYE FLATFISH

- Eyes typically on right side of body
- High arch in lateral line
- Mouth small

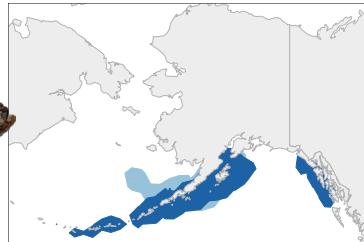


### Southern Rock Sole *Lepidopsetta bilineata*

Gill rakers on first arch stout, total number less than or equal to 10, with 3 or less on the upper arch; blind side skin somewhat transparent, muscle bands clearly visible throughout body depth from head to caudal fin with glossy highlights.

RANGE: Eastern Aleutians to Mexico, SE Bering Sea

DEPTH: 0-399m SIZE: 58cm



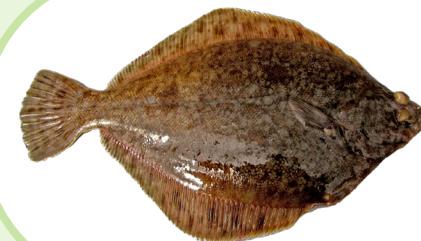
10262

### Northern Rock Sole *Lepidopsetta polyxystra*

Lateral line with a high flat-topped arch with a dorsal branch; Gill rakers on first arch slender, total number greater than or equal to 10, with 3 or more on the upper arch; blind side skin creamy white, muscle bands evident, but not clearly visible throughout body depth from head to caudal fin.

RANGE: Japan to Puget Sound, Bering Sea

DEPTH: 0-246m SIZE: 69cm



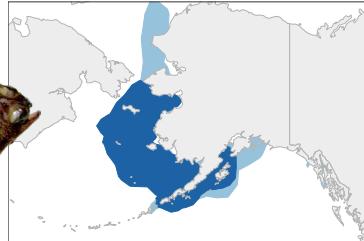
10261

### Yellowfin Sole *Limanda aspera*

Lateral line with a high flat-topped arch with no dorsal branch. Distinct dark lineat base of dorsal and anal fin; eyed side dark brown or olive, occasionally withgolden spots; fins often yellow; blind side snowy white. Eyed side uniform brown or olive-green.

RANGE: Korea to British Columbia, Bering Sea

DEPTH: 2-600m SIZE: 48cm



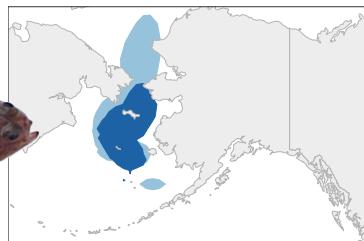
10210

### Sakhalin Sole *Limanda sakhalinensis*

No dark line at base of dorsal and anal fin; eyed side brown; fins without yellowish color; blind side pale.

RANGE: Sea of Okhotsk, Bering Sea

DEPTH: 20-95m SIZE: 35cm



10212

### Longhead Dab *Myzopsetta proboscidea*

Long pointed head, without bony protuberences; eyed side olive-brown with light blotches.

RANGE: Sea of Okhotsk, Bering Sea

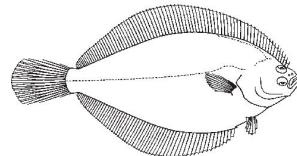
DEPTH: 10-125m SIZE: 42cm



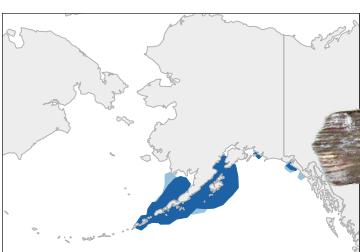
10211

## RIGHT-EYE FLATFISH

- Eyes typically on right side of body
- Low or no arch in lateral line
- ADB present



10170



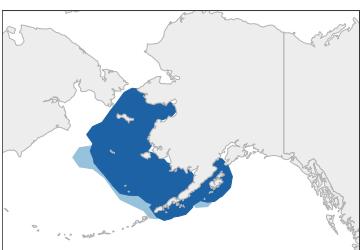
10270



10155



10220



10285

### English Sole *Parophrys vetulus*

Lateral line with low arch; maxilla much longer on blind side than on eyed side; eyed side uniform brown; blind side white to pale yellowish.

RANGE: Aleutians to Baja California, SE Bering Sea  
DEPTH: 0-550m SIZE: 61cm

### Butter Sole *Isopsetta isolepis*

Dorsal branch of lateral line extends beyond posterior margin of opercle; maxilla extends to anterior edge of orbit; 10-12 gill rakers on first arch; eyed side uniformly brown, often with yellowish fins; blind side white.

RANGE: Aleutians to S California, SE Bering Sea  
DEPTH: 0-425m SIZE: 55cm

### Arctic Flounder *Liopsetta glacialis*

Lateral line nearly straight: eyed side grayish brown with scattered faint spots: blind side snowy white.

RANGE: Norton sound, Chukchi and Beaufort Seas  
DEPTH: 0-100m SIZE: 35cm

### Starry Flounder *Platichthys stellatus*

Prominent dark bands on dorsal, anal, and caudal fins; rough star-like plates on both sides of body; eyes and dark coloration commonly occur on either right or left side.

RANGE: Korea to southern California, Bering Sea  
DEPTH: 0-375m SIZE: 91cm

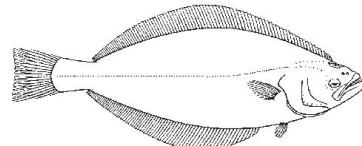
### Alaska Plaice *Pleuronectes quadrifasciatus*

Three to seven bony protuberances on eyed side of head; eyed side uniform brown or olive-green.

RANGE: Japan to NE Gulf of Alaska, Bering Sea  
DEPTH: 6-475m SIZE: 61cm

## RIGHT-EYE FLATFISH

- Eyes typically on right side of body
- Large mouth with prominent teeth
- Lateral line straight
- No anal spine

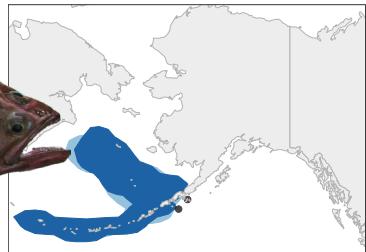


### Kamchatka Flounder *Atheresthes evermanni*

Tail forked; Preopercular bone rounded; no fang-like teeth on vomer (central bone in roof of mouth); teeth on upper jaw visible when mouth is closed; scale texture coarse; eyed side dark brown; blind side dirty white; young spotted; upper eye below top of head; anterior nostril of blind side with a large flap.

RANGE: Japan to western Gulf of Alaska, Bering Sea

DEPTH: 25-1100m SIZE: 84cm



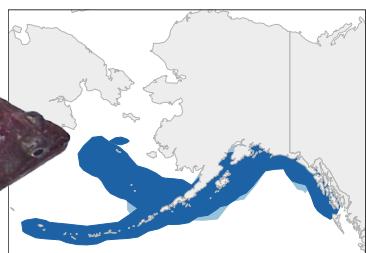
10112

### Arrowtooth Flounder *Atheresthes stomias*

Tail forked; Preopercular bone rounded; no fang-like teeth on vomer (central bone in roof of mouth); teeth on upper jaw visible when mouth is closed; scale texture coarse; eyed side dark brown; blind side dirty white; young spotted; upper eye below top of head; anterior nostril of blind side with a large flap.

RANGE: Bering Sea to central California

DEPTH: 20-900m SIZE: 85cm



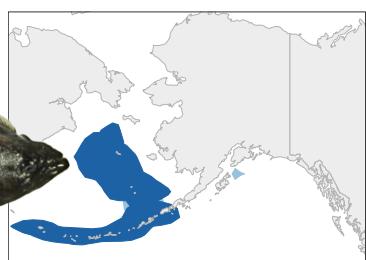
10110

### Greenland Turbot *Reinhardtius hippoglossoides*

Tail straight or slightly forked; Preopercular bone right-angled. Fang-like teeth on vomer (central bone in roof of mouth); teeth on upper jaw obscured when mouth is closed; scale texture fine; eyed side black or dark brown; blind side light with blue-green hues.

RANGE: Japan to Baja California, Bering Sea

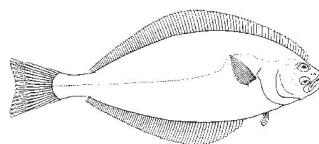
DEPTH: 14-2000m SIZE: 120cm



10115

## RIGHT-EYE FLATFISH

- Eyes typically on right side of body
- Large mouth
- Anal spine prominent

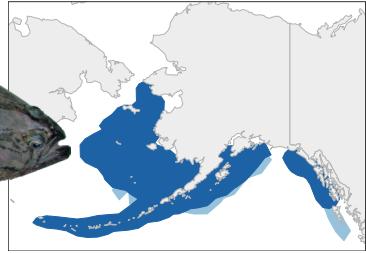


### Pacific Halibut *Hippoglossus stenolepis*

Tail crescent-shaped; eyed side usually uniform dark gray or brown, often with light blotches; blind side creamy white.

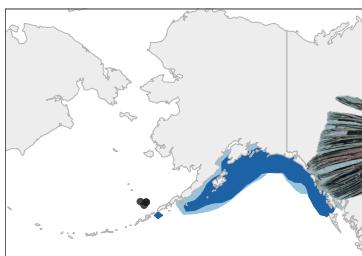
RANGE: Japan to Baja California, Bering Sea

DEPTH: 6-1100m SIZE: 267cm



10120

## FLATFISHES



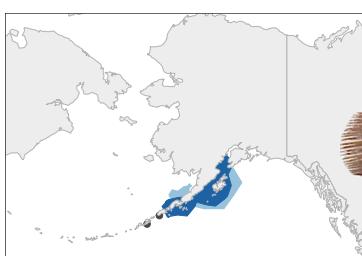
10150

### Slender Sole *Lyopsetta exilis*

Eyed side pale brown, blind side white; lateral line without accessory dorsal branch; large deciduous scales; mouth large, maxilla extending to midorbit..5

RANGE: Kodiak Island to Baja California

DEPTH: 10-800m SIZE: 35cm



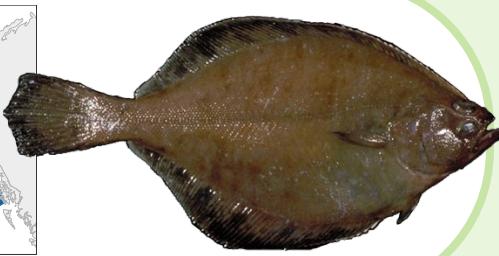
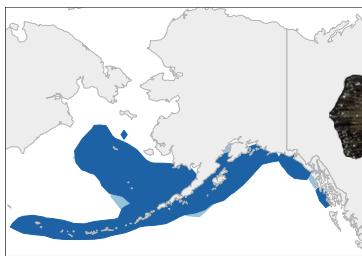
10250

### Sand Sole *Psettichthys melanostictus*

Dorsal branch of lateral line extends beyond posterior margin of opercle; first 4-8 dorsal fin rays long and mostly free from membrane, maxilla extends to midorbit or beyond; 20-25 gill rakers on first arch; eyed side and fins medium brown with darker speckling; blind side white.

RANGE: Aleutians to S California, SE Bering Sea

DEPTH: 1-325m SIZE: 63cm



10130

### Flathead Sole *Hippoglossoides elassodon*

Dark barring on dorsal and anal fins, caudal fin membranes without pigment; body slightly deeper than Bering flounder (below); silver sheen on blind side extends above lateral line; space between eyes narrow, with a raised ridge; 15-24 gill rakers on lower first arch.

RANGE: Kuril Islands to northern California, Bering Sea

DEPTH: 0-1050m SIZE: 56cm



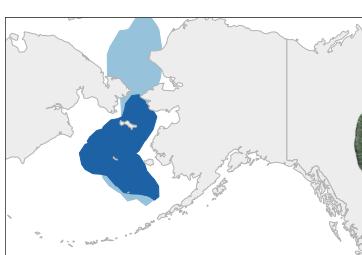
10160

### Petrale Sole *Eopsetta jordani*

Eyed side brown, blind side white, caudal fin membranes pigmented; interorbital space wider than previous two species, with 4-5 rows of scales between eyes.

RANGE: SE Bering Sea to Baja California

DEPTH: 20-550m SIZE: 70cm



10140

### Bering Flounder *Hippoglossoides robustus*

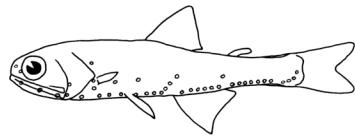
No barring on dorsal and anal fins, caudal fin membranes without pigment; body slightly more elongated than flathead sole (above); silver sheen on blind side mostly below lateral line; space between eyes slightly wider and without ridge, flat, with two rows of scales; 9-13 gill rakers on lower first arch

RANGE: Japan to Bering Sea

DEPTH: 18-425m SIZE: 40cm

## LANTERNFISHES

- Small mesopelagic fish with large eye
- Numerous conspicuous photophores



### California Headlightfish *Diaphus theta*

headlight lanternfish Body stout, black to dark brown when scales are present, typically beige when scales are stripped; photophores cover body; large anterior photophores present on snout.

RANGE: Bering Sea to Baja California, Japan

DEPTH: 0-16500m SIZE: 11cm



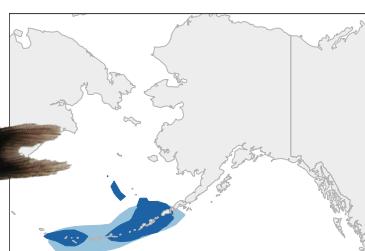
22610

### Brokenline Lampfish *Lampanyctus jordani*

Body slender, black to dark brown when scales are present, typically gray when scales are stripped; photophores cover body; pectoral fin reaches nearly to anal-fin origin

RANGE: Bering Sea to southern California, Japan

DEPTH: 0-1400m SIZE: 14cm



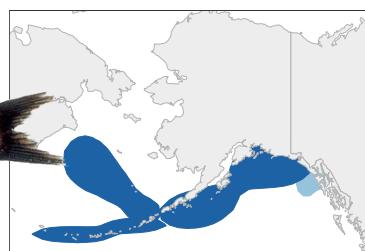
22625

### Pinpoint Lampfish *Lampanyctus regalis*

Body slender, black to dark brown when scales are present, typically white to pink when scales are stripped; minute photophores cover body; pectoral fin reaches pelvic-fin base

RANGE: Bering Sea to Baja California, Japan

DEPTH: 50-1550m SIZE: 20cm



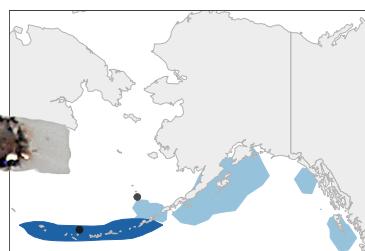
22624

### Northern Flashlightfish *Protomyctophum thompsoni*

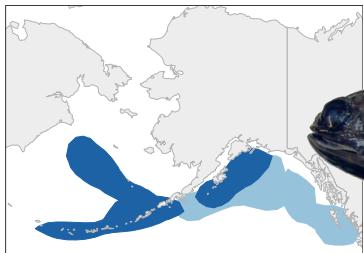
Body stout, black to dark brown when scales are present, typically beige when scales are stripped; photophores cover body;

RANGE: Bering Sea to central California, Japan

DEPTH: 0-500m SIZE: 7cm



22649



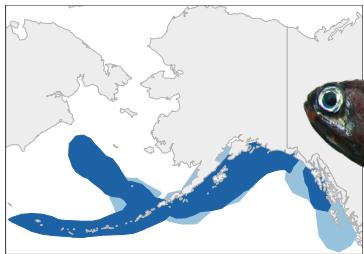
22603

**Garnet Lampfish** *Stenobrachius nannochir*

Body slender, black to dark brown when scales are present, typically beige to white when scales are stripped; photophores cover body; infracaudal gland on ventral side of caudal peduncle typically stripped, gray when present, with 5-6 scales that fill 3/4ths the space

RANGE: Bering Sea to N California, Japan

DEPTH: 300-1000m SIZE: 14cm



22602

**Northern Lampfish** *Stenobrachius leucopsarus*

Body slender, black to dark brown when scales are present, typically beige to white when scales are stripped; photophores cover body; infracaudal gland on ventral side of caudal peduncle typically retained, white when present, with 7-9 scales that fill entire space

RANGE: Bering Sea to Baja California, Japan

DEPTH: 0-2900m SIZE: 13cm

## MISCELLANEOUS FISHES

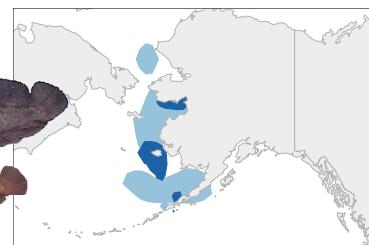
- Elongate body
- Benthic/demersal fishes

### Bering Wolffish *Anarhichas orientalis*

Body color reddish brown or black mottled (young with light spots and lines on body); embedded scales on body; caudal fin completely separate from dorsal and anal fins

RANGE: N Bering Sea to Gulf of Alaska; Japan

DEPTH: 0-122m SIZE: 123cm



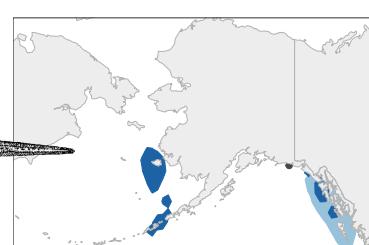
20322

### Wolf-Eel *Anarrhichthys ocellatus*

Body blue gray in young, covered with large dark spots surrounded by lighter areas; no distinct caudal fin

RANGE: SE Bering Sea to S California

DEPTH: 0-226m SIZE: 240cm



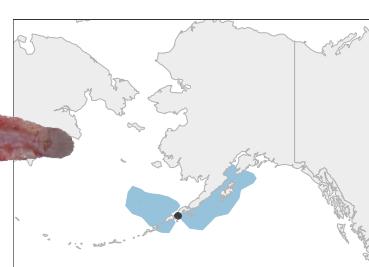
20320

### Dwarf Wrymouth *Cryptacanthodes aleutensis*

Body color bright red without longitudinal bands; lateral line absent; scales absent; caudal fin joined to dorsal and anal fins by membrane

RANGE: SE Bering Sea to California

DEPTH: 28-350m SIZE: 31cm



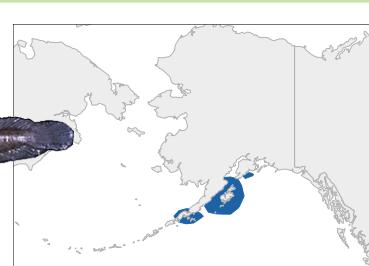
23791

### Giant Wrymouth *Cryptacanthodes giganteus*

Body color pink to brown; 2 longitudinal bands on each side of lateral line; small scales; caudal fin joined to dorsal and anal fin by membrane

RANGE: Aleutian Islands to N California

DEPTH: 6-128m SIZE: 117cm



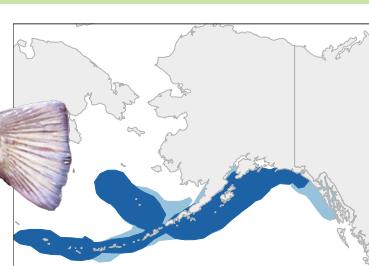
23792

### Prowfish *Zaprora silenus*

Body color gray brown; single continuous dorsal fin; large white pores on head; no pelvic fin or ventral sucking disk

RANGE: Bering Sea to S California; Japan

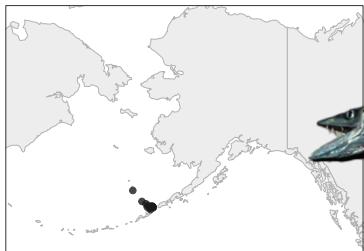
DEPTH: 10-350m SIZE: 89cm



24001

## MISCELLANEOUS FISHES

- Elongate body
- Midwater fishes



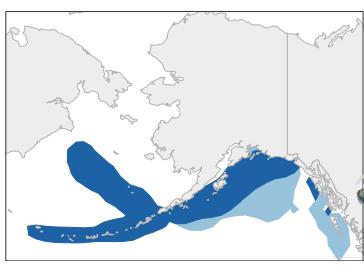
23657

### Longnose Lancetfish *Alepisaurus ferox*

Body elongate with large saillike dorsal fin; jaws long and acute; teeth prominent and daggerlike.

RANGE: Bering Sea to Chile, Okhotsk Sea to Japan

DEPTH: 200-1000m SIZE: 22cm



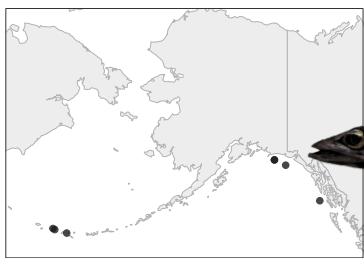
21010

### Pacific Viperfish *Chauliodus macouni*

Body elongate, with photophores along length of body; strong viper-like teeth; first dorsal fin ray elongate with lure

RANGE: Bering Sea to Baja California, Japan

DEPTH: 70-4000m SIZE: 27cm



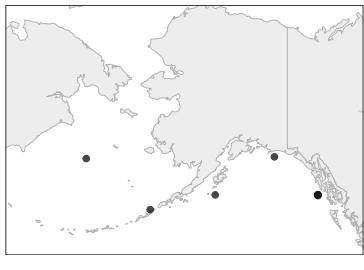
22952

### Duckbill Barracudina *Magnisudis atlantica*

Body elongate with short, small dorsal fin; jaws long and acute; teeth prominent and daggerlike

RANGE: Bering Sea to Baja California, Japan

DEPTH: 200-1000m SIZE: 22cm



22701

### Snipe Eel *Nemichthysidae*

Body extremely elongate, brown to black; jaws elongate, each one curving away from the other, with small needle-like teeth

RANGE: Bering Sea to Peru, Japan

DEPTH: 25-4500m SIZE: 145cm

## MISCELLANEOUS FISHES

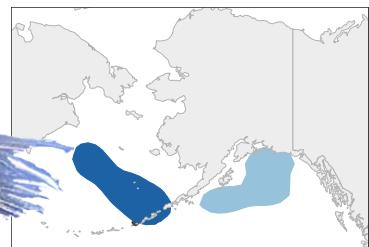
- Body stout

### Barreleye *Macropinna microstoma*

Body stout, light brown; snout protruding; eyes large and oriented dorsally

RANGE: Bering Sea to Baja California, Japan

DEPTH: 100-900m SIZE: 16cm



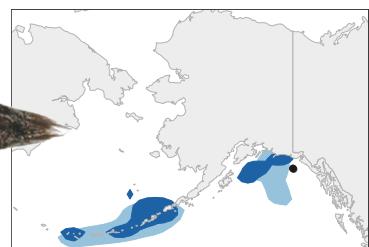
23962

### Highsnout Bigscale *Melamphaes lugubris*

Body stout, black, with large scales especially around eyes and head; frontal bones over eyes without strong crests

RANGE: Bering Sea to Baja California

DEPTH: 150-3300m SIZE: 18cm



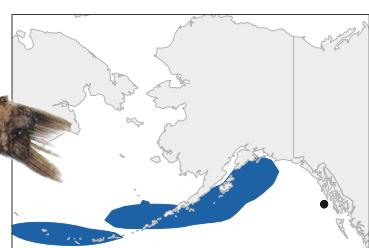
22320

### Crested Bigscale *Poromitra crassiceps*

Body stout, black, with large scales especially around eyes and head; frontal bones over eyes with strong serrated crests; prominent nasal spine between nares

RANGE: Bering Sea to Peru, worldwide

DEPTH: 150-3300m SIZE: 18cm



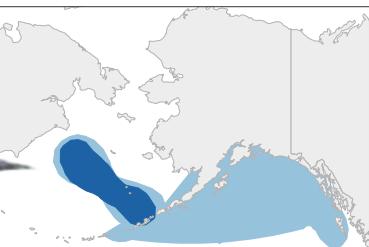
22310

### Dreamer Angler *Oneirodes sp.*

(in females) a pointed lure (esca) protruding from its forehead; the esca has a tapering, internally pigmented, anterior appendage.

RANGE: Bering Sea to Gulf of Alaska; Japan

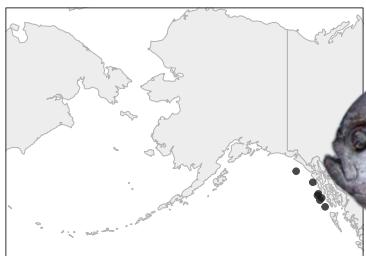
DEPTH: 100-2000m SIZE: 21cm



22912

## MISCELLANEOUS FISHES

- Body laterally compressed

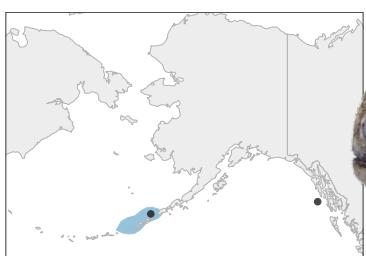


20842

### Pacific Pomfret *Brama japonica*

Body color silver gray with black fins; rounded deep body shape; forked caudal fin; elongated pectoral fin

RANGE: Bering Sea to Peru; Japan  
DEPTH: offshore pelagic SIZE: 122cm



22461

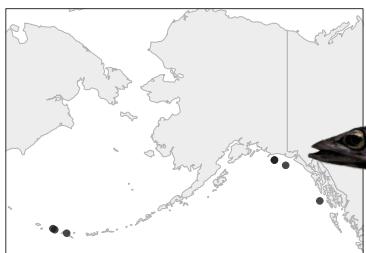
### Manefish *Caristius macropus*

Body color gray-brown to black; dorsal, anal, and pectoral fins elongate, delicate, flanked by a sheath of tissue on the dorsal and ventral surface of the body

RANGE: Bering Sea to California; Japan  
DEPTH: 80-1300m SIZE: 33cm

## MISCELLANEOUS FISHES

- Body fusiform

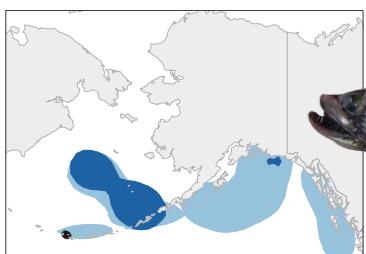


22952

### Duckbill Barracudina *Magnisudis atlantica*

Body elongate with short, small dorsal fin; jaws long and acute; teeth prominent and daggerlike

RANGE: Bering Sea to Baja California, Japan  
DEPTH: 200-1000m SIZE: 22cm



23603

### Northern Pearleye *Benthalbella dentata*

Adipose very slender; pectorals small; pelvic fins large and expanded. Brown dorsally, lighter below

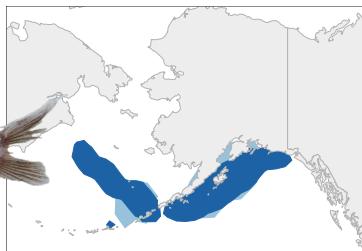
RANGE: Gulf of Alaska, Aleutians, Japan  
DEPTH: 98-1000m SIZE: 26cm

## Northern Smoothtongue *Leuroglossus schmidti*

Body opaque, silvery white; snout acute

RANGE: Bering Sea to British Columbia, Japan

DEPTH: 0-1800m SIZE: 19cm



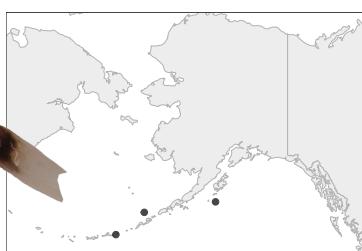
20622

## Bluethroat Argentine *Nansenia candida*

Body opaque, bright and silvery, bluish on nape, preopercle, and throat; teeth form straightcutting edge in lower jaw

RANGE: Bering Sea to Baja California, Japan

DEPTH: 200-1000m SIZE: 22cm



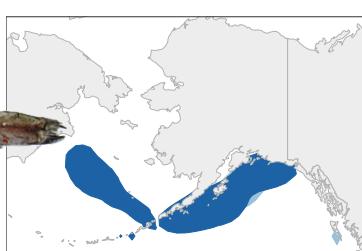
20572

## Robust Blacksmelt *Pseudobathylagus milleri*

Body soft and translucent, black with blue highlights around head and belly; frontal bones firm and brittle; snout blunt

RANGE: Bering Sea to southern California, Japan

DEPTH: 60-6600m SIZE: 20cm



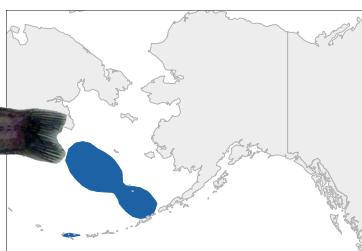
20620

## Popeye Blacksmelt *Lipolagus ochotensis*

Body opaque, light brown; snout acute

RANGE: Bering Sea to Baja California, Japan

DEPTH: 50-1050m SIZE: 18cm



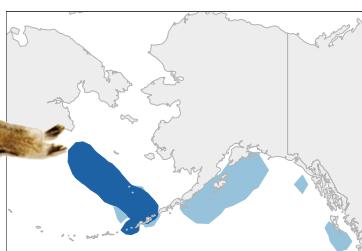
20624

## Pacific Blacksmelt *Bathylagus pacificus*

Body soft and translucent, black with blue highlights around head and belly; frontal bones flexible; snout blunt

RANGE: Bering Sea to Baja California, Japan

DEPTH: 150-7700m SIZE: 25cm



20615





**Gina M. Raimondo**

Secretary of Commerce

**Rick Spinrad**

Under Secretary of Commerce  
for Oceans and Atmosphere

**Janet Coit**

Assistant Administrator  
for Fisheries

February 2023

[www.fisheries.noaa.gov](http://www.fisheries.noaa.gov)

**National Marine  
Fisheries Service**

Alaska Fisheries Science Center  
7600 Sand Point Way N.E.  
Seattle, WA 98115-6349