



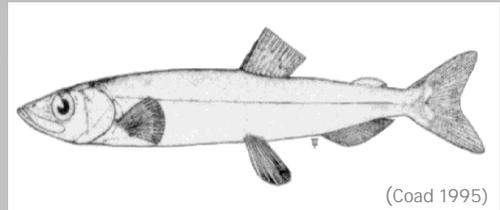
T. Mills, FWS

## Field Guide to Identifying Kittlitz's Murrelet Forage Fish

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### Capelin (*Mallotus villosus*)

- Dorsal color is olive, ventral is silver
- Opalescent sheen (herring and sandlance may have pinkish sheen too)
- **Firm** body type
- Body shape is **wider** than sandlance and **straighter** than herring
- Spawning male has **raised lateral line** and **enlarged anal fin\***



(Coad 1995)

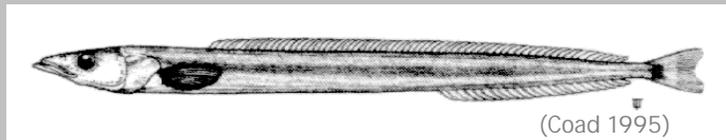


Spawning male capelin\*

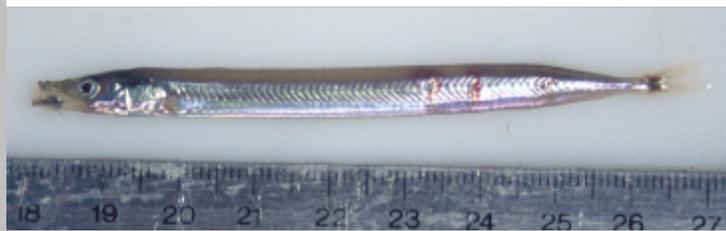


### Pacific sandlance (*Ammodytes hexapterus*)

- Dorsal color is metallic bluish/green, ventral is silver
- May look more **limp** in the bill than capelin
- Body shape is **slender, straight** and **pointed** (like a needle)



(Coad 1995)

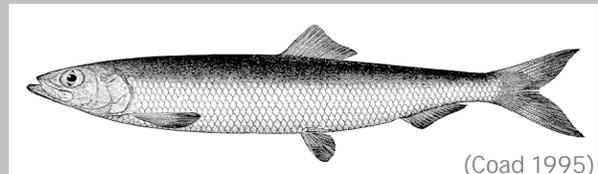


### Pacific herring (*Clupea pallasii*)

- Dorsal color is dark blue to purple, ventral color is silver
- Opalescent sheen (capelin and sandlance may have pinkish sheen too)
- Juvenile body type is **medium to firm**
- Body shape is **widest at the middle**, tapers at both ends



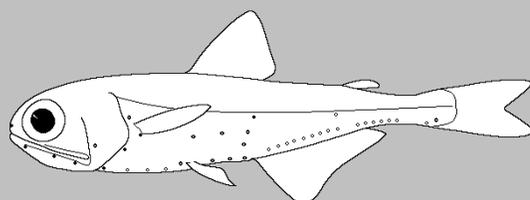
Adult Pacific herring



(Coad 1995)



northern lampfish (~90 mm)



(Froese and Pauly 2003)

**Myctophid** (Cannot ID to species in the bill)

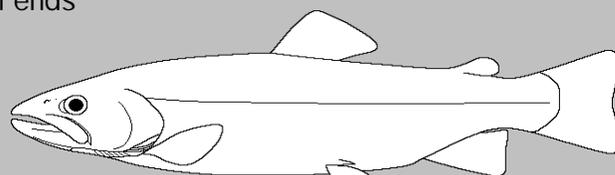
- Coloration is **dark grey** or black with **photophores** and luminous tissue
- Body type is **limp**
- Body shape is **widest at the nape**
- We've found large concentrations of northern lampfish in the surface waters near tidewater glaciers.

**Salmonid** (Species identification in the bill is unlikely)

- Dorsal color is blue, ventral color is silver
- Parr marks (dark blotches on the body) may be visible with scope for chinook, sockeye, chum or coho. Juvenile pink salmon do not have parr marks.
- **Firm** body type
- Body shape **widest at the middle**, tapers at both ends



Pink salmon (212 mm)



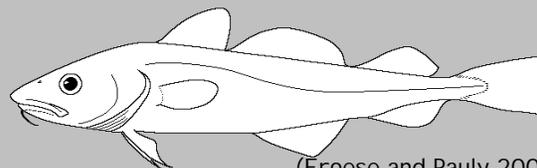
(Froese and Pauly 2003)

**Gadid** (walleye pollock are common, Pacific cod are also present)

- Coloration is dull/grayish with **brown or rust colored blotches**
- Body type is **limp**
- Body shape is **widest at the nape**, tapers at posterior end



Pacific cod



(Froese and Pauly 2003)



M. Romano

KIMU with Capelin

References:

Coad, B.W., 1995. Encyclopedia of Canadian fishes. Canadian Museum of Nature and Canadian Sport fishing Productions Inc. Singapore.

Froese, R. and D. Pauly. Editors. 2003. FishBase. World Wide Web publication. [www.fishbase.org](http://www.fishbase.org), version 13 April 2004

