### Fish

~250 observed in Sweden in four different classes.

All species seen in Sweden with any regularity is treated in the text but a few species very rarely seen outside very deep waters or stray species not normally occurring in the North Atlantic may potentially be misidentified.

The animals are ordered by taxonomy with slides noting each new order.

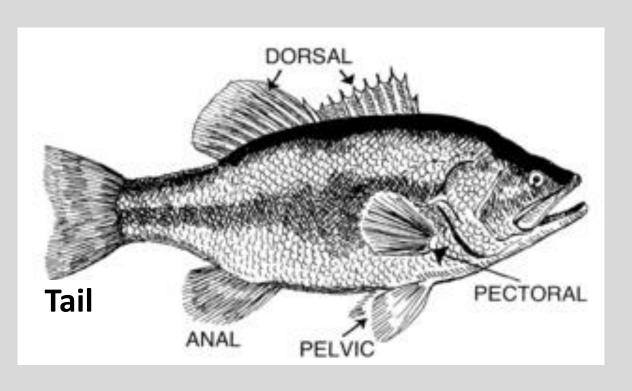
Note that the listing is partly hierarchical so both a larger group and one or more taxa within it is discussed as separate taxa. This hierarchy is noted in the upper right corner when present.

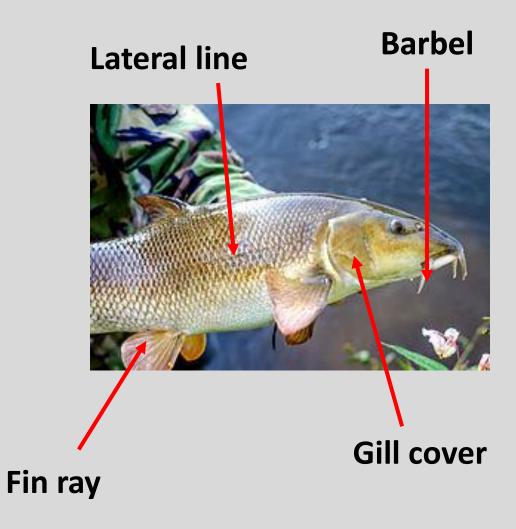
A few morphological traits are illustrated in the next slide which will be referred to for species descriptions.

The size given is the size of adult fish. Juveniles will be smaller than this. It can be hard to know if a fish is fully adult so you may often identify species to one of the animals we list even though they are much smaller than the sizes we list.

### **Basic fish anatomy**

**Fins** 





## Myxiniformes: Hagfish/Pirål







## Myxine glutinosa Hagfish/Pirål







#### Identification

- No jaw.
- Pale pink colour.
- No eyes, no jaws, no scales.
- Eel like body.
- 1 gill slit.
- Can tie themselves in knots.
- Excreted massive amounts of slime if disturbed.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

- Marine.
- Deep water.



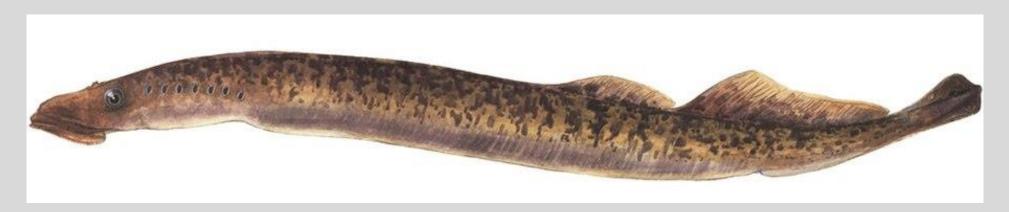




## Petromyzontiformes: Lampreys/Nejonögon







## Petromyzontidae Lampreys/Nejonögon



Lampetra planeri



Lampetra fluviatilis



#### Identification

- Jawless.
- Toothed funnel-like mouth.
- Distinct gill openings (see arrows).
- Scaleless elongated body.

#### **Potential misidentifications**

• No similar species in Sweden.

#### **Habitat**

Marine, brackish and freshwater.

Larvae filter feeders burrowed in freshwater sediment.

Length

20 - 120 cm

## **Chimaeriformes: Rabbitfish/Havsmus**



# Chimera monstrosa Rabbitfish/Havsmus





#### Identification



- Cream-brown with horizontal lines of dark spots.
- Elongated, tapering to the back.
- Venomous thorn on dorsal fin.
- Large eyes high on the head.
- Long thin tail.
- All teeth in each jaw grown together into plates.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

- Deep marine.
- Bottom dwelling.

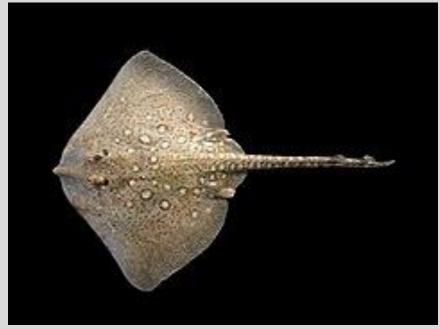




Chordata Chondrichthyes Chimaeriformes Chimaeridae Chimera monstrosa

## Rajiformes: Skates and rays/Äggrockeartade rockor

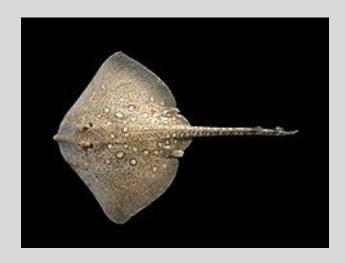




## Rajiformes Skates and rays/Äggrockeartade rockor



Amblyraja radiata



Raja clavata

#### Identification

- Greatly enlarged pectoral fins.
- Flattened body.
- Distinct undulating fin movement when swimming.
- Wide mouth and gill slits on the underside of the body.
- Narrow tail.

#### **Potential misidentifications**

• There are other groups of rays but none of them has been seen more than a handful of times in Sweden.

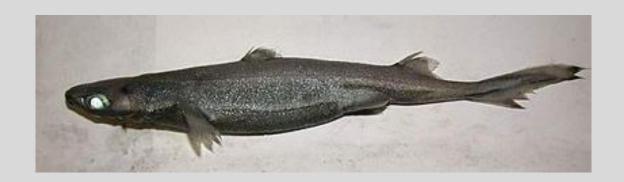
#### Habitat

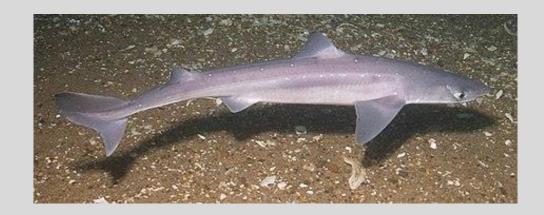
- Marine.
- Bottom dwelling.



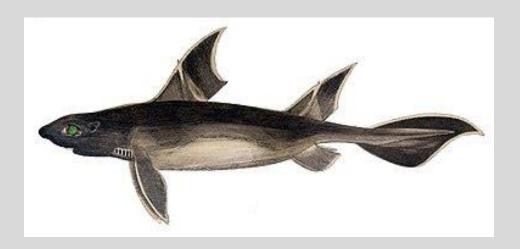


## **Squaliformes: Squaliformes/Pigghajartade hajar**





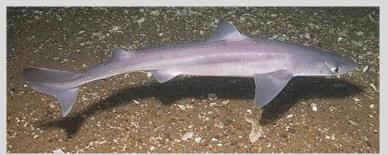




## Squaliformes Squaliformes/Pigghajartade hajar



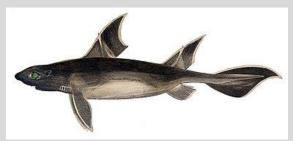
Etmopterus spinax



Squalus acanthias



Somniosus microcephalus



Oxynotus centrina

### Nr 6 belongs to this group

#### **Identification**

- Two dorsal fins with a spine in front of each (see arrow) (spine missing in Greenland shark, Fish nr. 6).
- Anal fins absent (as the only Swedish sharks).
- 5-7 gill slits.

#### **Potential misidentifications**

• No similar species in Sweden.

#### Habitat

Marine.

Length

100 - 650 cm



# Somniosus microcephalus Greenland shark/Håkäring





#### Identification

CR

- Grey to black.
- Relatively small fins.
- Short rounded nose.
- Dorsal fins lack spine.
- Blue irises.
- Occasionally faint dark stripes or white spots on the body.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

- Marine.
- Deep water.
- Arctic species rarely caught in winter in Bohuslän.

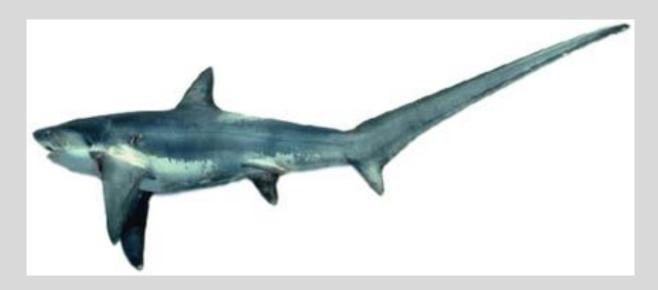
Length

240 - 640 cm



## Lamniformes: Mackerel sharks/Håbrandsartade hajar







## Lamniformes Mackerel sharks/Håbrandsartade hajar



Lamna nasus



Alopias vulpinus



Cetorhinus maximus

#### Identification

- 2 dorsal fins.
- Anal fin present.
- Large mouth.
- 5 gill slits.
- Lacks lower eyelids (all other Swedish sharks has eyelids).

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

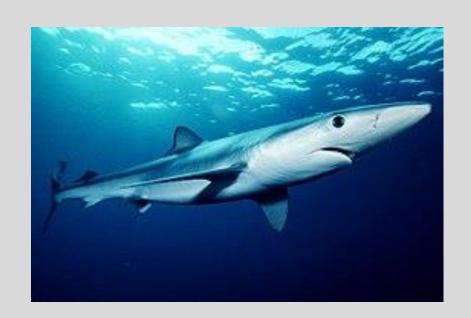
- Marine.
- Open water.



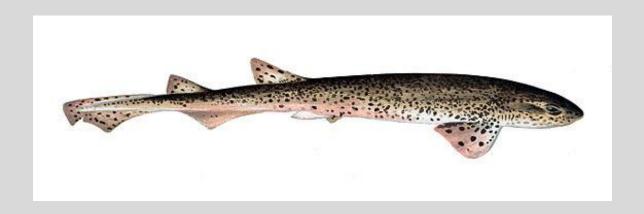
200 – 900 cm



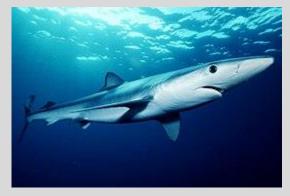
## Carchariniformes: Ground sharks/Gråhajartade hajar







## Carchariniformes Ground sharks/Gråhajartade hajar



Prionace glauca



Scyliorhinus canicula



Scyliorhinus stellaris

### Nr 9 belongs to this group

#### Identification

- Elongated, slightly flattened sharks.
- Two dorsal fins.
- Anal fins present.
- 5 gill slits.

#### **Potential misidentifications**

• No similar species in Sweden.

#### Habitat

- Marine.
- Mainly free water masses but sometimes bottom dwelling.

Length

35 - 380 cm

## Scyliorhinus canicula Lesser spotted-dogfish/Småfläckig rödhaj







#### Identification

- Light reddish brown with dark spots, white abdomen.
- Short narrow head.
- First dorsal fin starts a bit behind the beginning of the abdominal fins, and the second dorsal fin begins a bit behind the beginning of the anal fin.

#### **Potential misidentifications**

- Greater spotted dogfish (not seen in Sweden in ~80 years) looks similar.
- Lesser spotted dogfish has enlarged nasal flaps that reach all the way to the mouth (see arrow). Nasal flaps in greater spotted dogfish much smaller.

#### Habitat

 Marine from as shallow as 30 meter but generally much deeper.

Length

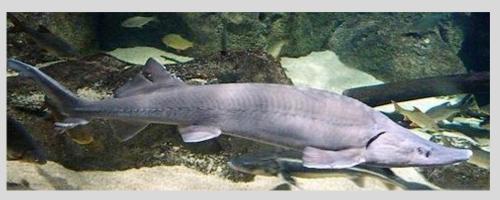
60 - 100 cm



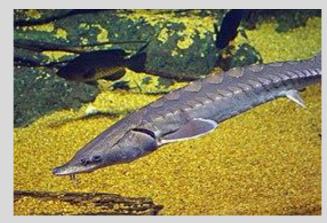
## Acipenseriformes: Sturgeons/Störar







## Acipenseridae Sturgeons/Störar



Acipenser oxyrinchus



Acipenser gueldenstedti



Acipenser baerii

#### Identification

- Grey to brown.
- Elongated body.
- Bony plates along head and body.
- Upper half of tail fin drastically larger than lower half.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

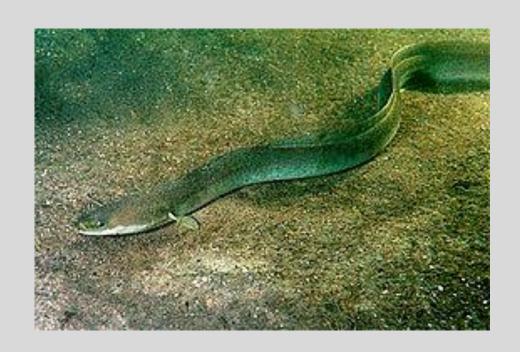
- Adults in marine to brackish water.
- Spawns in rivers.
- Very rarely seen in Sweden.



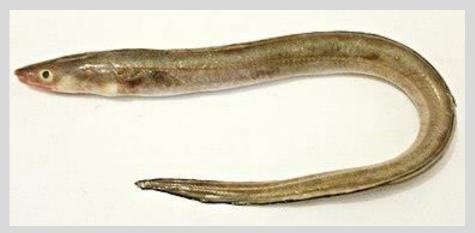
**Up to 400 cm** 



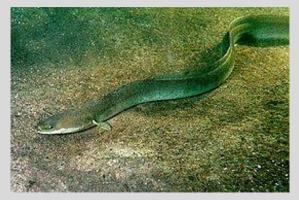
## Anguilliformes: Eels/Ålar







## Anguilliformes Eels/Ålar



Anguilla anguilla



Nemichthys scolopaceus



Conger conger

### Nr 12 belongs to this group

#### **Identification**

- Very elongated, flexible body.
- No abdominal fins.
- Invisible scales.
- Slimy to the touch.
- Dorsal fin, anal fin and tail fin fused together (clear tail fin may be completely absent).

#### **Potential misidentifications**

No similar species in Sweden.

#### **Habitat**

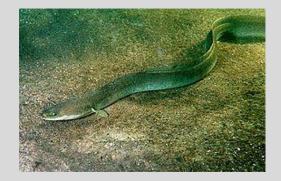
Marine, brackish and freshwater.



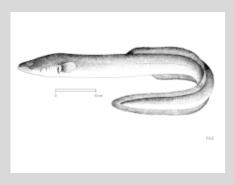
Length

5 - 300 cm

## Anguilla anguilla European eel/Europeisk ål









#### Identification

CR

- Dark grey to brown.
- Extremely elongated flexible body.
- Large mouth stretching past the eye.
- Lower jaw slightly longer than upper.
- Dorsal fin starts far behind pectoral fin.

#### **Potential misidentifications**

- Marine individuals can be mistaken for conger eels.
- Conger eels are generally larger, have upper jaw longer than upper and have the dorsal fin starting just behind pectoral fin.

#### **Habitat**

- Freshwater, brackish, marine depending on lifestage.
- Prefer soft bottom.

Length

45 - 100 cm



## Siluriformes: Catfish/Mal



## Silurus glanis Wels Catfish/Mal





#### Identification

NT

- Dark brown back, grey abdomen.
- Speckled sides.
- 3 pairs of barbels (one set very long) (see arrow).
- Elongated body.
- Anal fin very wide and connected to the caudal fin
- Wide mouth.
- Small eyes high on the head.

#### **Potential misidentifications**

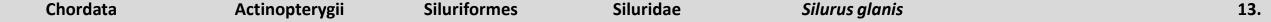
- Can be mistaken for Burbot (Fish nr. 35).
- Burbot only has one long barbel (which is must shorter than in Wels Catfish).

#### **Habitat**

- Slow of still freshwater.
- Rare in Sweden.

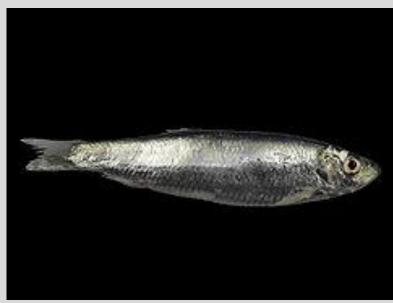
Length

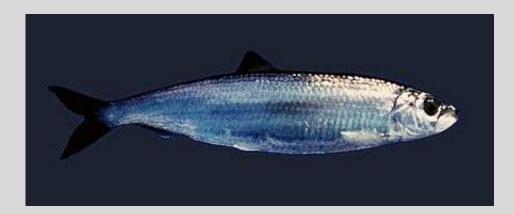
200 - 300 cm



## Clupeiformes: Clupeiformes/Sillartade fiskar









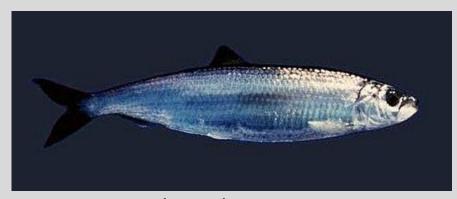
## Clupeidae Herrings/Sillar



Sardina pilchardus



Sprattus sprattus



Clupea harengus



Actinopterygii

#### Clupeiformes

#### **Identification**

- Silvery color.
- Typically lack a lateral line.
- · Streamlined.
- Generally found in large schools.
- Short snout not extending forward past lower jaw.
- Short mouth not extending backward past eye.

#### **Potential misidentifications**

Anchovy (Fish nr 15) looks similar but has longer snout and larger mouth.

#### Habitat

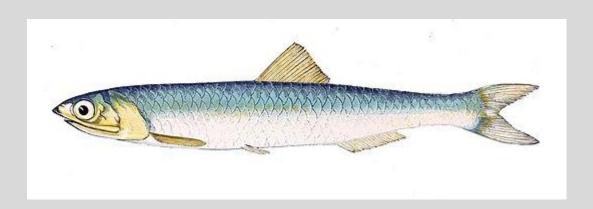
Marine or brackish waters.



**Length** 2 – 75 cm

# Engraulis encrasicolus Anchovy/Ansjovis





#### Identification

- LC
- Dark back, blue/green/silver side, whiteish underside.
- Slender.
- Generally found in large schools.
- Stripe along the body that fades with age.
- Long snout extending forward past lower jaw.
- large mouth extending backward past eye.

#### **Potential misidentifications**

 Herrings (Fish nr 14) looks similar but has shorter snout and smaller mouth.

#### Habitat

Marine.



Length

12 - 20 cm

## **Cypriniformes: Cypriniformes/Karpartade fiskar**









# Barbatula barbatula Stone loach/Grönling





#### Identification



- Lack of teeth in the mouth (pharyngeal bones instead, shared with rest of order).
- No adipose fin (unlike Salmoniformes fish nr 22).
- 3 pairs of short barbels.
- Dark brown back, speckled brown body, yellowish abdomen.
- Relatively wide elongated body.
- Blunt nose and downward pointing mouth.

#### **Potential misidentifications**

 Spined loach (Fish nr 17) is lighter in color and has spines near eyes (only visible if disturbed).

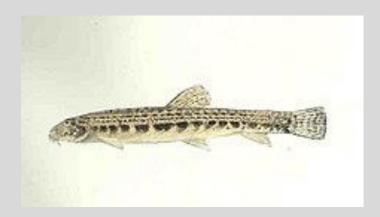
#### **Habitat**

- Freshwater Bottom dwelling.
- Prefers rocky bottoms.

Length

8 - 20 cm

# Cobitis taenia Spined loach/Nissöga





#### Identification

LC

- Lack of teeth in the mouth.
- No adipose fin (unlike Salmoniformes fish nr 22).
- 3 pairs of small barbels.
- Eye high on the head with a spine under each eye (only visible when disturbed).
- Wellow-brown with distinct spot pattern (bands of small spots as well as a band of larger spots along side).
- Head has small spots and a black line through from top of the head.

#### **Potential misidentifications**

Stone loach is darker (Fish nr. 16)
 has a wider body and head and lacks spine.

#### Habitat

Muddy bottoms of freshwater.

Length

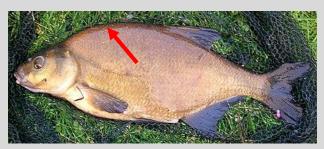
9 - 13 cm



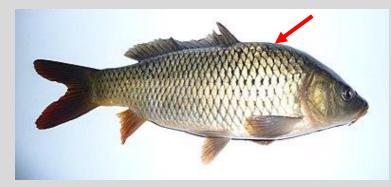
# Cyprinidae Carps/Karpar



Tinca tinca



Alburnus alburnus



Cyprinus carpio

### Nr 19 – 21 belong to this group

#### Identification

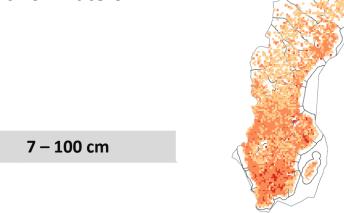
- Lack of teeth in the mouth (pharyngeal bones instead).
- No adipose fin (unlike Salmoniformes fish nr 22).
- Often with a high backed body (see arrow).
- Generally without distinct barbels, if barbels are present, fish is much bigger than two preceding species.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

Freshwater or brackish waters.



Length

## Alburnus alburnus Common bleak/Löja



#### Identification

- Dark grey- green back, silver sides, white-silver belly.
- Often a gold line separates the back and bodyside.
- Long anal fin.
- Upturned mouth.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

- Freshwater.
- Open water.



Length 12 – 15 cm

# Phoxinus phoxinus Common minnow/Elritsa





#### Identification

LC

- Green-brown back, white-grey belly.
- 12-15 dark transverse stripes/blotches.
- Semi-transparent finns.
- Found in groups.

#### **Potential misidentifications**

 Young salmonids (Fish nr 22) can appear similar but have distinct spots rather than stripes and have adipose fins.

#### Habitat

- Freshwater.
- Clear, flowing water.

Length 7 – 12 cm



## Rutilus rutilus Roach/Mört





#### Identification

- LC
- Silver to grey blue colour, dark back, white abdomen.
- Red eyes.
- · Red fins.
- Caudal fin incised with pointed lobes.
- Short and rounded pectoral and anal fins.

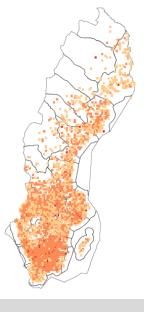
#### **Potential misidentifications**

• No similar species in Sweden.

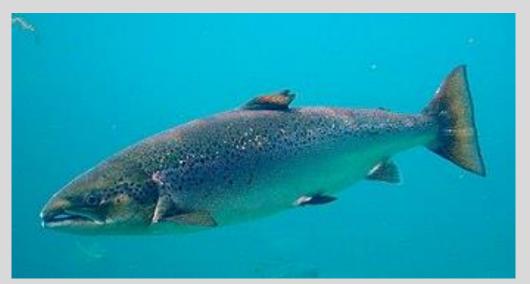
#### Habitat

- Freshwater and brackish water.
- Absent in acidic water.

Length 15 – 30 cm

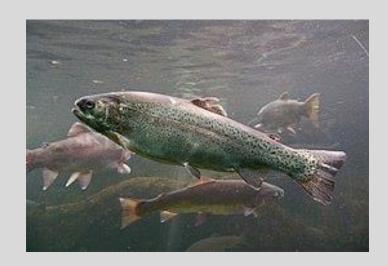


## Salmoniformes: Salmonids/Laxartade fiskar



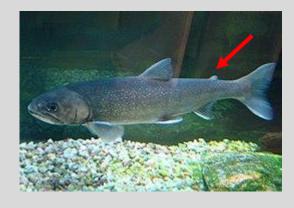






# Salmoniformes Salmonids/Laxfiskar









# Identification

- Nr 23 27 belong to this group
- Presence of fat fins (just in front of the tail (see arrow. The only other Swedish order with this fin is Osmeriformes (Fish nr 28-29).
- No distinct smell (compare with Osmeriformes).
- Most species grow to large sizes.
- Small scales.

## **Potential misidentifications**

 Osmeriformes may look similar but smell very distinctly of cucumber and never grow above 70 cm.

# Habitat

- Marine, brackish and freshwater.
- Spawn in freshwater.

Length

Up to 200 cm



# Oncorhynchus mykiss Rainbow trout/Regnbåge





## Identification



- Grey green back, silver sides, white abdomen.
- Reddish pink to purple band along its side.
- Mottled fins (dorsal, tail and sometimes anal fins covered in black spots).
- Black dots over the body and head (most above the lateral line).

## **Potential misidentifications**

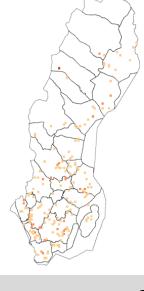
No similar species in Sweden.

# Habitat

- Freshwater.
- Introduced and invasive (native to the Pacific).

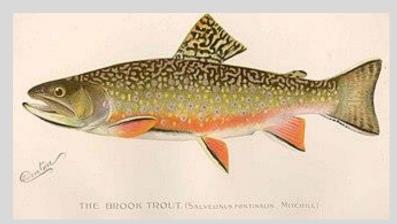
Length

App. 120 cm



# Salvelinus fontinalis Brook trout/Bäckröding





## Identification

NE

- Grey green to brown in color.
- Back, dorsal fin and tail fin covered in bright spots (yellow, red or pink).
- "Worm-like" yellow pattern on the back.

### **Potential misidentifications**

• No similar species in Sweden.

# Habitat

- Freshwater.
- Introduced and invasive (native to the American Atlantic).



Length

App. 30 cm

# Salmo trutta Brown trout/Öring

Resident









# Identification

- LC
- Two distinct forms, residents and migrants.
- Resident are yellow brown with distinct black and/or red spots on the back and sides often with a lighter ring around the spots.
- Migrants are silvery with black spots concentrated on the back and sides, both above and below lateral line.
- Long and low pectoral fins.
- Fat fin is often edged with red.

# **Potential misidentifications**

• Atlantic salmon (Fish nr 29) is similar to the migratory brown trout but the trout have longer teeth and more spots on the sides.

## Habitat

Marine, freshwater and brackish water.

Length 15 – 100 cm



# Salmo salar Atlantic salmon/Lax







# **Identification**

- LC
- Dark grey blue back, silver body, lighter abdomen.
- Vast majority of black dots only above the lateral line.
- Long and low pectoral fins.
- Relatively short head with a rounded nose.
- Relatively thin tail (compared to brown trout).

# **Potential misidentifications**

 Atlantic salmon is similar to the migratory brown trout (Species 28) but the trout have longer teeth, wider tail and many spots below the lateral line.

## Habitat

Marine, freshwater and brackish.

Length

110 - 150 cm



# Coregonus albula Vendance/Siklöja



### Identification

- Grey/blue/green back, silver sides, white abdomen.
- Streamlined.
- Lower jaw longer than upper jaw.
- Dark dorsal and caudal fins, lighter anal and abdominal fins.

### **Potential misidentifications**

- Other species in genus look similar but has jaws of equal length.
- Looks similar to smelt (Fish nr 30) but smelt can be identified by a distinct smell of cucumber.

## Habitat

- Freshwater.
- Pelagic.

Length 20 – 35 cm

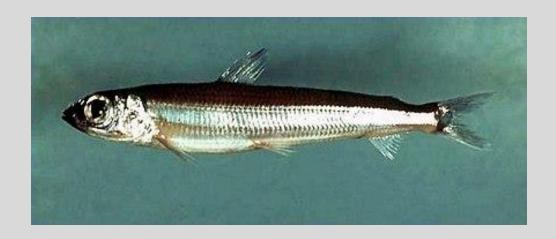




# Osmeriformes: Osmeriformes/Norsartade fiskar







# Osmerus eperlanus Smelt/Nors





# Identification

- Dark silver back, silver body and whiteish abdomen.
- Slightly translucent body.
- Has adipose fin.
- Elongated body.
- Long sharp teeth.
- Large mouth with an underbite.
- Distinct smell of cucumber.

## **Potential misidentifications**

 Looks like small salmonoid fish particular vendance (Fish nr. 27) but recognizable by the distinct smell of cucumber.

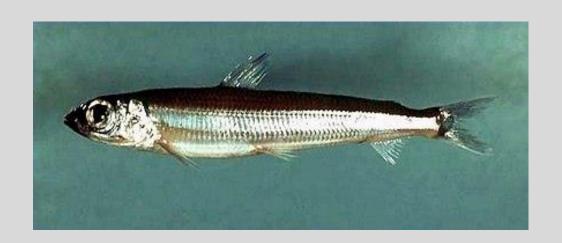
# Habitat

Found in lakes or in brackish waters.

Length

20 - 45 cm

# Argentina sp. Argentine/Guldlax



## Identification

- Yellow-brown back, brass colored sides, light abdomen.
- Adipose fin.
- Elongated body.
- Large eyes.
- Relatively short head.
- Distinct smell of cucumber.

# **Potential misidentifications**

• No similar species in Sweden.

# Habitat

- Marine.
- Deep water.
- Prefers soft bottoms.

**Length** 50 – 70 cm



# **Esociformes/Gäddartade fiskar**





# Esox lucius Pike/Gädda





## Identification

LC

- Grey-green body.
- Long mouth and body.
- Only one dorsal fin (at the back of the body).
- Light spots along the body.

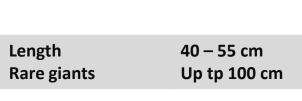
## **Potential misidentifications**

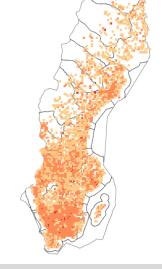
• No similar species in Sweden.

# Habitat

Primarily seen in freshwater.

Sometimes found in brackish water/estuaries.

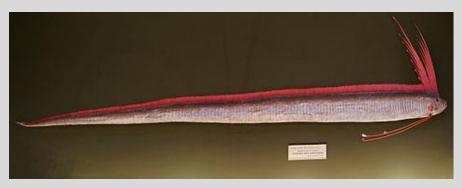


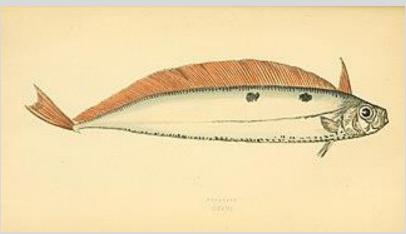


Chordata Actinopterygii Esociformes Esocidae Esox lucius 30.

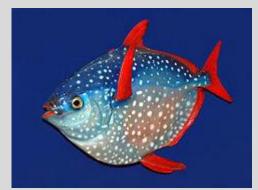
# Lampriformes: Lamprids/Glansfiskartade fiskar



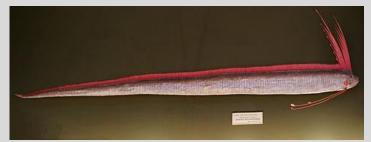




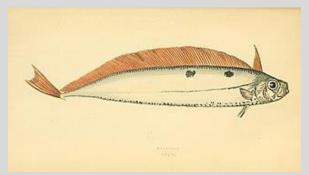
# Lampriformes Lamprids/Glansfiskartade fiskar



Lampris guttatus



Regalecus glesne



Trachipterus arcticus

## Identification

- Brightly colored.
- Compressed from the side.
- Very long dorsal fin.

# **Potential misidentifications**

No similar species in Sweden.

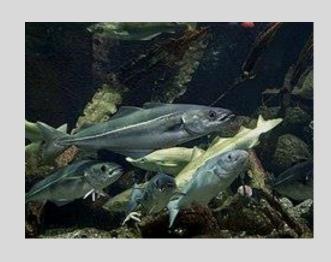
# Habitat

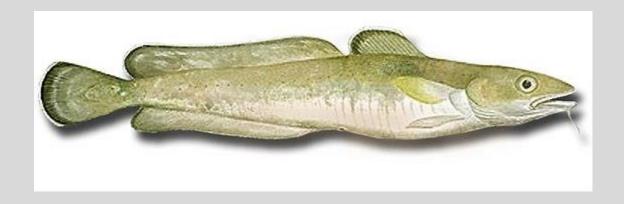
- Marine.
- Living in free water masses.

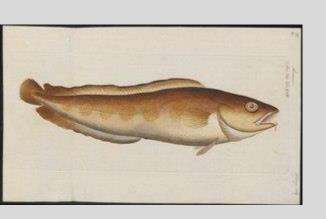


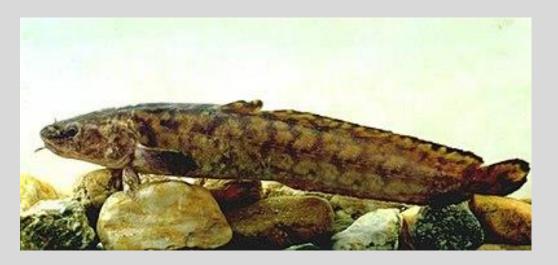
# **Gadiformes: Codfishes/Torskartade fiskar**

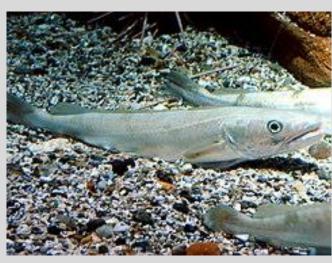




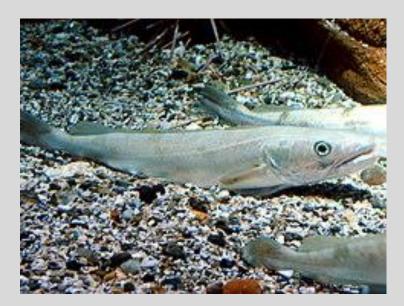








# *Merluccius merluccius*European Hake/Kummel





# Identification

VU

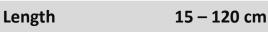
- Dark back, silvery sides and abdomen.
- Two dorsal fins, the front is short and noticeably higher than the back which is long but short.
- Inside of the mouth is black.
- No barbel.

# **Potential misidentifications**

• No similar species in Sweden.

# Habitat

- Marine.
- Deep waters.
- Prefers muddy bottoms.





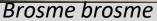
Chordata Actinopterygii Gadiformes Merlucciidae *Merluccius merluccius* 32.

# Lotidae Lings/Lakefiskar





Molva molva





Lota lota

# Nr 34 – 35 belong to this group

# Identification

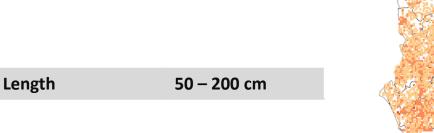
- Normally with barbels on the chin.
- One to two dorsal fins, the first (if present) is relatively narrow and short and the posterior is broad and short.
- Single broad and short anal fin.

## **Potential misidentifications**

No similar species in Sweden.

# **Habitat**

- Normally marine
- Barnot (fish nr 38 ) in Freshwater.



# Molva molva Common ling/Långa



## Identification



- Back and sides reddish brown, grey-white abdomen.
- Two dorsal fins.
- Black at back of dorsal and anal fins.
- Small eyes.
- Very elongated body.
- Long barbel on chin.

# **Potential misidentifications**

• No similar species in Sweden.

# Habitat

- Marine.
- Deep waters.
- Prefers rocky bottoms/shipwrecks.

Length

160 - 200 cm



Chordata Actinopterygii Gadiformes Lotidae *Molva molva* 34.

# Lota lota Burbot/Lake



# Identification



- Marbled brown.
- Single barbel in middle of chin.
- Elongated body.
- Small brush like teeth.

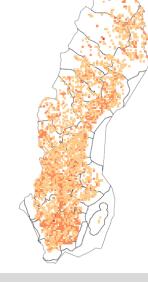
# **Potential misidentifications**

Can initially be mistaken for Wels catfish (Fish nr. 13)
 but catfish have much longer barbels.

# Habitat

Freshwater (as the only species in order).

• Bottom dwelling.

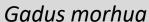


Length

65 - 120 cm

# Gadidae Gadidae/Torskfiskar







Pollachius virens



Pollachius pollachius

# Nr 37 – 39 belong to this group

# Identification

- Three dorsal fins and two anal fins.
- Often a barbel on the chin.

# **Potential misidentifications**

• No similar species in Sweden.

# Habitat

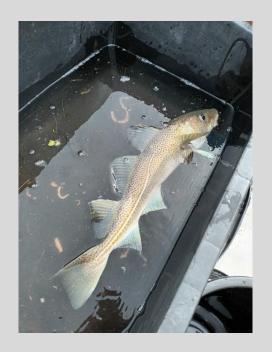
Marine.

Length

15 – 200 cm



# Gadus morhua Atlantic cod/Torsk





# Identification



- Speckled brown body with white abdomen and abdominal fins.
- Distinct stripe along lateral line.
- Relatively wide (width approximately 2/3 of height).
- Long barbel on chin.

# **Potential misidentifications**

No similar species in Sweden.

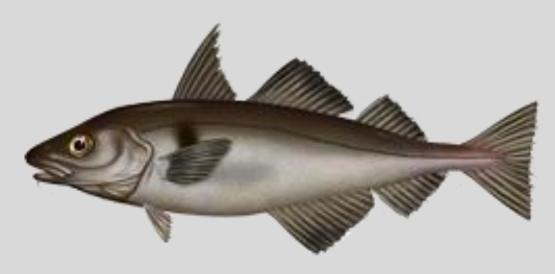
# **Habitat**

- Marine and brackish water.
- Bottom dwelling.
- Usually coastal.





# *Melanogrammus aeglefinus*Haddock/Kolja





## Identification



- Dark grey back and white abdomen.
- Elongated tapering body.
- Large dark spot above pectoral fins.
- Short barbel on chin (easily overlooked).
- Dark lateral line.

# **Potential misidentifications**

• No similar species in Sweden.

# Habitat

- Marine and brackish.
- Depths of 10-200m.
- Usually coastal.





# Merlangius merlangus Whiting/Vitling





## Identification



- Dark grey back, grey-silver body, white abdomen.
- Dark spot at base of pectoral fins.
- First dorsal fin is longer and has a sharper corner than others.
- Very small barbel on chin (easily overlooked).
- Overbite.

### **Potential misidentifications**

 Norway pout/Vitlingslyra looks similar but has underbite and a much longer and more distinct barbel.

## Habitat

- Marine and brackish water.
- Deep water.

Length

40 - 70 cm

# Tetraodontiformes: Tetraodontiformes/Blåsfiskartade fiskar





# Mola mola Ocean sunfish/Klumpfisk







## Identification



- Brown to grey, lighter towards the ventral side.
- Sideways flattened body.
- Tail fins absent, dorsal and anal fins elongated.
- Pectoral fins rounded and relatively small.
- Relatively small eyes and mouth.
- Commonly seen basking on its side at the water's surface.

## **Potential misidentifications**

No similar species in Sweden.

# Habitat

Marine.



150 - 350 cm



# **Lophiiformes: Lophiiformes/Marulkartade fiskar**



# Lophius piscatorius Anglerfish/Marulk





# **Identification**

- Adapts to surroundings, usually brown with irregular spots.
- Large mouth.
- Wide flat head.
- Elongated front fin used as a lure.

# **Potential misidentifications**

• No similar species in Sweden.

# **Habitat**

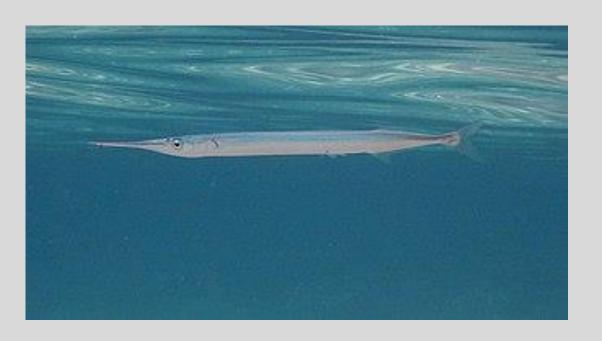
- Marine.
- Deepwater.
- Bottom dwelling.

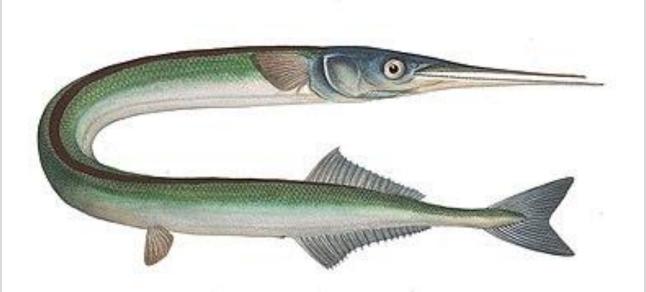


Length

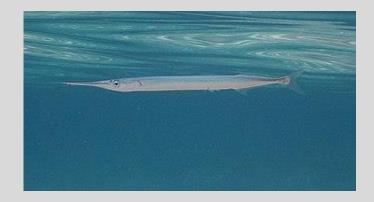
100 - 200 cm

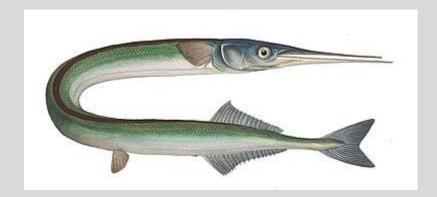
# Beloniformes: Beloniformes/Näbbgäddartade fiskar





# Belone belone Garfish/Näbbgädda





## Identification

- LC
- Dark blue/grey back, silvery side, light belly.
- Extremely elongated.
- Long narrow jaw (80% of the head).

# **Potential misidentifications**

No similar species in Sweden.

## Habitat

- Marine and brackish.
- Spends winter in warmer waters and only seen in Sweden in late spring to fall.

Length

50 – 90 cm

# Mugiliformes: Mullets/Multartade fiskar







# Mugiliformes Mullets/Multartade fiskar



Chelon labrosus



Liza ramada



Liza aurata

## Identification

- Silvery in color.
- Long broad heads.
- Large scales.
- Small mouth with little to no teeth.
- Usually 2 dorsal fins.
- Pectoral fins high on the body (parallel with the eyes).

## **Potential misidentifications**

• No similar species in Sweden.

# Habitat

Marine.





# **Gasterosteiformes:** Gasterosteiformes/Spiggartade fiskar

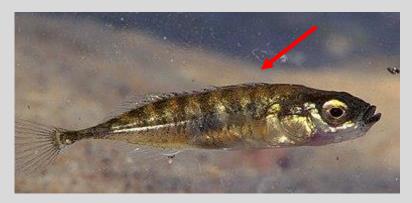




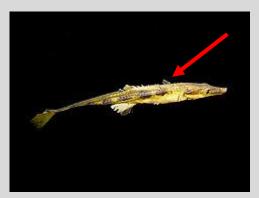




# Gasterosteidae Sticklebacks/Spiggfiskar



Pungitius pungitius



Spinachia spinachia



Gasterosteus aculeatus

# Identification

- 3-17 distinct individual rays along the back in front of dorsal fin (can be raised as spines for defense; see arrow).
- Bony plates along the sides (also for defense).

### **Potential misidentifications**

No similar species in Sweden.

# Habitat

Marine, freshwater and brackish waters.



Length

2 - 20 cm

# Syngnathidae Pipefishes/Kantnålsfiskar



Syngnathus acus



Syngnathus typhle



Nerophis ophidion

# Identification

- Narrow body.
- Toothless tubelike mouth.

# **Potential misidentifications**

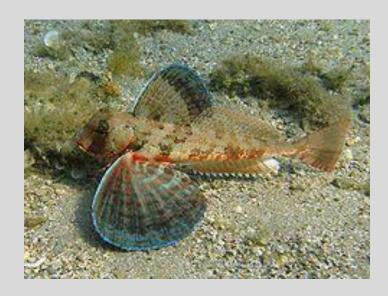
• No similar species in Sweden.

# Habitat

Marine and brackish waters.

Length 2 – 70 cm

# Scorpaeniformes: Mail-cheeked fishes/Kindpansrade fiskar









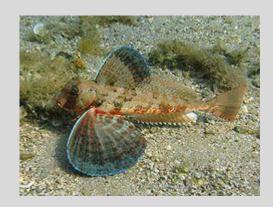




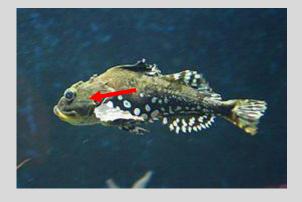
# Scorpaeniformes Mail-cheeked fishes/Kindpansrade fiskar



Sebastes norvegicus



Trigloporus lastoviza



Myoxocephalus scorpius

# Nr 47 – 50 belong to this group

### Identification

- Have a backwards extension of a cheek bone extending back to gill cover (see arrow). This extension often protected with spines.
- Many lack scales.
- Usually 2 dorsal fins (first with hard rays and the second with soft rays).
- The two fins may be joined, or first may be missing.

# **Potential misidentifications**

 Some perches (Fish nr 55) may also have spines protecting gills but they do not have the extension of cheekbone.

### **Habitat**

Marine, freshwater and brackish waters.

Length

10 - 100 cm

# Sebastidae Rockfishes/Kungfiskar



Sebastes viviparus



Helicolenus dactylopterus



Sebastes norvegicus

## Identification

- Red/orange coloration.
- Compressed body.
- Head often has ridges or spines.
- Venom-bearing spines in the dorsal, anal and pelvic fins.

## **Potential misidentifications**

No similar species in Sweden.

# Habitat

- Marine.
- Deep water.





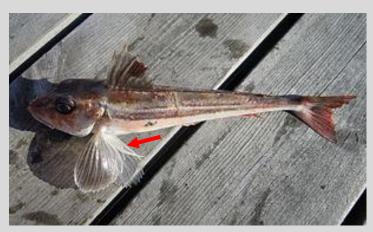
### Triglidae Gurnards/Knotfiskar



Trigloporus lastoviza



Chelidonichthys lucerna



Eutrigla gurnardus

#### Identification

- Long, free fin rays at the bottom of the pectoral fin (red arrows).
- Bony head.
- Many have bony plates on the body.
- Often reddish tones.

#### **Potential misidentifications**

• No similar species in Sweden.

#### Habitat

- Marine.
- Soft bottoms.
- Coastal.

Length 20 – 75 cm



## Agonus cataphractus Hooknose/Skäggsimpa



#### Identification

- Brownish coloration.
- Large barbels (as the only Swedish species in the order).

#### **Potential misidentifications**

• No similar species in Sweden.

#### Habitat

- Marine or brackish water.
- Often in shallow waters (5-20 m) in summer but in deeper waters in winter.

Length

15 – 21 cm

## Cottidae Sculpins/Simpor



Myoxocephalus scorpius



Taurulus bubalis



Cottus gobio

#### Identification

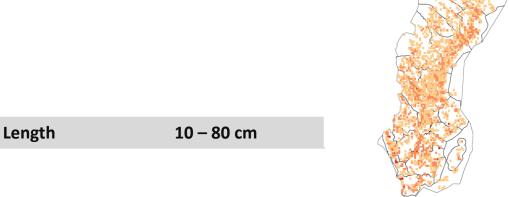
- Usually small.
- Large eyes placed high on the head.
- Brown or brownish colouration

#### **Potential misidentifications**

 Can be separated from all other species in the order in Sweden by the brown coloration (as opposed to orange/red or blue) and by the lack of barbels.

#### Habitat

Marine, freshwater and brackish waters.



## Pleuronectiformes: Flatfish/Plattfiskar



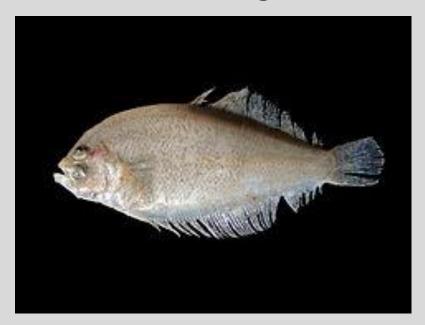








### Arnoglossus laterna Scaldfish/Tungevar





#### Identification



51.

- Strongly flattened and asymmetric.
- Eyes (nearly always) on the left side.
- Eye side grey brown, underside unpigmented (appears blueish white).
- Tailfin nearly connected to other fins.
- Translucent body.
- Lateral line bends around pectoral fin

#### **Potential misidentifications**

• Turbots (Fish nr 52) also has eyes on the left side but are generally rounder, normally much larger and if elongate has distinctly separated tail.

#### Habitat

- Marine.
- Bottom dwelling mainly in sandy bottoms.

Length

20 - 25 cm

## Scophthalmidae Turbots/Varfiskar



Scophthalmus maximus



Zeugopterus punctatus



Lepidorhombus whiffiagonis

#### Identification

- Strongly flattened and asymmetric.
- Eyes (nearly always) on the left side.
- Large mouth.
- Wide abdominal fins.

#### **Potential misidentifications**

Scaldfish (Fish nr 51; see this).

#### Habitat

- Marine and brackish.
- Bottom dwelling.
- Found in both soft hand rocky bottoms.



Length

12 - 100 cm

## Soleidae True soles/Tungefiskar





Buglossidium luteum



#### Identification

- Strongly flattened and asymmetric.
- Eyes on the right side.
- More elongated than most flatfish.
- Straight lateral line.
- Brownish colors.
- Tailfin nearly connected to other find.

#### **Potential misidentifications**

- Flounders (Fish nr. 54) also has eyes on right side but normally do not have straight lateral line.
- One exception is pinkish in color and has a tailfin distinctly separated from other fins.

#### Habitat

- Marine and brackish waters.
- Bottom dwelling mainly sandy bottoms.

Length

10 - 70 cm

### Pleuronectidae Flounders/Flundrefiskar



Platichthys flesus



Glyptocephalus cynoglossus



Microstomus kitt



Limanda limanda

#### Identification

- Strongly flattened and asymmetric.
- Eyes (nearly always) on the right side.
- Abdominal fins usually symmetrical.
- Tail often distinctly separated from body.
- Lateral line bends around pectoral fin (except Glyptocephalus cynoglossus which is instead identified by it's pinkish colour).

#### **Potential misidentifications**

• Soles (Fish nr. 55) see this.

#### Habitat

- Marine, freshwater and brackish waters.
- Bottom dwelling.
- Found in both soft hand rocky bottoms.

Length

Up to 200 cm



## Perciformes: Perches/Abborrartade fiskar









## Perciformes Perches/Abborrartade fiskar



Pomatoschistus microps



Labrus mixtus



Trachurus trachurus



Perca fluviatilus

### Nr 56 – 75 belong to this group

#### Identification

- Most species have 2 dorsal fins.
- The abdominal fins are located below or in front of the pectoral fins, and have one barbed ray and five or fewer soft rays.
- Pectoral fins are located on the side of the body and have a vertical base.
- Tail fin has 17 or fewer fin rays.

#### **Potential misidentifications**

 Group is rather variable and sometimes it is easier to identify a perch as not matching any of the other descriptions.

#### Habitat

Marine, brackish and freshwater.

Length

**Up to 460 cm** 

## Scomber scombrus Mackrel/Makrill





#### Identification

- LC
- Dark back, green blue sides, whitish abdomen.
- Dark marbled pattern on back.
- 2nd dorsal fin followed by 4-6 small finlets (see arrow).

#### **Potential misidentifications**

Somewhat similar in body shape to tuna (Fish 59)
 but drastically smaller and with smaller caudal fin.

#### Habitat

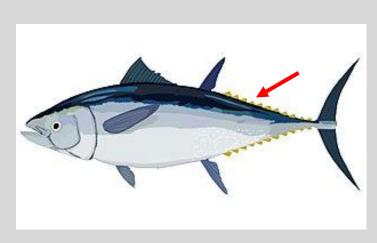
- Marine.
- Only in Sweden in Summer.





## Thunnus thynnus Bluefin tuna/Tonfisk





#### Identification



- Grey blue back and sides, silver abdomen.
- 2nd dorsal fin followed by bright yellow finlets (see arrow).
- Sharply tapered at the back to a thin tail.
- Wide tail fin.

#### **Potential misidentifications**

Somewhat similar in body shape to mackerel (Fish nr.
 58) but drastically bigger and with wider tail fin.

#### **Habitat**

- Marine.
- Living in free water masses.
- Only in Sweden in Summer.
- Rare but potentially increasing in Sweden with global warming.

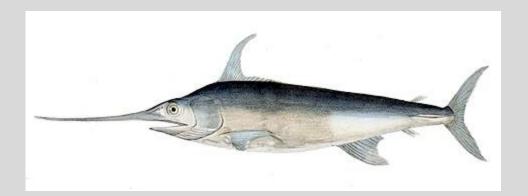
Length

360 - 460 cm



### Xiphias gladius Swordfish/Svärdfisk





#### Identification

LC

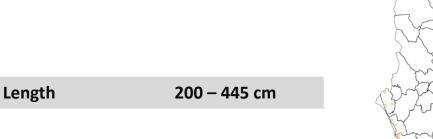
- Long flat pointed bill.
- Dark grey back lightening down the body.
- No abdominal fins.
- Scales and lateral line disappear with age.

#### **Potential misidentifications**

• No similar species in Sweden.

#### **Habitat**

- Marine.
- Living in free water masses.
- Very rare in Sweden.





# Anarhichas lupus Atlantic Wolfish/Havskatt





#### Identification

EN

- Grey-dark grey.
- Dark grey stripes made up of small dots.
- Large head and strong bite.
- Exposed teeth.

#### **Potential misidentifications**

 Two other very rare species in the family has been seen in Sweden. Both has similar body shape but lack the dark stripes.

#### Habitat

- Marine.
- In Sweden normally confined to deeper waters.
- Rocky bottoms.

Length

**Up to 125 cm** 



Chordata Actinopterygii Perciformes Anarhichadidae Anarhichas lupus

## Ammodytidae Sandeels/Tobisfiskar



Hyperoplus lanceolatus



*Ammodytes tobianus* 

#### Identification

- Dark blue-green back, silvery sides and light abdomen.
- Extremely elongated.
- Short dorsal fin that runs along the entire back.
- Typically lacking abdominal fins.

#### **Potential misidentifications**

• No similar species in Sweden.

#### Habitat

- Marine and brackish.
- Prefer sand/gravel bottoms.
- Spends most time borrowed in sand.



Length

20 - 30 cm

## Zoarces viviparus Viviparous eelpout/Tånglake





#### Identification

LC

- Yellow brownish color.
- Elongated body.
- 14-15 short dark bands over dorsal fin and back.
- 14-15 dark spots along the side of the body.
- Short wide dorsal fin.
- Abdominal fins very small and placed below gill opening rather than posterior on abdomen as normal in fish.

#### **Potential misidentifications**

- Two other rare species in family are found in Sweden.
- They have similar body shape but lack the dark spots and bands.

#### Habitat

- Marine and brackish.
- Rocky bottoms.

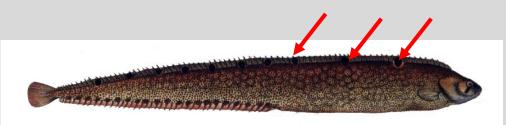
Length

Up to 52 cm



## Pholis gunnelus Rock gunnel/Tejstefisk





#### Identification

LC

- Yellow brown to red.
- Flattened elongated body.
- 10-12 prominent eye spots along the dorsal fin (see arrow).
- Short wide dorsal fin.
- Thick lips.

#### **Potential misidentifications**

 Can initially be mistaken for a species of eel but multiple traits including the eye spots easily tell them apart.

#### **Habitat**

- Marine and brackish.
- Often found in empty mussel shells.

Length

Up to 25 cm

# Callionymus sp. Dragonets/Sjökocksfiskar







Callionymus reticulatus



Callionymus maculatus

#### Identification

- Grey-dark to grey in color.
- Wide flattened head.
- Large eyes.
- Long fins.
- Gill openings reduced to a small opening on each side of the neck.
- Lack scales.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

- Marine.
- · Sandy bottoms.

Length

Up to 30 cm



# Trachinus draco Greater weever/Fjärsing









#### Identification

- Very elongated body with greenish back and white, yellow and blue stripes on sides.
- Short first black first dorsal fin with highly poisonous spines! This is only raised if threatened.
- Spike near gill cover which also is poisonous!
- Long second dorsal and pectoral fins.
- Wide anal fin.

#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

- Marine.
- Normally burrowing in soft sediments in depths of 5-25 m but sometimes deeper.
- Occasionally in very shallow water.
- Extremely painful but not deadly poison!

Length 30 – 45 cm





### Labridae Wrasses/Läppfiskar



Ctenolabrus rupestris



Symphodus melops



Labrus mixtus

### Nr 66 belongs to this group

#### Identification

- Very thick lips.
- Dorsal fin has eight to 21 hard rays and six to 21 soft rays.
- Fifth pair of gill arches and its tooth plates are fused into a strong pharynx with coarse teeth.
- Some species brightly colored.

#### **Potential misidentifications**

• No similar species in Sweden.

#### Habitat

- Marine.
- Hard bottoms/coral reefs.





# Ctenolabrus rupestris Goldsinny wrasse/Stensnultra



#### Identification



- Beige or orange back and sides, white abdomen.
- Black spot on the front of the dorsal fin.
- Black spot on the upper edge of the tail.

#### **Potential misidentifications**

• Other species in family has similar body shape but only this species has the black spots.

#### Habitat

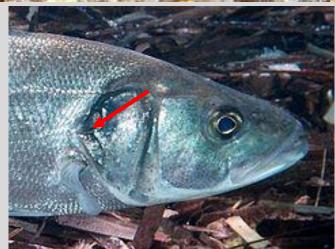
Marine.



Length 10 – 18 cm

## *Dicentrarchus labrax*Seabass/Havsabborre





#### Identification



- Dark back, grey-brassy sides, pale abdomen. Can have a greenish tinge.
- 2 dorsal fins.
- 2 backwards facing spikes on each gill cover (see arrow).
- Visible lateral line.

#### **Potential misidentifications**

No similar species in Sweden.

#### **Habitat**

- Marine.
- Coastal.
- Warmwater species, relatively rare in Sweden.





### Gymnocephalus cernua Ruffe/Gärs



#### Identification



- Greyish yellow to dark brown sides and back.
- Abdomen light grey to white.
- Slimy body.
- Irregular dark spots on back and sides.
- Dorsal fins fused together.
- Spikes on dorsal fin.
- Downturned mouth.

#### **Potential misidentifications**

 Can initially look like a small European perch (Fish nr 70) but lack the stripes or red fins of a European perch.

#### Habitat

- Freshwater and brackish water.
- Lakes.
- Bottom dwelling.

Length

14 - 25 cm

## Perca fluviatilis European Perch/Abborre





#### Identification

- Normally yellow-green body and yellow-white belly but colors vary a lot.
- Pectoral, pelvic and anal fin are normally red.
- Nearly always has distinct black transverse stripes.
- Rare form lack stripes but has red fins.
- Rough scales.

#### **Potential misidentifications**

 Color variation can make it look like other species in the family but black stipes and or red fins should nearly always allow identification.

#### Habitat

- Freshwater and brackish water.
- Lakes.
- Bottom dwelling.

Length

Up to 35 cm



### Sander lucioperca Zander/Gös





#### Identification



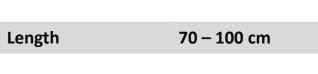
- Grey yellow to green or brown sides and back.
- White abdomen.
- Striped back.
- Prickly fins.
- Long nosed.
- Tail fin and dorsal fin striped by small black spots.

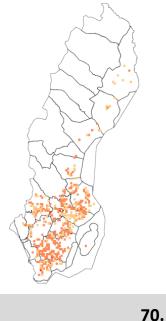
#### **Potential misidentifications**

No similar species in Sweden.

#### Habitat

- Freshwater.
- Lakes.
- Prefers warm, oxygen rich waters.





## Gobiidae Gobies/Smörbultsfiskar



Pomatoschistus microps



Gobius niger



Pomatoschistus minutus



#### Identification

- Nr 72 75 belong to this group
- Abdominal fins fused together and joined at the base with a membrane forming an abdominal fin bowl (see arrow).
- Lateral line absent.
- Visible pores behind and above the eye.

#### **Potential misidentifications**

• No similar species in Sweden.

#### Habitat

Marine, freshwater and brackish waters.





## Neogobius melanostomus Round goby/Svartmunnad smörbult





#### Identification

NE

- Brown to dark grey color.
- Black spot on the back of first dorsal fin (see arrow).
- Brown spots on neck and back.
- Row of seven/eight small dark spots along side.
- Irregular, reddish-brown lines on head.
- Short head and short rounded nose.

#### **Potential misidentifications**

Similar to black goby (Fish nr 73) but in black goby, the dark spot on the first dorsal fin is on the front of the fin rather than on the back.

#### **Habitat**

- Freshwater and brackish water.
- Only non-marine species in family.
- Introduced and invasive.

Length

App. 25 cm

## Gobius niger Black goby/Svart smörbult





#### Identification

LC

- Grey brown to dark brown.
- Black spot on the front of first dorsal fin (see arrow).
- 5 large black spots along the side.
- Rounded caudal fin.
- Wide head and short rounded nose.

#### **Potential misidentifications**

- Similar to round goby (Fish nr 72) but in round goby, the dark spot on the first dorsal fin is on the back of the fin rather than on the front.
- Round goby is also normally larger.

#### Habitat

- Marine and brackish.
- Coastal.

Length 10 – 18 cm



Chordata Actinopterygii Perciformes Gobiidae Gobius niger 73.

# Aphia minuta Transparent goby/Klarbult





#### Identification

LC

- Transparent with visible organs.
- Small black dots at the base of the dorsal and anal fins and faint rust-red dots on the sides.
- Five rays in first dorsal fin (see arrow).
- Distinct scales.

#### **Potential misidentifications**

• The rarer crystal goby (*Crystallogobius linearis*) looks similar but lacks scales and has at a most 3 rays in first dorsal fin.

5 - 6 cm

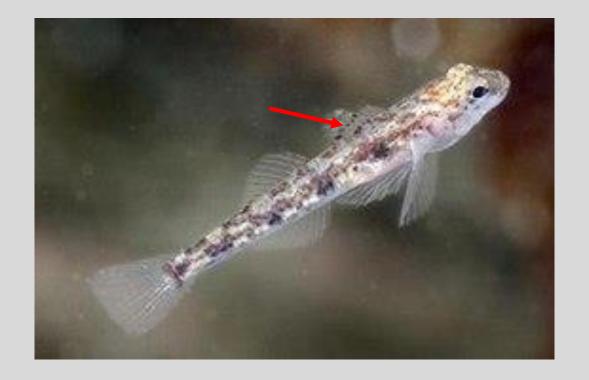
#### Habitat

Marine.



Length

# Pomatoschistus pictus Painted goby/Bergstubb



#### Identification



- Light brown back and sides, white abdomen.
- Black dots on dorsal fin.
- Back and sides have a fine mesh pattern of stripes.
- Dark stripe from eye to chin and eye to cheek.

#### **Potential misidentifications**

• Other species in genus similar body shape but lack the distinct black spot pattern on the dorsal fin.

#### Habitat

- Marine.
- Common along the West coast.



Length

App. 6 cm

### **Sources**

Species selected and text written by Madeleine Berry and Søren Faurby.

Sizes measurements are taken from artfakta.se

Distributional maps for all taxa are taken from artfakta.se

Most pictures are from Wikipedia commons, five pictures (20: second picture; 28 first and second picture; 33: first picture and 59: second picture) are Madeleine Berry's personal photos.