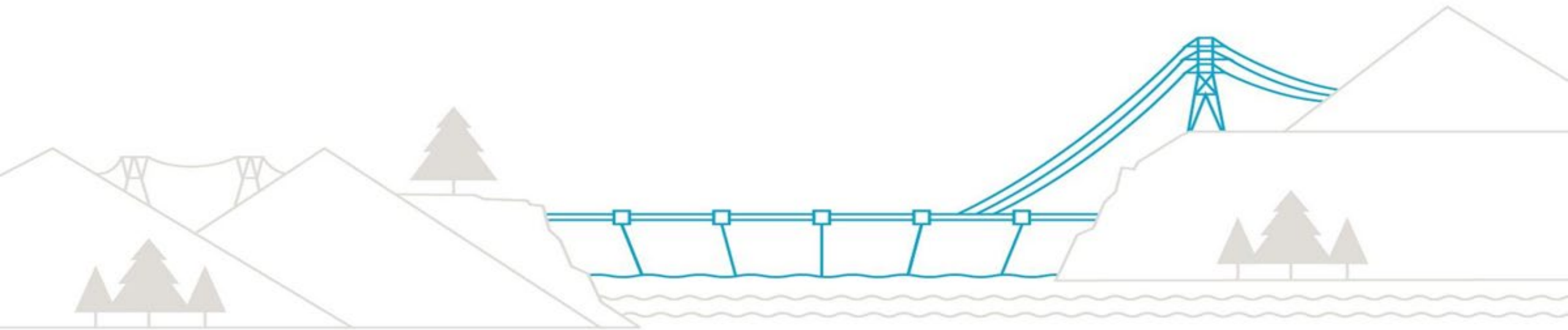


Peace River Fish Identification Key



Draft
2022-01-31

Disclaimer

The information provided in this key has been compiled to assist in fish identification in the Peace River and its tributaries in British Columbia. This information should supplement standard fish identification keys, including: McPhail and Carveth 1993¹, McPhail 2007², Scott and Crossman 1973³, and Nelson and Patez 1992⁴.

Photos have been compiled from various fish sampling programs conducted under the Site C Clean Energy Project's [Fisheries and Aquatic Habitat Monitoring and Follow-up Program](#) (FAHMFP). Slide 3 lists the species included in this key, including their common names, scientific names, and traditional Beaver language names (where provided by the Halfway River First Nation).

¹ McPhail JD and Carveth R. 1993. Field Key to the Freshwater Fishes of British Columbia. Fish Museum, Department of Zoology, University of British Columbia. Vancouver, BC. ISBN 0-7726-3830-6.

² McPhail JD. 2007. The Freshwater Fishes of British Columbia. University of Alberta Press, Edmonton, AB. 620 pages.

³ Scott WB and Crossman EJ. 1973. Freshwater Fishes of Canada. Bulletin 184. Fisheries Research Board of Canada, Ottawa 1973.

⁴ Nelson JS and Patez MJ. 1992. The Fishes of Alberta. 2nd Edition. The University of Alberta Press. ISBN: 0 88864-236-9. 437 pages.

Fish Species in the Peace River

Species			Provincial Status	
Common Name	Latin Name	Indigenous Name ¹	BC	AB
Arctic Grayling	<i>Thymallus arcticus</i>		Yellow	Sensitive
Bull Trout	<i>Salvelinus confluentus</i>	sa-pa	Blue	Sensitive
Burbot	<i>Lota lota</i>		Yellow	Secure
Goldeye	<i>Hiodon alosoides</i>		Blue	Secure
Kokanee	<i>Oncorhynchus nerka</i>		Yellow	Not assessed
Lake Whitefish	<i>Coregonus clupeaformis</i>	ihuwe-dak'ale	Yellow	Secure
Lake Trout	<i>Salvelinus namaycush</i>		Yellow	Sensitive
Mountain Whitefish	<i>Prosopium williamsoni</i>		Yellow	Secure
Northern Pike	<i>Esox lucius</i>		Yellow	Secure
Rainbow Trout	<i>Oncorhynchus mykiss</i>		Yellow	At risk
Yellow Perch	<i>Perca flavescens</i>		Yellow	Secure
Walleye	<i>Sander vitreus</i>		Yellow	Secure
Largescale Sucker	<i>Catostomus macrocheilus</i>		Yellow	Sensitive
Longnose Sucker	<i>Catostomus catostomus</i>		Yellow	Secure
White Sucker	<i>Catostomus commersonii</i>		Yellow	Secure
Finescale Dace	<i>Chrosomus neogaeus</i>		Unknown	Undetermined
Flathead Chub	<i>Platygobio gracilis</i>		Yellow	Secure
Lake Chub	<i>Couesius plumbeus</i>		Yellow	Secure
Longnose Dace	<i>Rhinichthys cataractae</i>		Yellow	Secure
Northern Pikeminnow	<i>Ptychocheilus oregonensis</i>		Yellow	Sensitive
Northern Redbelly Dace	<i>Chrosomus eos</i>		Unknown	Sensitive
Peamouth	<i>Mylocheilus caurinus</i>		Yellow	Not rated
Northern Pearl Dace	<i>Margariscus margarita</i>		Blue	Undetermined
Redside Shiner	<i>Richardsonius balteatus</i>		Yellow	Secure
Spottail Shiner	<i>Notropis hudsonius</i>		Red	Secure
Trout-perch	<i>Percopsis omiscomaycus</i>		Yellow	Secure
Prickly Sculpin	<i>Cottus asper</i>		Yellow	Not assessed
Slimy Sculpin	<i>Cottus cognatus</i>		Yellow	Secure
Spoonhead Sculpin	<i>Cottus ricei</i>		Yellow	May be at risk

¹ Indigenous names translated into English from the Beaver language. Names provided to BC Hydro by the Halfway River First Nation.



Common & Well-Known Species



Sucker Species (White, Longnose, Largescale)



Northern Pike



Rainbow Trout



Burbot



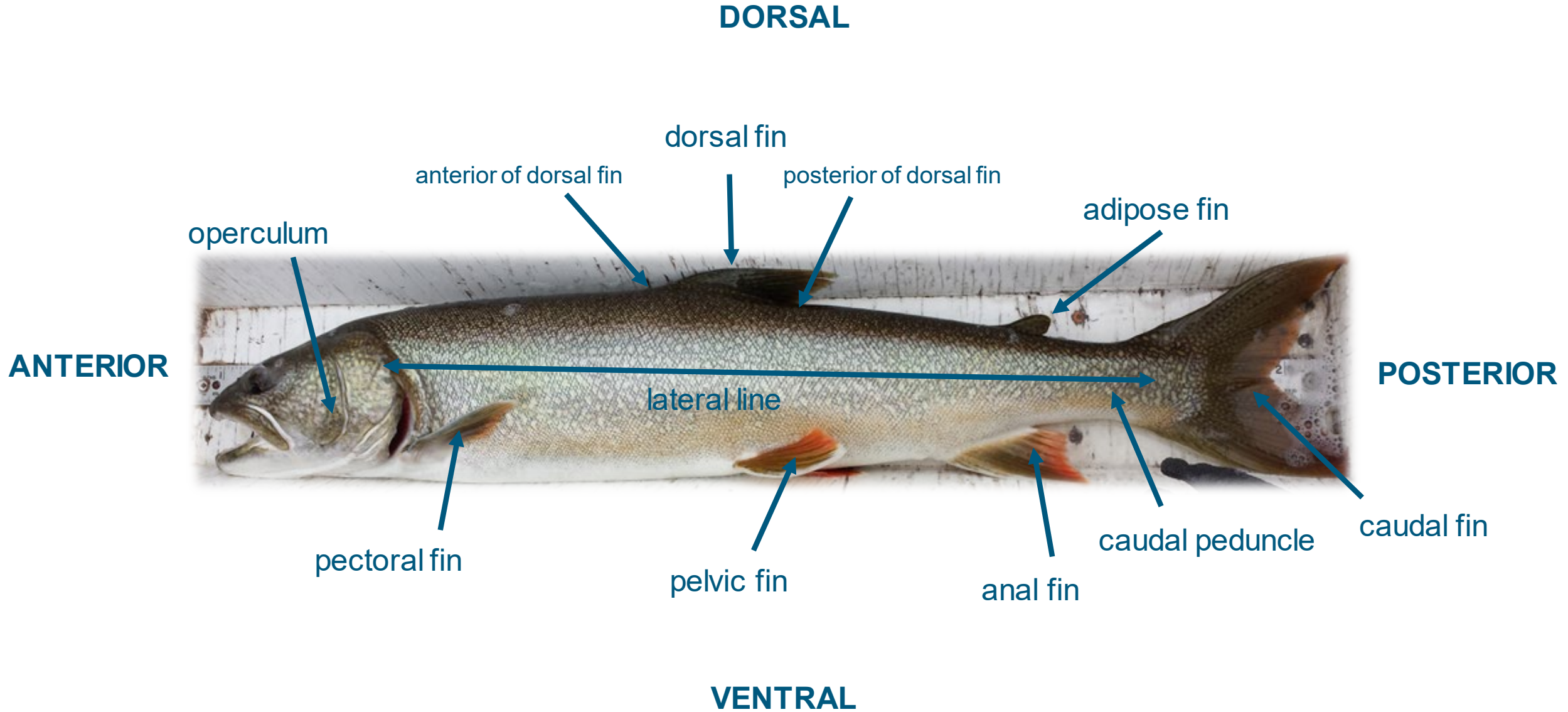
Walleye



Mountain Whitefish

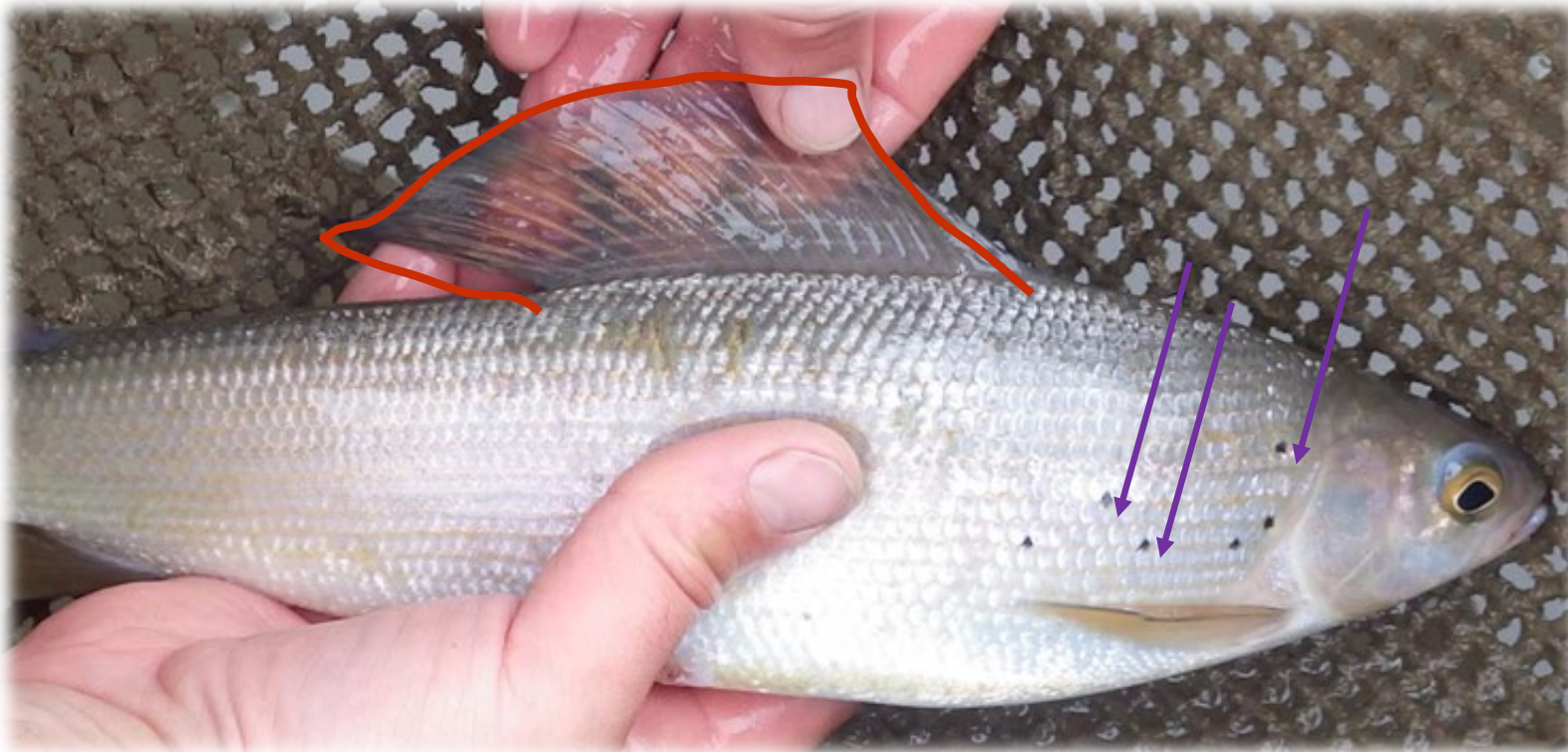
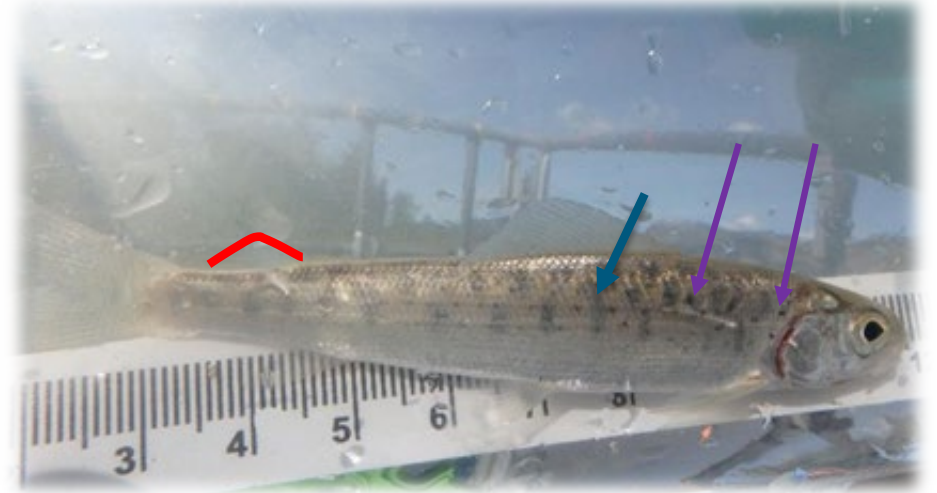


Bull Trout



Arctic Grayling

- Large dorsal fin **“sail-like”**
- **Black spots** along body
- **Adipose** fin
- Juveniles have **oblong-dash shaped parr marks**



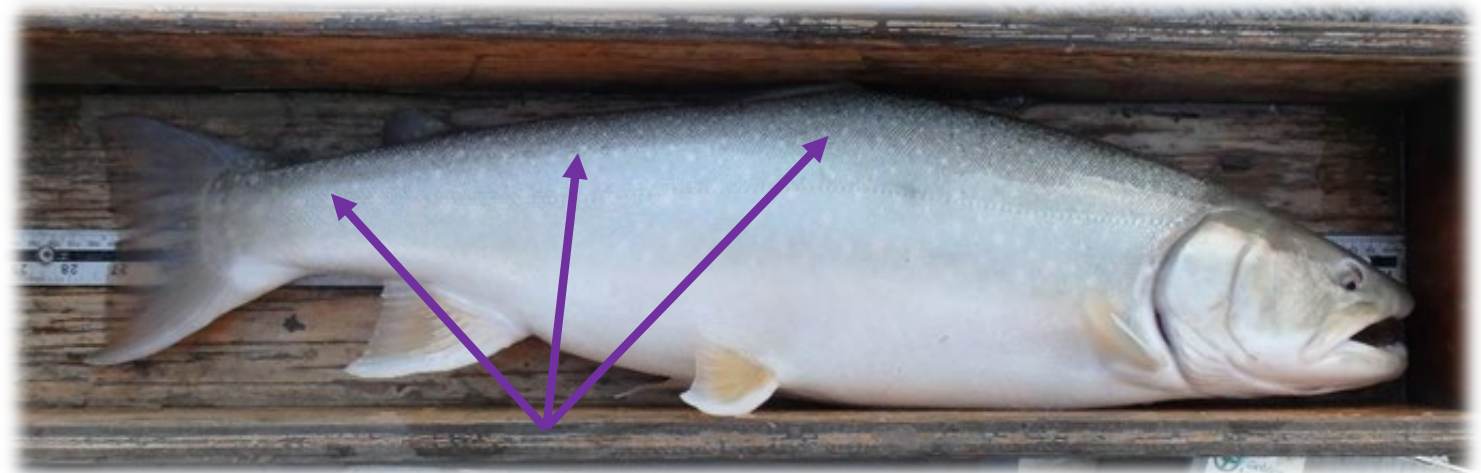
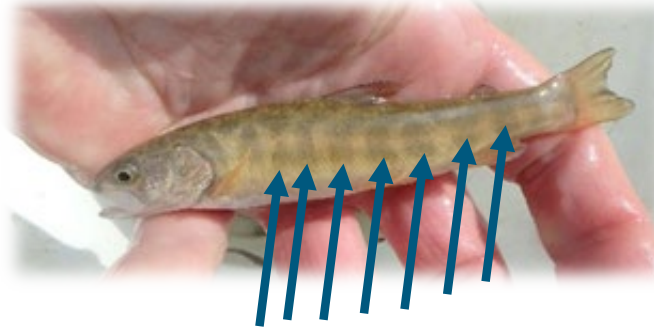
Burbot

- Two dorsal fins (first dorsal fin is small, base of second is very long)
- Long anal fin
- Single barbel at tip of chin
- Pelvic fins originate in front of pectoral fins
- Mottled colouration with very, very small scales
- Round caudal fin



Bull Trout (*sa-pa*)

- Dark background with light spots along flanks
- Pale pink, lilac, or red spots along flanks
- In juveniles, parr marks are dark irregular blotches, with width of dark areas greater than width of light areas along the midline
- Tail is not deeply forked (especially in adults)



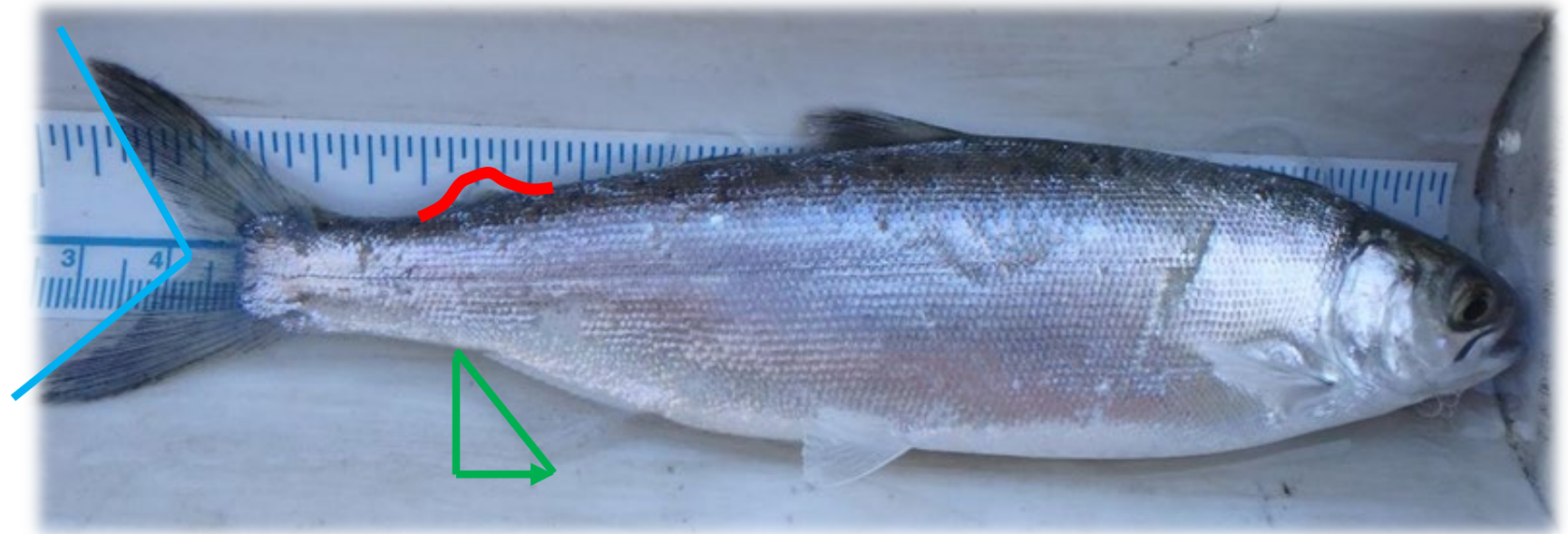
Lake Trout

- Deep “V” in caudal fin
- Head and body heavily covered in light irregularly shaped spots on dark background
- Spots on are grey or whitish but never coloured



Kokanee

- Scales fall off easily
- Silvery colour, occasional dark speckles on back or outer edge of tail
- **Adipose** fin present
- Small head relative to body
- Deep **“V”** in caudal fin
- Back-sloped **anal fin**
- Juveniles have small oval shaped parr marks



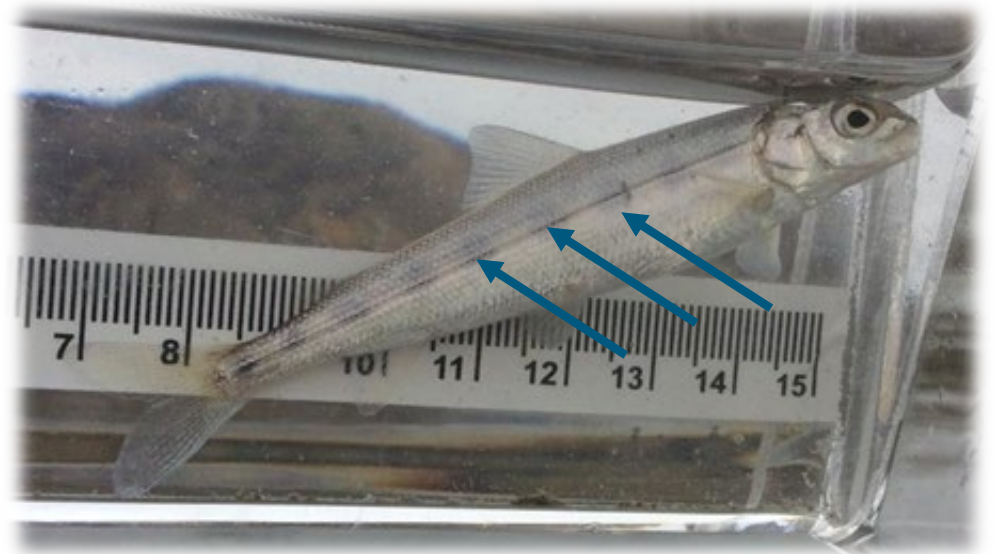
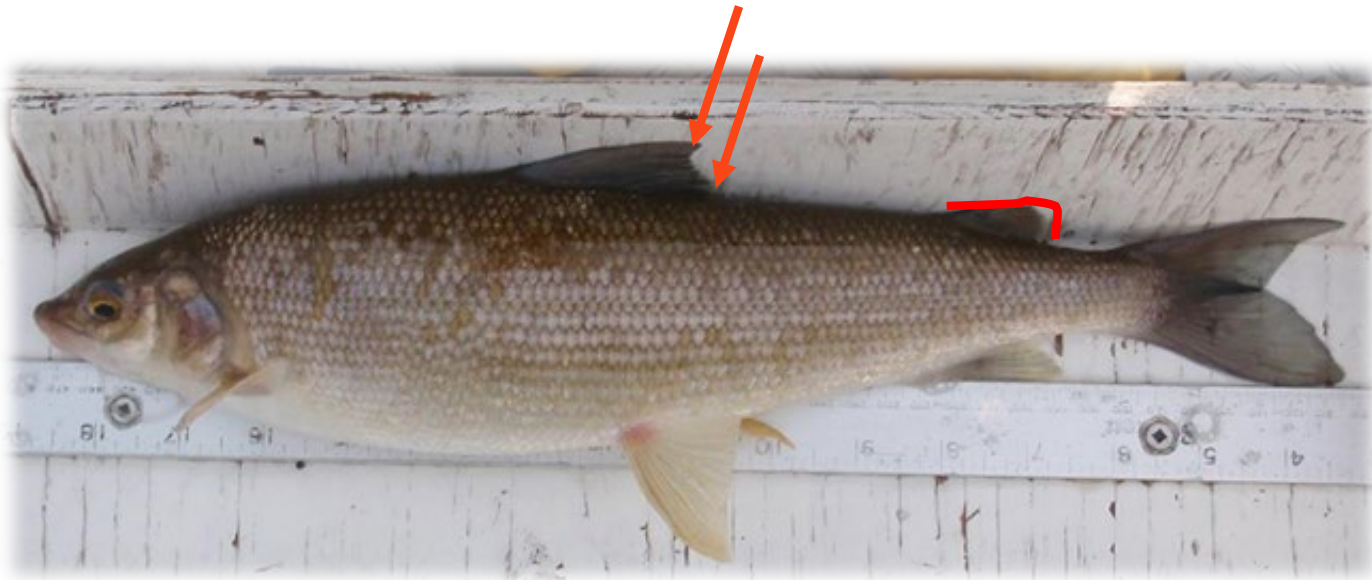
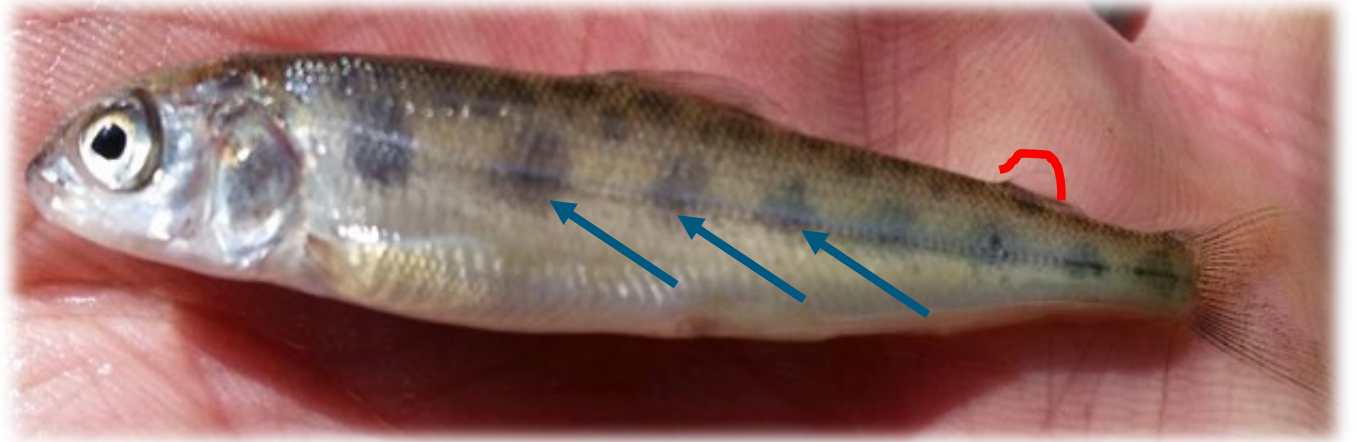
Lake Whitefish (*ihuwe-dak'ale*)

- Hump on back
- Small head compared to body
- Parr marks absent on juveniles
- Deep, slab-like body
- Ventral surface clearly curves downward when viewed from the side
- Large scales
- When pushed down, the anterior rays of the dorsal fin extend well beyond the posterior rays



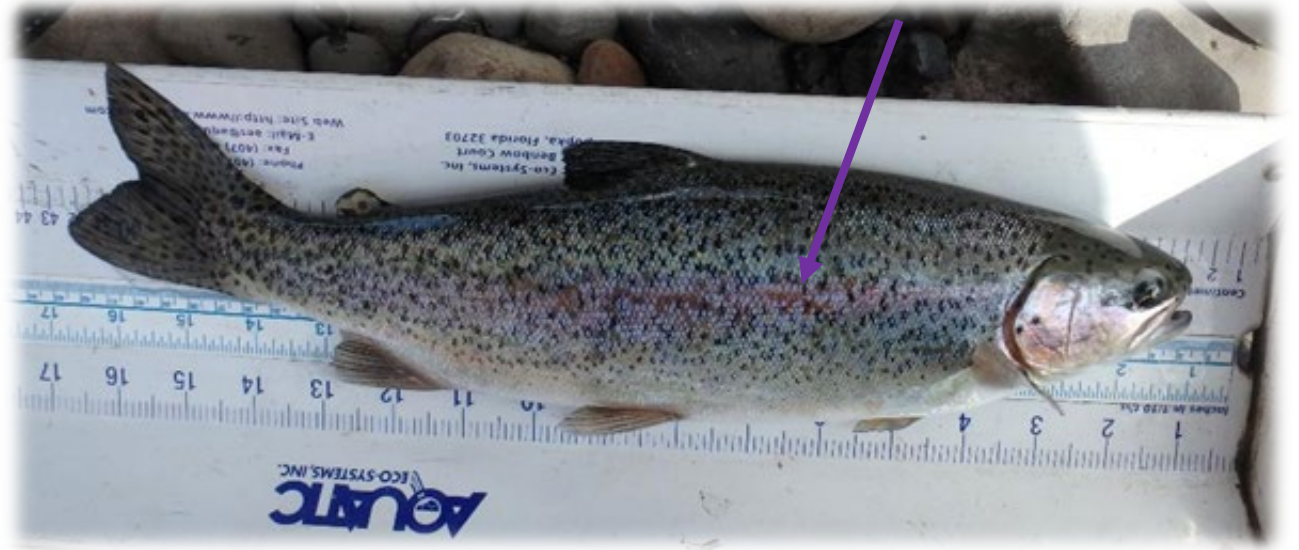
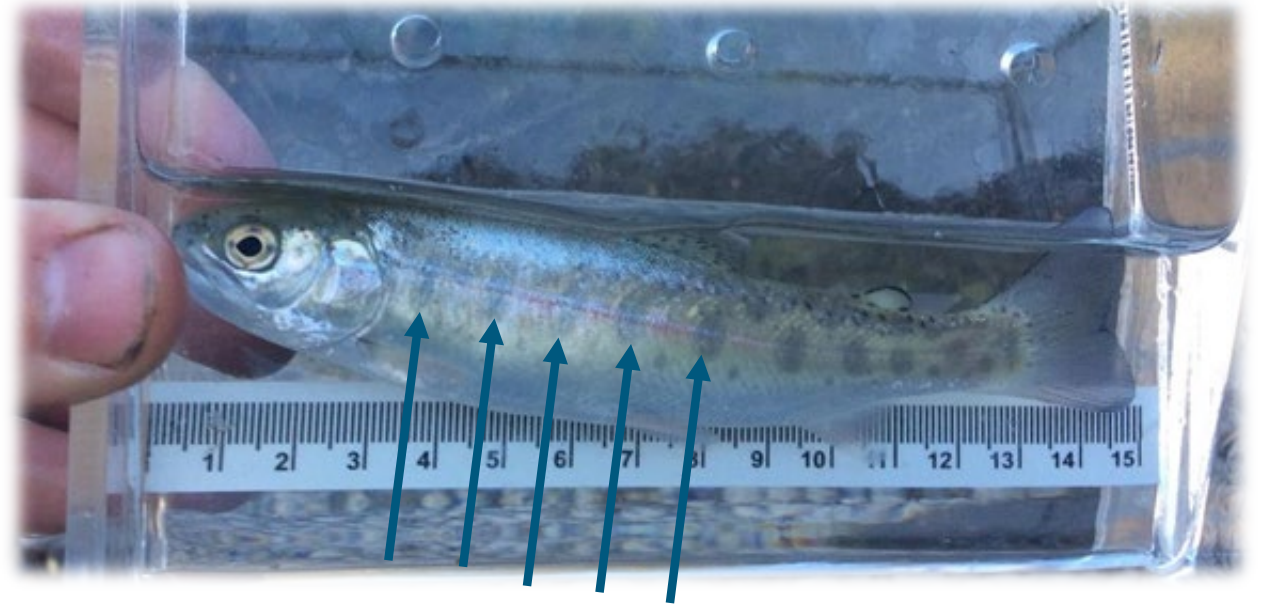
Mountain Whitefish

- Juveniles have round parr marks present along lateral line of body
- Large adipose fin present
- Large scales
- When pushed down, the anterior rays of the dorsal fin do not extend past the posterior rays



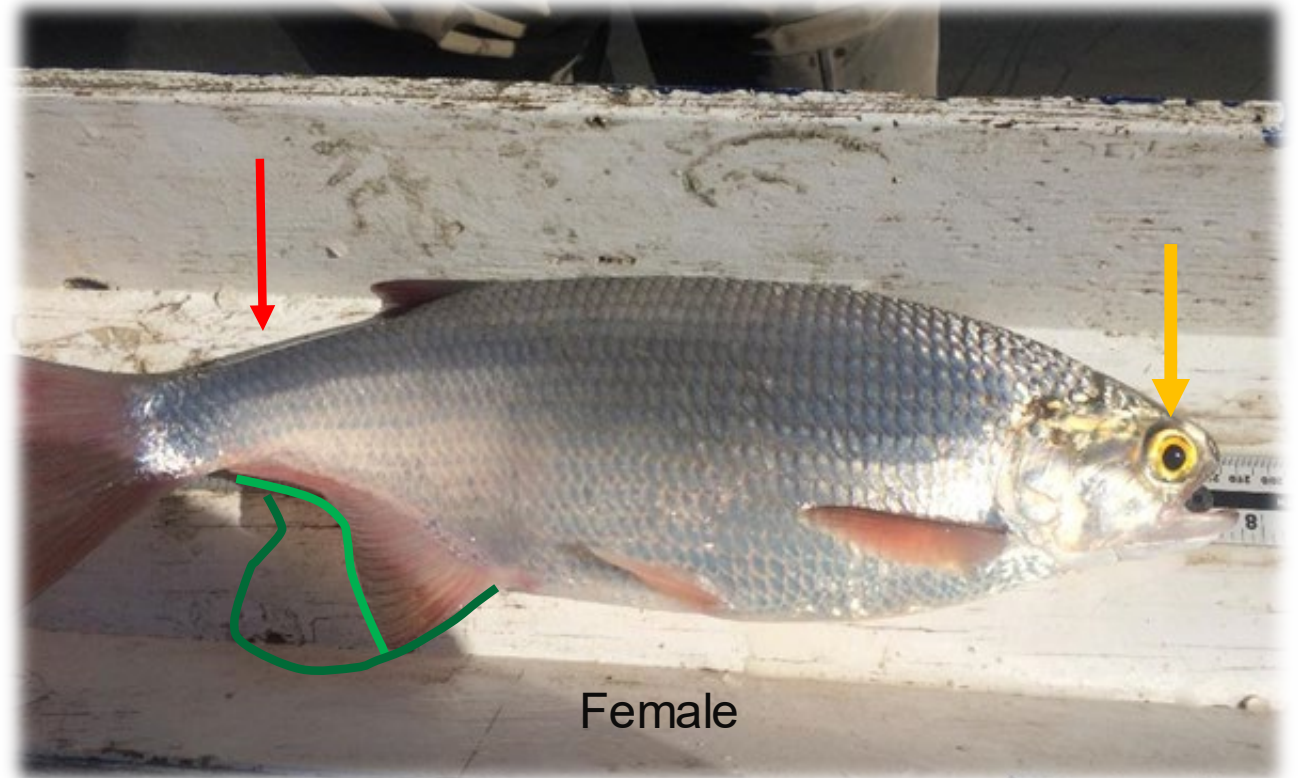
Rainbow Trout

- Sides usually silver with pink hue along midline (colour deepens and is more pronounced during spawning)
- Black spots on flanks evenly dispersed
- Tail is dusky with dark spots
- No red or orange slash under jaw
- For juveniles the width of parr marks is less than width of light areas between parr marks



Goldeye

- Yellow “gold” coloured iris
- Deep, flattened body shape
- Dorsal fin placed over anal fin
- Females have a concave anal fin while males have a convex anal fin
- Large scales
- Blue-Listed in BC
- No adipose fin



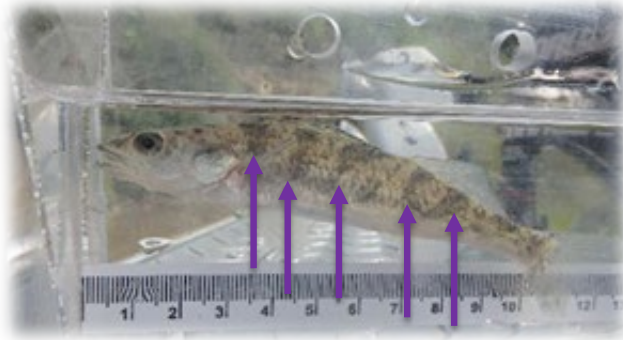
Northern Pike

- Long, flattened duck-like snout
- Dorsal and anal fins positioned towards back end of fish



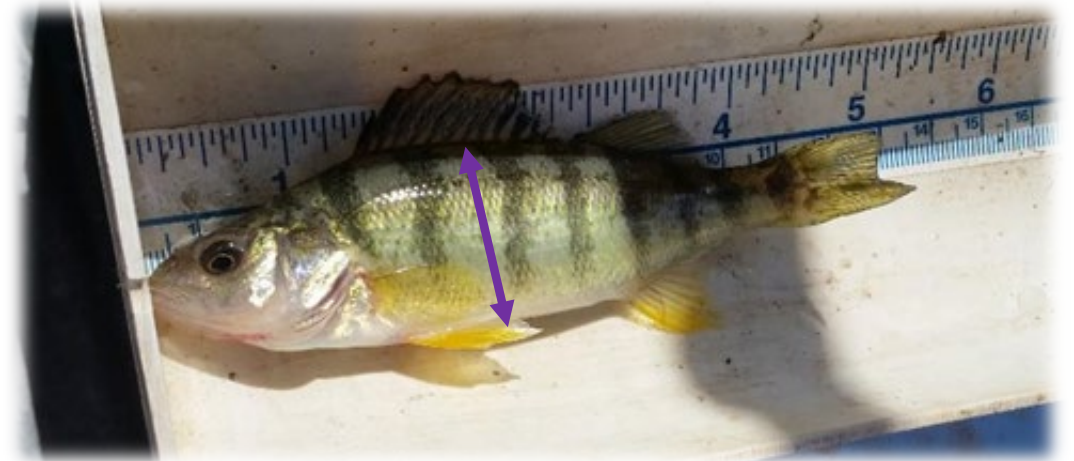
Walleye

- Juveniles have irregular dark bars on sides
- Tail has white spot on lower lobe
- Prominent teeth
- Two dorsal fins



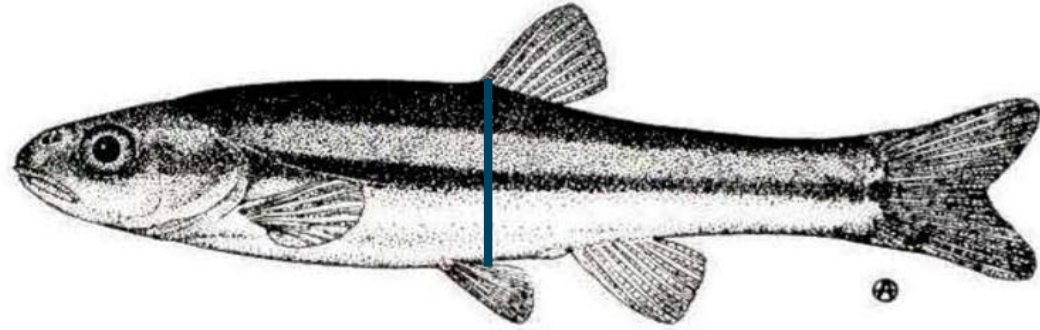
Yellow Perch

- 6 to 8 large vertical bars
- Two dorsal fins
- Yellow colouring to fins
- Deep body
- Absence of canine teeth

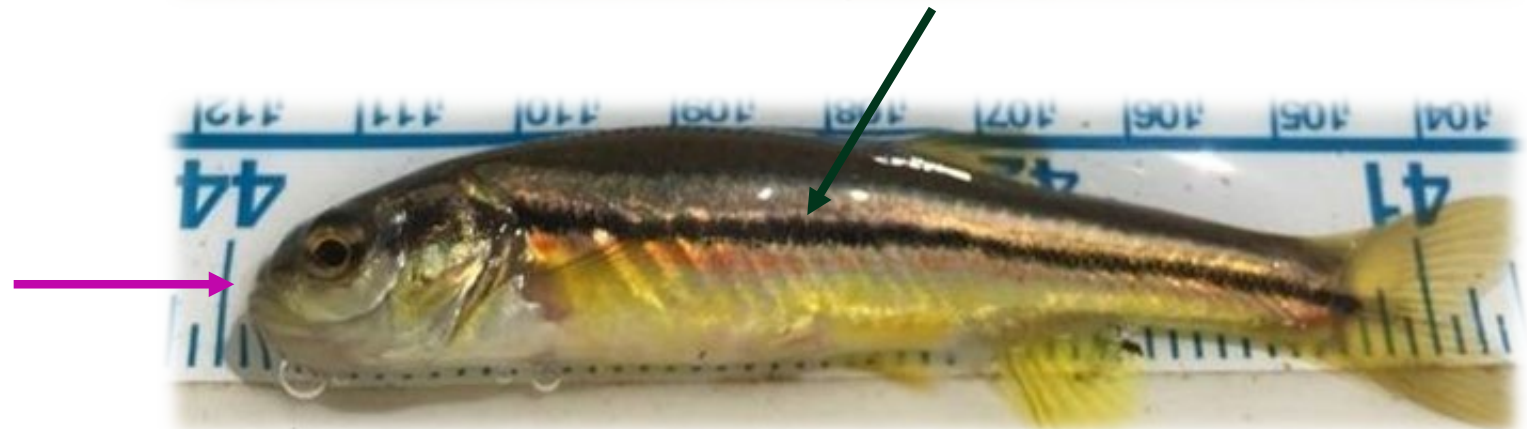


Finescale Dace

- One lateral band
- Large blunt head
- Very small scales that seem see-through
- Origin of dorsal fin begins behind the origin of pelvic fin

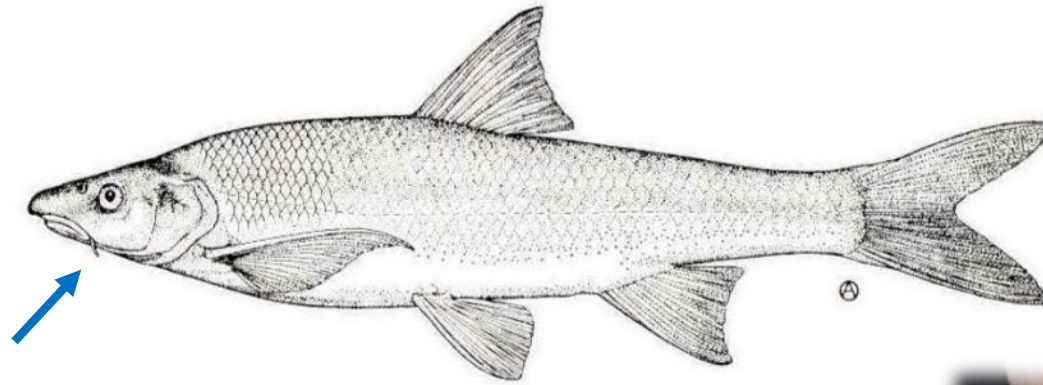


Reference: Freshwater Fishes of Canada 1973 (pg 396-398).



Flathead Chub

- Flattened head
- Snout overhangs mouth
- Mouth extends past beginning of eye
- One barbel at the corner of the mouth
- Large Scales
- No adipose fin

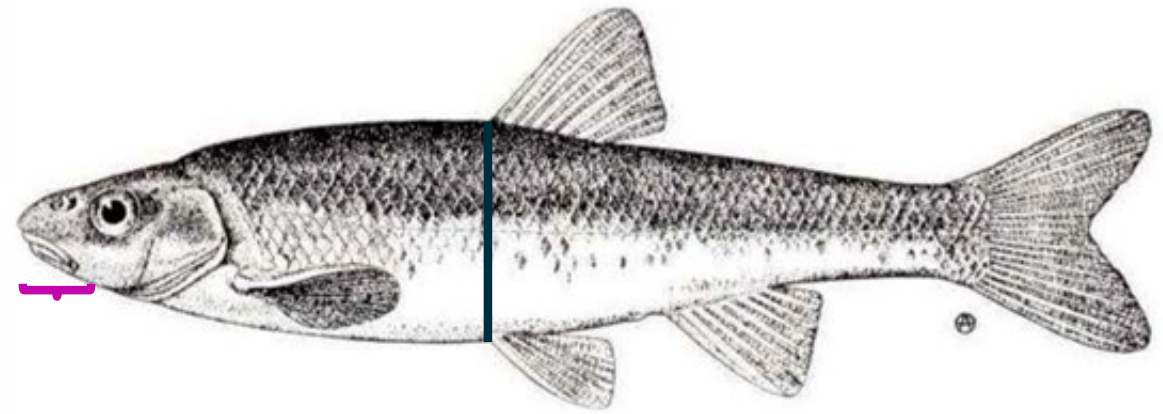


Reference: *Freshwater Fishes of Canada* 1973 (pg 484-487).



Lake Chub

- Pink coloration around origin of pectoral fin
- Large eye relative to size of head
- Upper jaw extends to anterior margin of eye
- Dorsal fin origin in line with pelvic fin origin

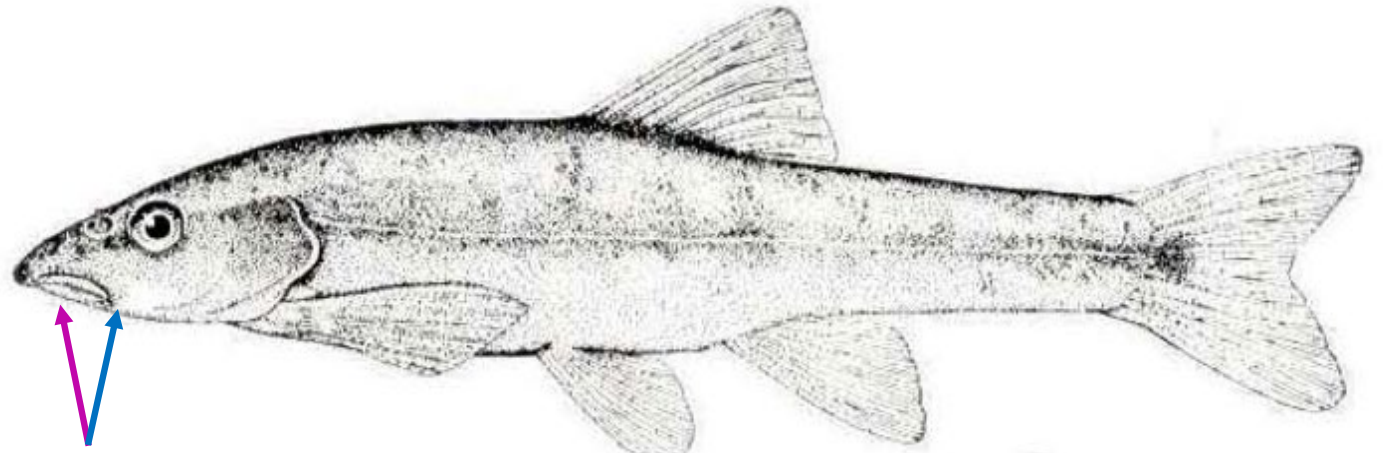


Reference: Freshwater Fishes of Canada 1973 (pg 401-406).

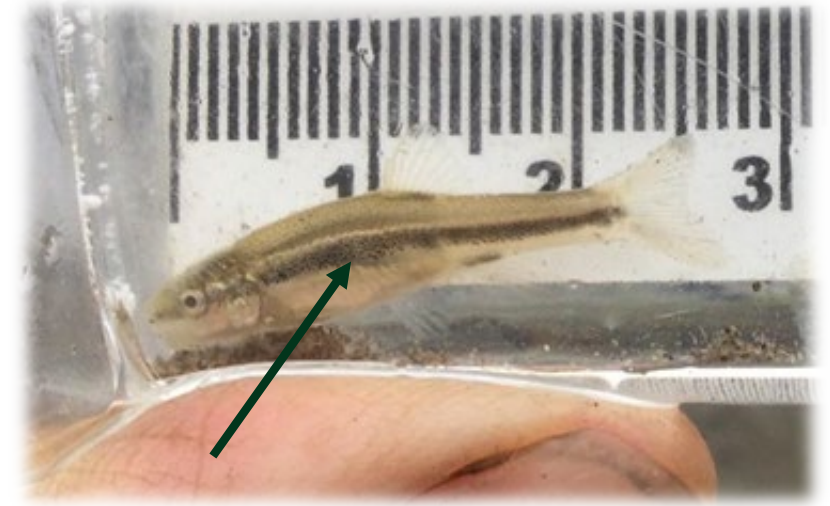


Longnose Dace

- Subterminal mouth that ends before start of the eye
- One barbel at the corner of the mouth
- Deep caudal peduncle
- Juveniles have distinct dark lateral stripe



Reference: Freshwater Fishes of Canada 1973 (pg 494-498).



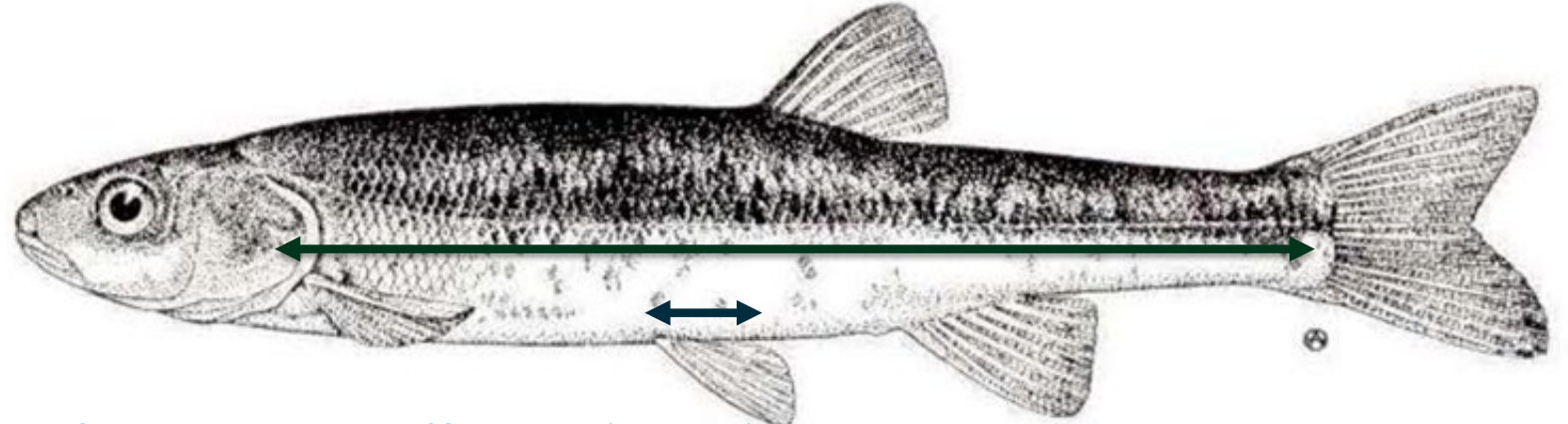
Northern Pikeminnow

- No adipose fin
- Large mouth that extends past the beginning of the eye
- Juveniles can have a dark spot on their caudal peduncle similar to a Spottail Shiner
- Commonly has yellow colouring to fins



Northern Pearl Dace

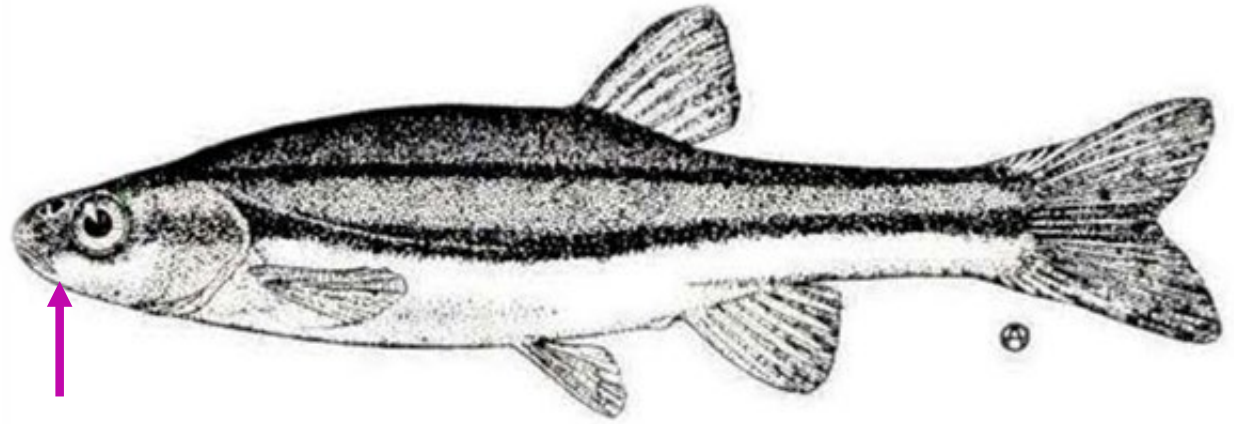
- Narrow body behind anal fin
- **Complete lateral line**
- Top of body noticeably darker than abdomen
- **Origin of pelvic fins** is approximately the diameter of an eye behind the dorsal fin



Reference: [Freshwater Fishes of Canada 1973 \(pg 515-519\)](#)

Northern Redbelly Dace

- Two lateral lines
- Yellow fins
- Small mouth that does not extend past the beginning of the eye
- Very small scales

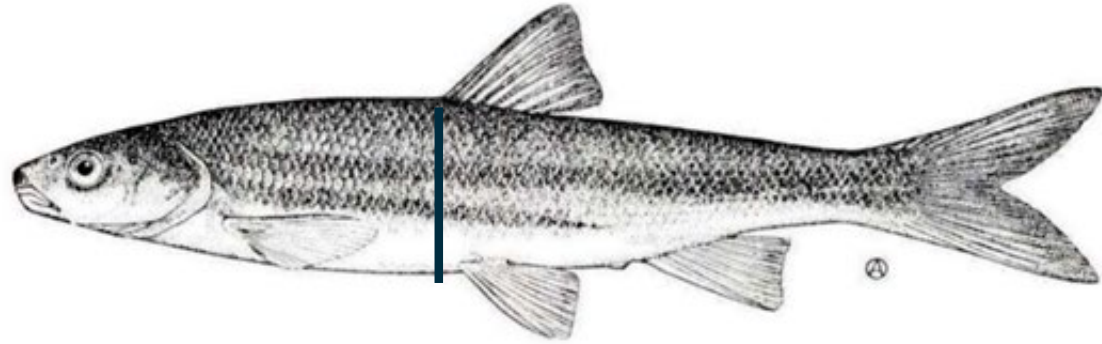


Reference: Freshwater Fishes of Canada 1973 (pg 392-395).



Peamouth

- Very small round mouth
- Dorsal and pectoral fins have similar origins
- Deep “V” in caudal fin
- Small barbels at the corner of the mouth

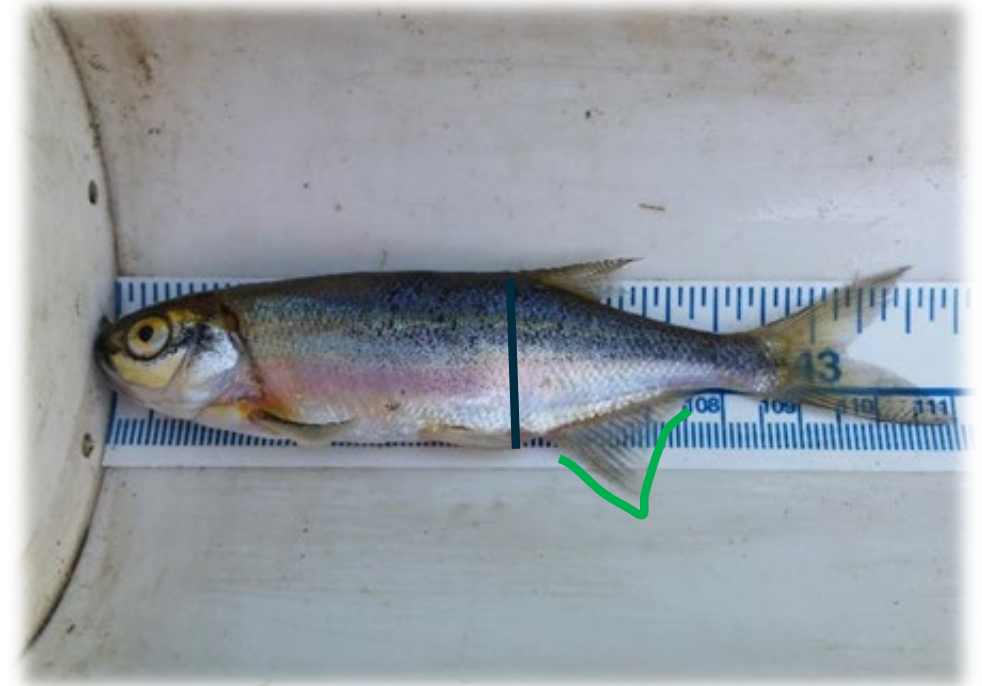


Reference: Freshwater Fishes of Canada 1973 (pg 424-427).



Redside Shiner

- Very wide body compared to other minnows
- Dorsal fin set far back on body (in line with anal fin)
- Large anal fin and deep "V" in caudal fin
- Lacks a dark spot at the base of the tail



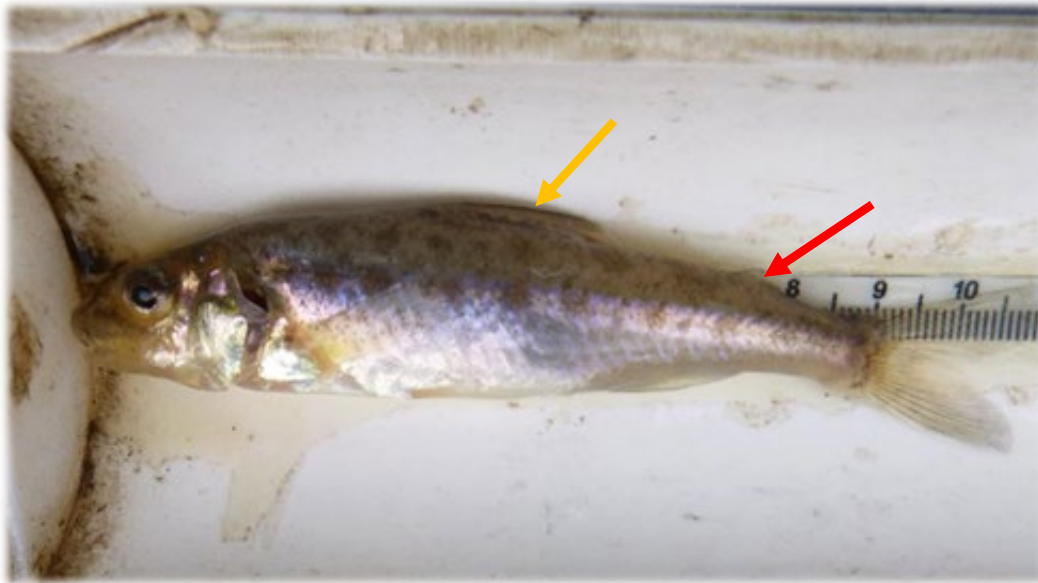
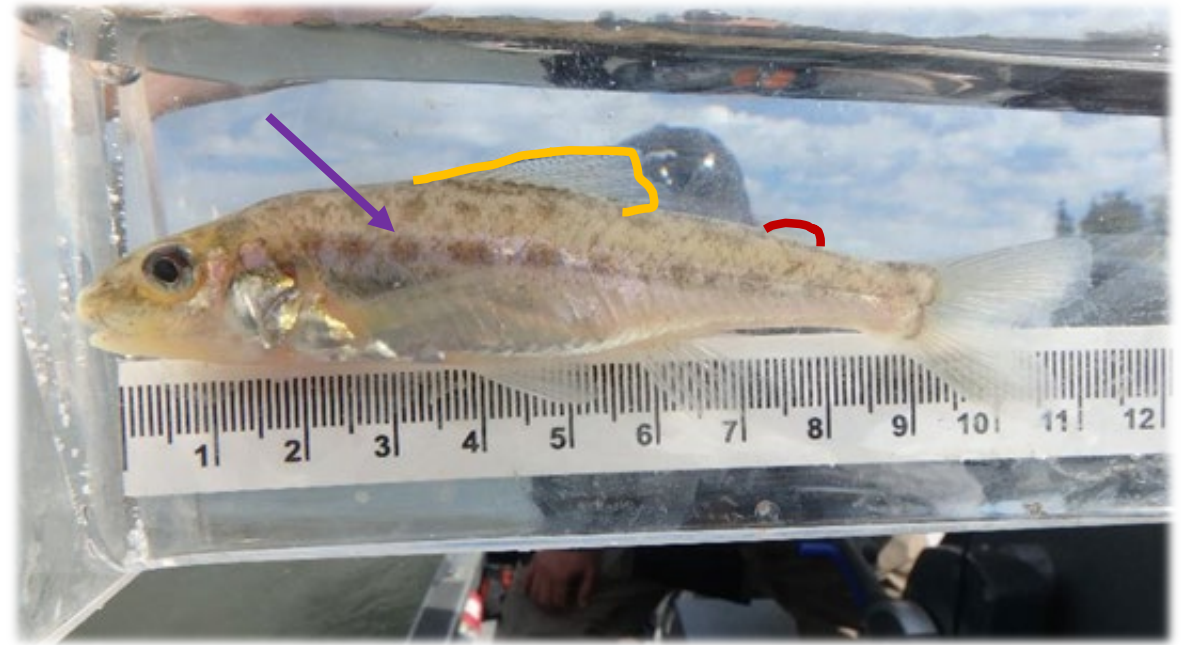
Spottail Shiner

- Large scales that fall off easily
- Black spot on caudal peduncle
- Scales appear translucent
- Endangered in BC



Trout-perch

- Adipose fin and spiny-rayed dorsal fin
- Translucent scales
- Light spots can be present on body
- Appears “see through”



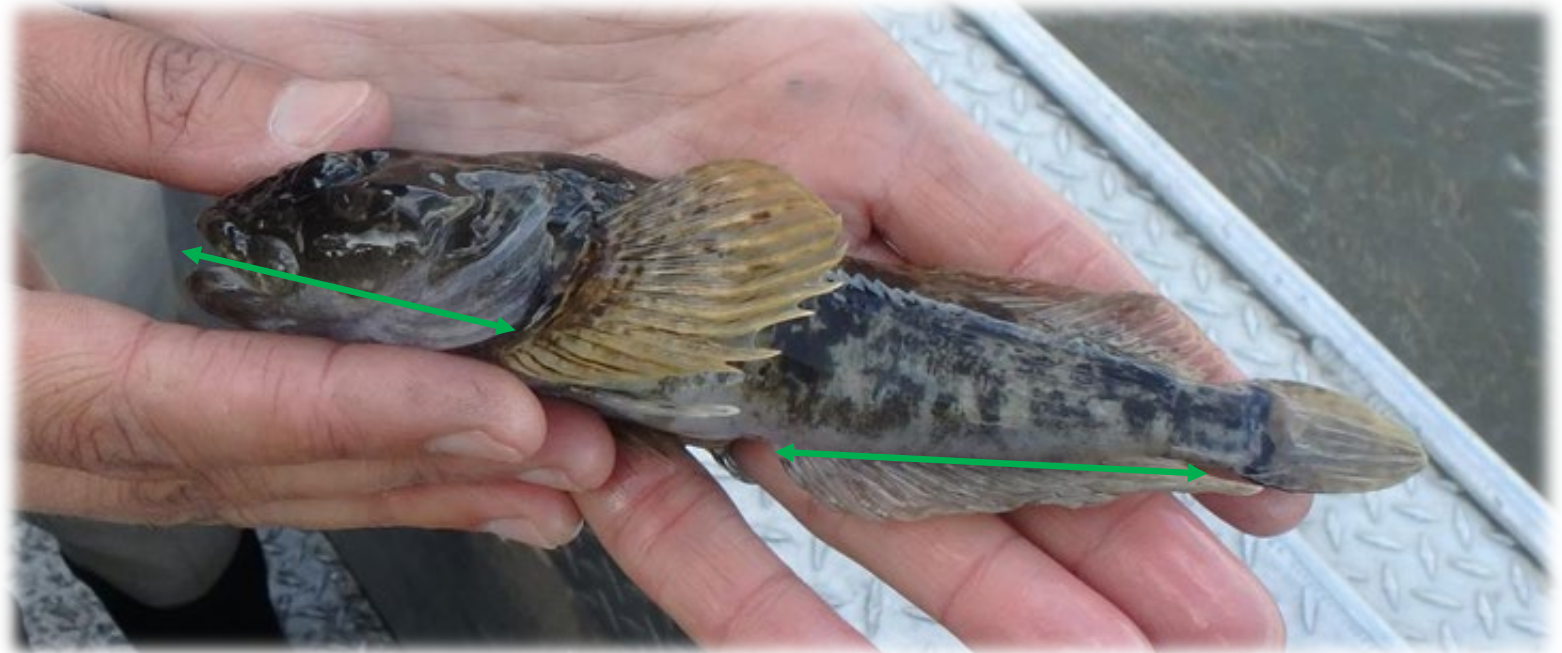
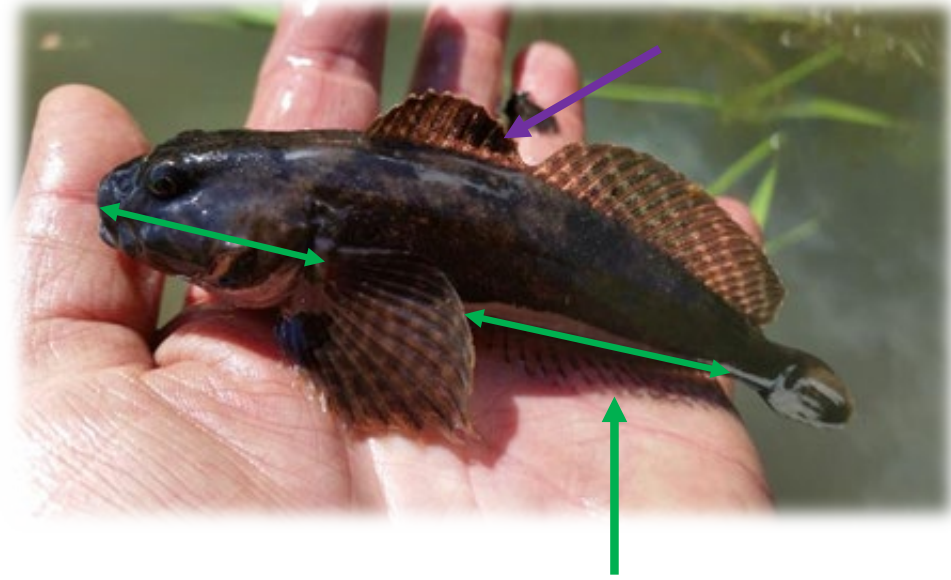
Sculpin Species

- Three species in Peace River
 - Prickly Sculpin
 - Slimy Sculpin
 - Spoonhead Sculpin
- All very similar in appearance
- Can be identified based on number of anal fin rays and bands across top of body



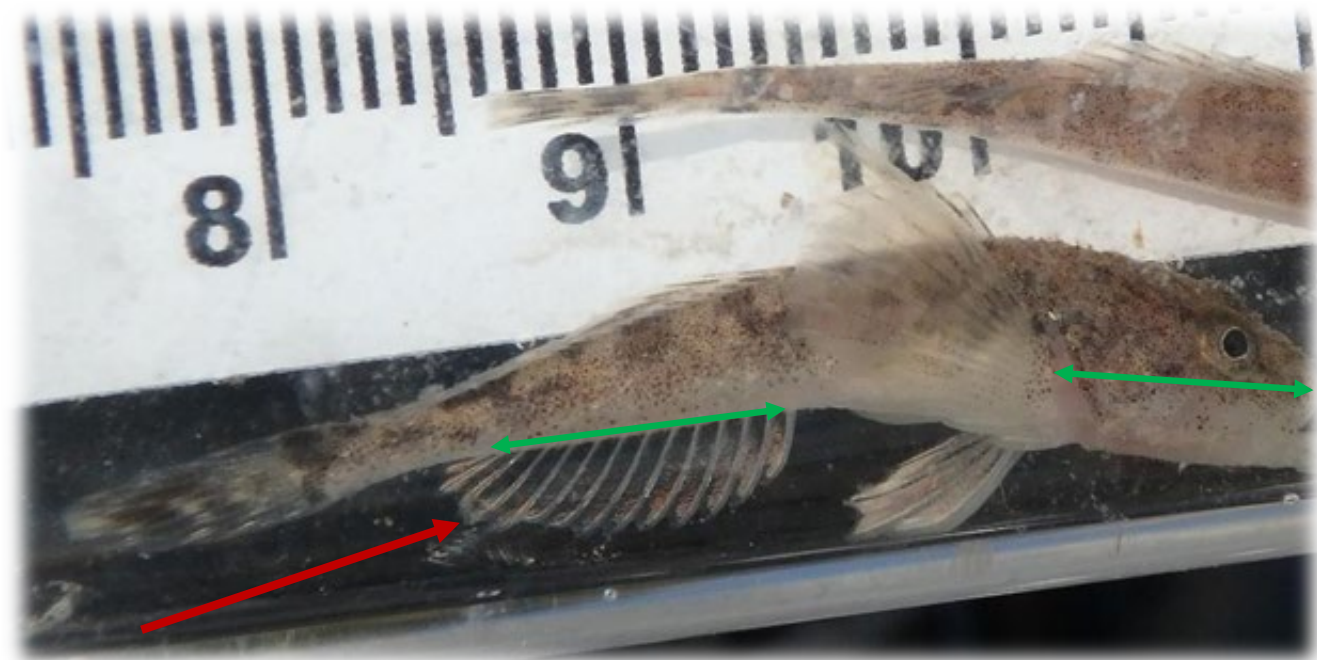
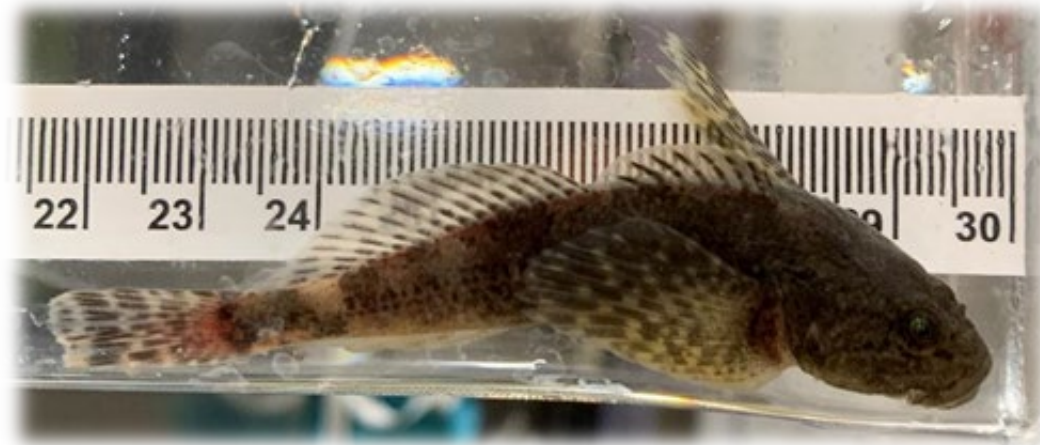
Prickly Sculpin

- Conspicuous dark spot at back of first dorsal fin
- Anal fin base distinctly longer than head length
- 16-18 anal fin rays



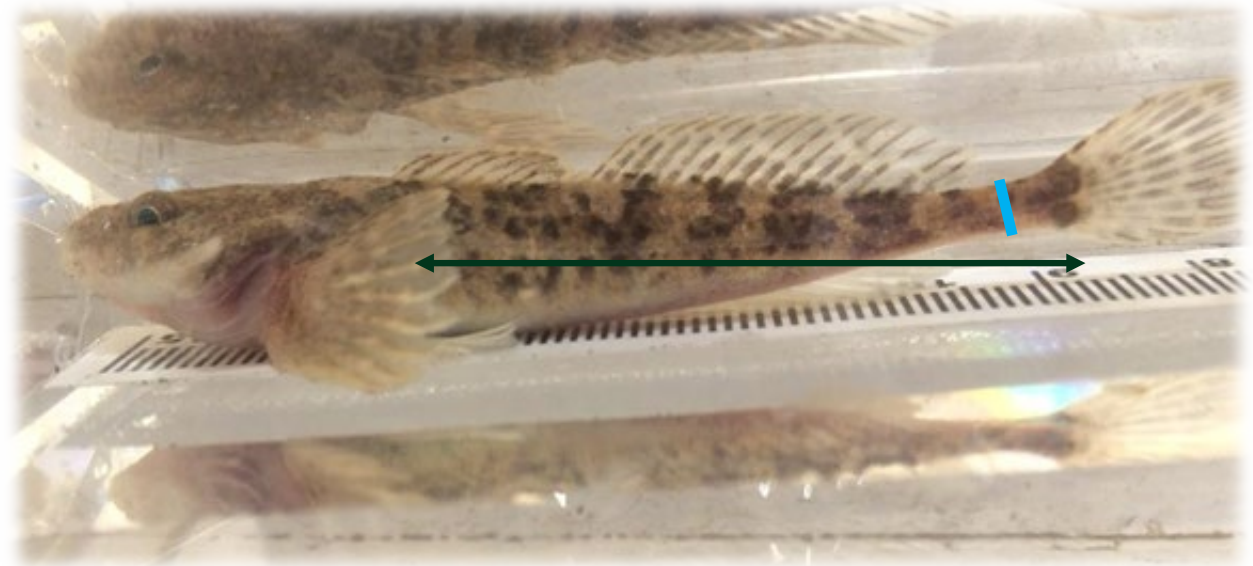
Slimy Sculpin

- Head not flattened
- No hooks on preopercular spines
- Incomplete lateral line
- Slim bodied and smooth skinned
- Anal fin base not distinctly longer than head length
- 10-14 anal fin rays



Spoonhead Sculpin

- Head noticeably flattened
- Strongly hooked preopercular spines
- Complete lateral line
- Narrow caudal peduncle



Sucker Species

- Three species in the Peace River
 - Largescale Sucker
 - Longnose Sucker
 - White Sucker
- All very similar in appearance
- Can be identified by shape of mouth and caudal peduncle



Sucker Snout and Lip Comparison



Largescale Sucker

Short rounded snout that barely hangs over the mouth.

Cleft between lower lips forms a broad inverted "V"



Longnose Sucker

Long pointed snout that noticeably hangs over the mouth.

Deep cleft between lower lips



White Sucker

Short rounded snout that barely hangs over the mouth.

Cleft between lower lips is narrow inverted "V"

Largescale Sucker

- Large, distinct scales (even on juveniles)
- Short, rounded snout that barely overhangs mouth
- Cleft between the lower lips forms a broad inverted “V”
- Caudal peduncle is at least half (or less than half) of dorsal fin base



Longnose Sucker

- Snout long and pointed
- Snout hangs over mouth
- Small scales (barely visible on juveniles)
- Deep cleft between lower lips



White Sucker

- Deep caudal peduncle (depth is equal to dorsal fin base)
- Large scales
- Short rounded snout that barely overhangs the mouth
- Cleft between lower lips is narrow inverted "V"



