

Idaho's Native Trout

A Trout in the Classroom supplement

Designed as a supplemental lesson for Idaho Trout in the Classroom. Conceived, designed, and written by the Native Fish Committee of the Idaho Chapter of the American Fisheries Society lead by Joe Thiessen (ThiessenJD@lopers.unk.edu) and Dan Dauwalter (ddauwalter@tu.org)

Objective: Introduce students to the concept of native animals, specifically Idaho's native trout, and how they differ from one another in color, markings, and distribution. Target grade level: 2-7.

Background: Idaho has 38 native fish species. These include three species of trout: Columbia River redband trout (includes steelhead trout), bull trout, and cutthroat trout. There are three subspecies of cutthroat trout native to Idaho: Westslope cutthroat trout, Yellowstone cutthroat trout, and Bonneville cutthroat trout. The Yellowstone cutthroat trout has a form that is often recognized as distinct: the Snake River fine-spotted cutthroat trout. The cutthroat trout (all subspecies) is Idaho's state fish!

Due to Idaho's unique geologic history, our native trout occur in different and often distinct regions. For example, redband trout do not naturally occur east of Shoshone Falls in the Snake River and its tributaries. Redband trout were not capable of navigating such an immense waterfall, so they did not colonize these waters. As watersheds and conditions become available to trout, they may move into new areas.

Materials:

- Colored printouts of species pages
- Crayons or colored pencils

Procedure:

1. Define and introduce the concept of a species and a subspecies. Give an example, such as bears. Idaho has two bear species – black bears and grizzly bears. Each bear is unique; they can interbreed with their own kind and have unique scientific names. The black bear is *Ursus americanus*. The grizzly bear is *Ursus arctos*. Have the students ever heard of the brown bear living in Alaska? The brown bear in Alaska is actually the same species of bear as Idaho's grizzly bear. Because the brown bear lives in a different habitat, its appearance is also a bit different. Brown bears are often larger than grizzlies. They may look a bit different on the outside, but they are the same species. Scientists use the term subspecies to indicate that a species is found in two different areas, and they add an additional name. The grizzly bear's name is *Ursus arctos horribilis*. The brown bear's name is *Ursus arctos arctos*. Do subspecies occur in other types of animals – how about fish? Yes.
2. Ask the students if they know what the word native means. Have they ever heard someone say he or she is an Idaho native? What does a person mean when they say they are native to a place or area? Get ideas and definitions from students. Guide them into the idea that the person most likely means that they were born in Idaho or their family has lived here for many generations. Define and introduce the concept of what a native species means.
3. Discuss with students the concept of native trout.
4. Use the map to show where the six different native trout species (and subspecies and forms) occur in Idaho. Ask the students which species or subspecies live in the same areas. Ask the students how this pattern of native species came to be in Idaho. Why are some trout found in certain areas and not others? Do they know about any unique features in the rivers and waterways where the fish are found?
5. Pass out the species pages and have the students color each species, subspecies, or form based on the picture provided and the bulleted characteristics.
6. Ask the students which of Idaho's native trout look most similar and which ones are most different.
 - a. If students only colored one or two of the six trout, have them get together with other students to compare the fish.
7. Ask the students if the Idaho native trout that look most similar are different species or different subspecies. Why do these trout look similar?

8. Discuss with the students whether the Idaho native trout that look most similar occur in the same places or not. Why do they believe this is the case? Do they think that the native trout in Montana or Nevada would be similar in appearance to Idaho's native trout? Why or why not?

Simple Definitions:

Species: a group of related organisms having common characteristics and capable of interbreeding.

Native species: a species that is found naturally in a given area.

Subspecies: a subdivision of a species; usually a geographically isolated population that shows physical and genetic differences; may interbreed with other populations of the species where their ranges overlap.

American Fisheries Society (AFS):

The World's oldest and largest organization dedicated to strengthening the fisheries profession, advancing fisheries science, and conserving fisheries resources. The Idaho Chapter is a local chapter of the Society.

American Fisheries Society: www.fisheries.org

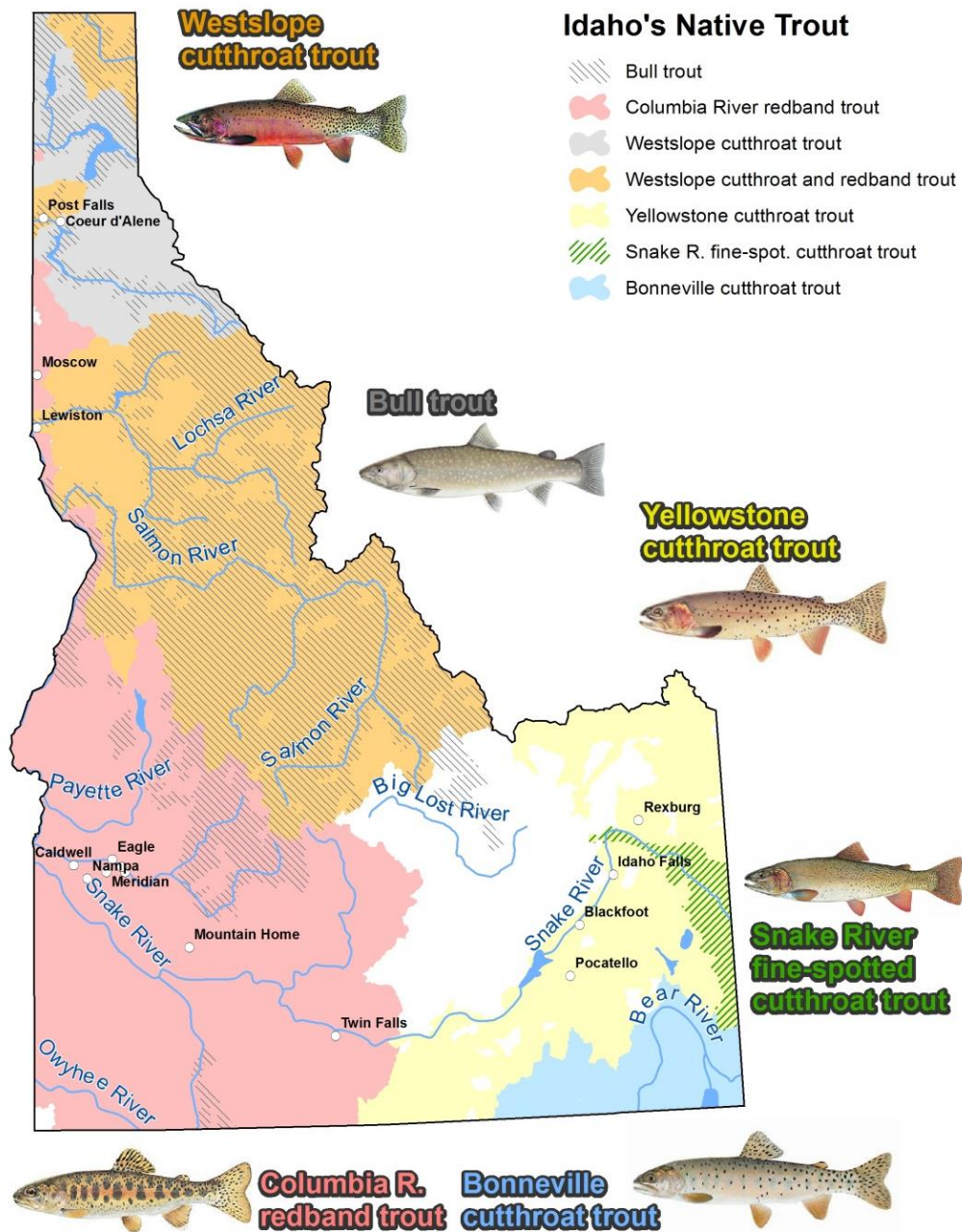
Idaho Chapter American Fisheries Society: www.idahoafs.org



Idaho's Native Trout

What is an Idaho native trout?

An Idaho native trout is a trout that lived in Idaho before Idaho was settled in the 1860s. There are six different kinds (species or subspecies) of trout native to Idaho. So, where do they live?



Columbia River redband trout

Oncorhynchus mykiss gairdneri



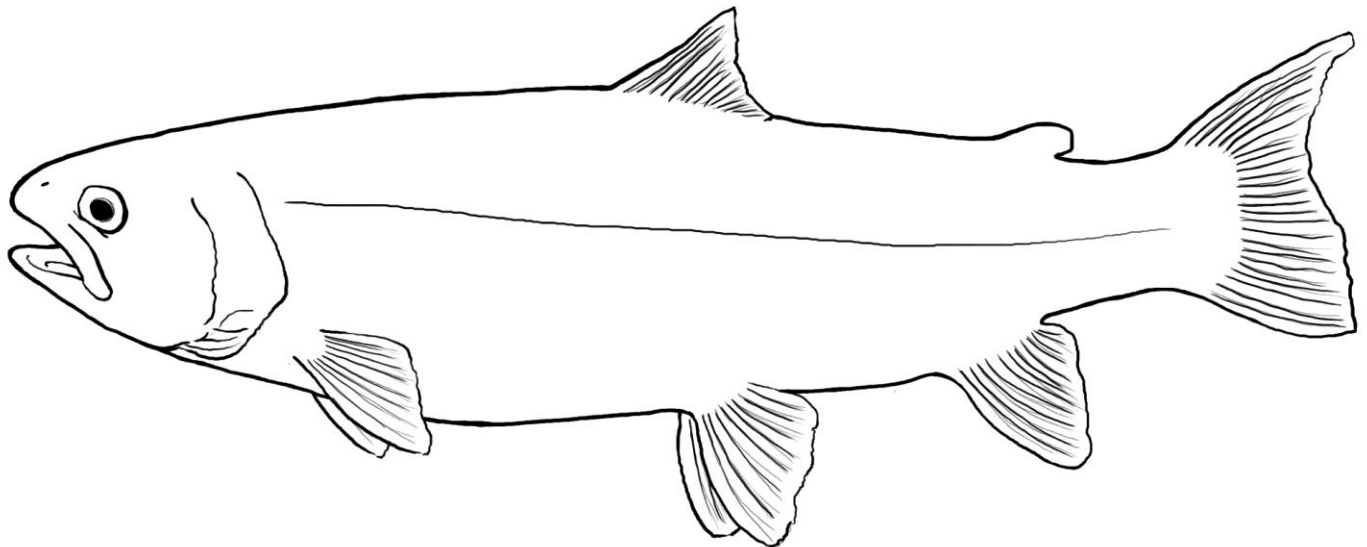
Credit: D. Dauwalter

Fun facts:

- I am a type of rainbow trout that inhabits much of Idaho.
- I live in both desert and mountain streams.
- If I migrate to the ocean, I'm then called a steelhead.

Can you color me with my identifying colors and marks?

- Green-olive color on my back
- Large black spots down my side
- My belly is white
- Smaller black spots from my head to my tail
- Reddish band down my side



Bull trout

Salvelinus confluentus

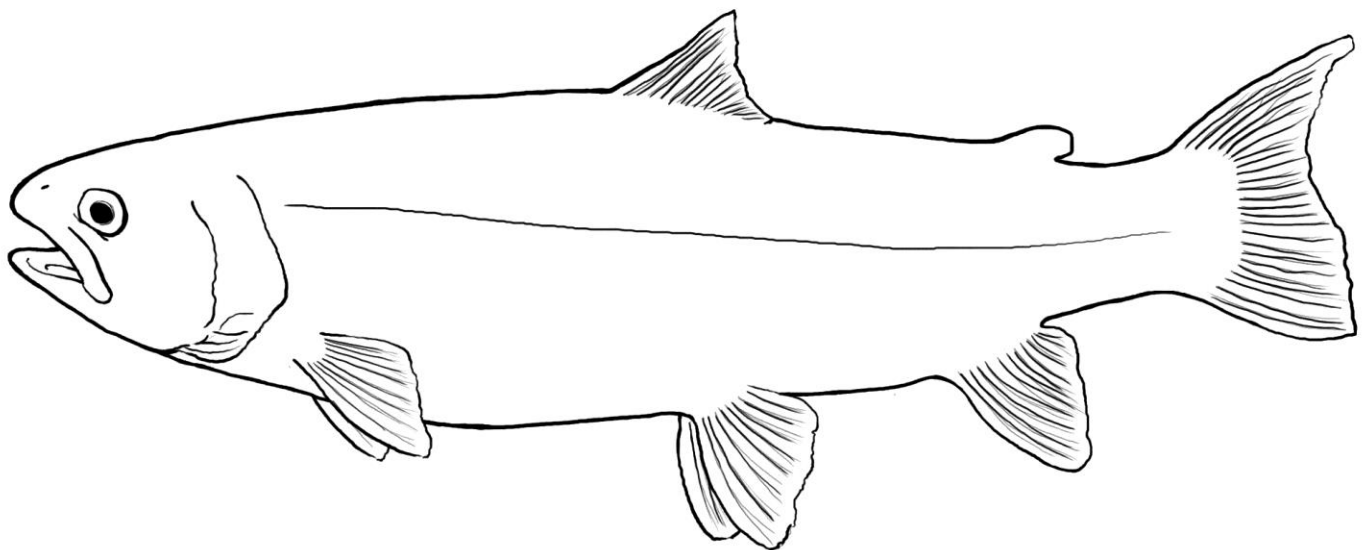


Fun facts:

- I'm found from west-central to northern Idaho.
- I live in very cold and clear mountain streams and rivers.
- I can reach 3 feet in length!

Can you color me with my identifying colors and marks?

- My back is grey with some green
- Less color on my belly
- Small white spots with some pink or red
- No spots on my top fins
- Spots no larger than the pupil of the eye
- White edge on all lower fins
- Fins can have a black stripe as well as orange-red colors



Yellowstone cutthroat trout

Oncorhynchus clarkii bouvieri

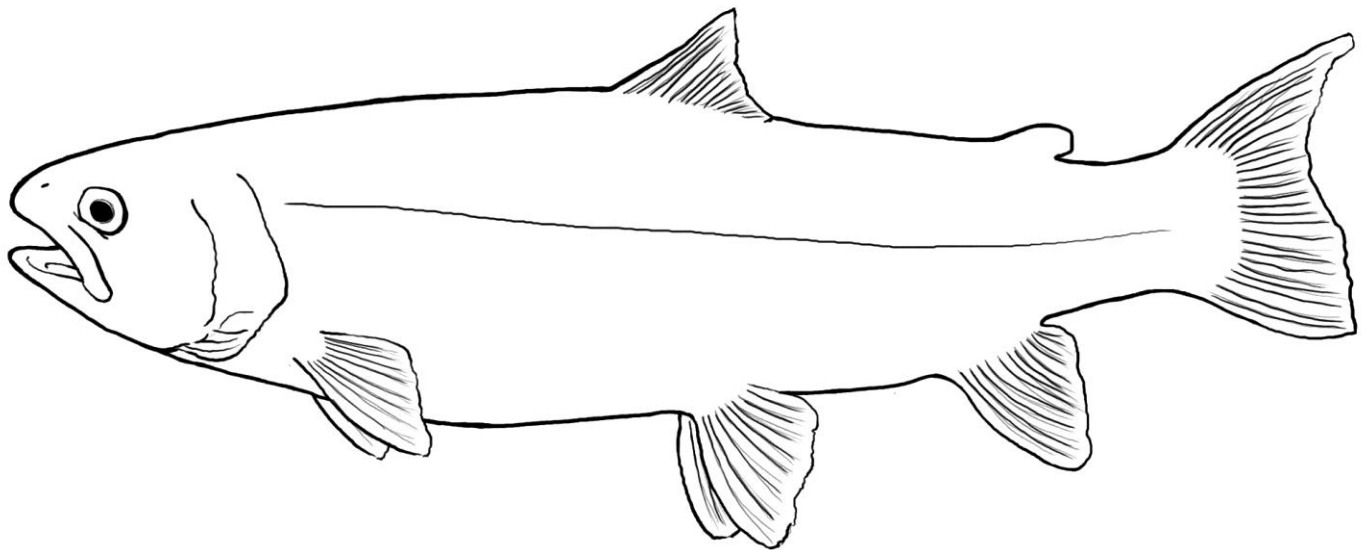


Fun facts:

- I live in the Snake River in eastern Idaho.
- I live in rocky rivers, streams, and lakes too.
- I also live in Montana, Wyoming, and Yellowstone National Park!

Can you color me with my identifying colors and marks?

- Yellow or bronze back and sides
- Orange-red slash under throat
- Rose tints along side
- Large round black spots
- Spots concentrated near tail
- Orange-red tints on lower fins
- Smaller spots towards- head



Snake River fine-spotted cutthroat trout

Oncorhynchus clarkii bouvieri

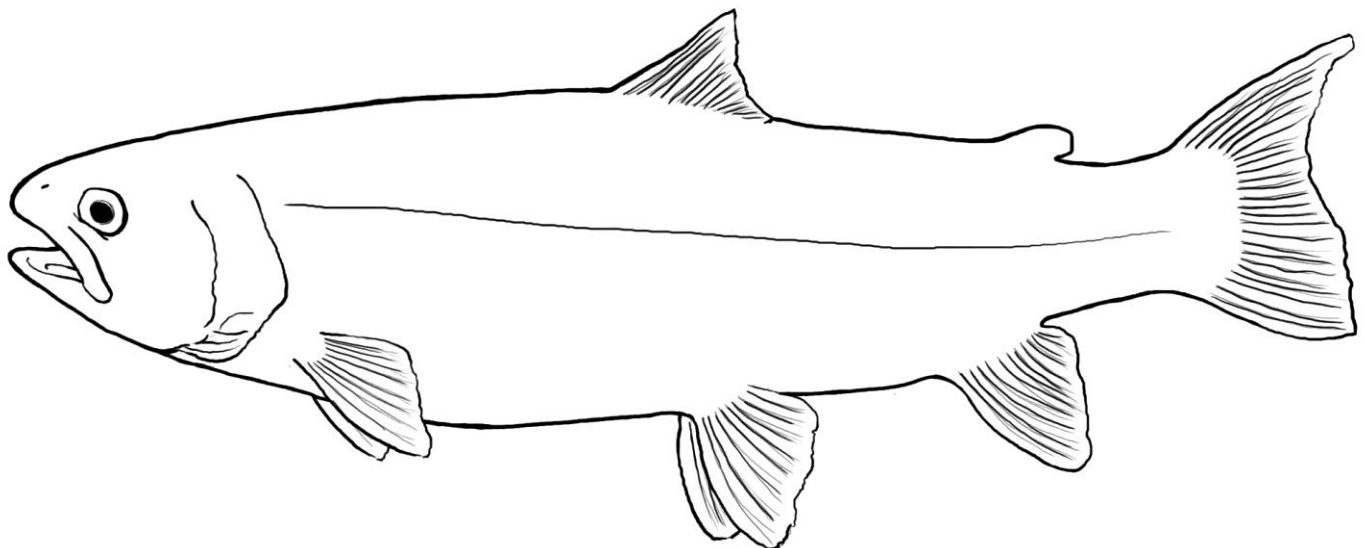


Fun facts:

- I am a different type of Yellowstone cutthroat trout.
- I live in the South Fork of the Snake River.
- I live in Wyoming too!

Can you color me with my identifying colors and marks?

- Yellowish brown on back and sides
- Red-orange slash under throat
- Lower fins red or orange
- Small, irregular spots across body
- Spots on upper fins and tail fin
- Spots concentrated towards tail



Westslope cutthroat trout

Oncorhynchus clarkii lewisi



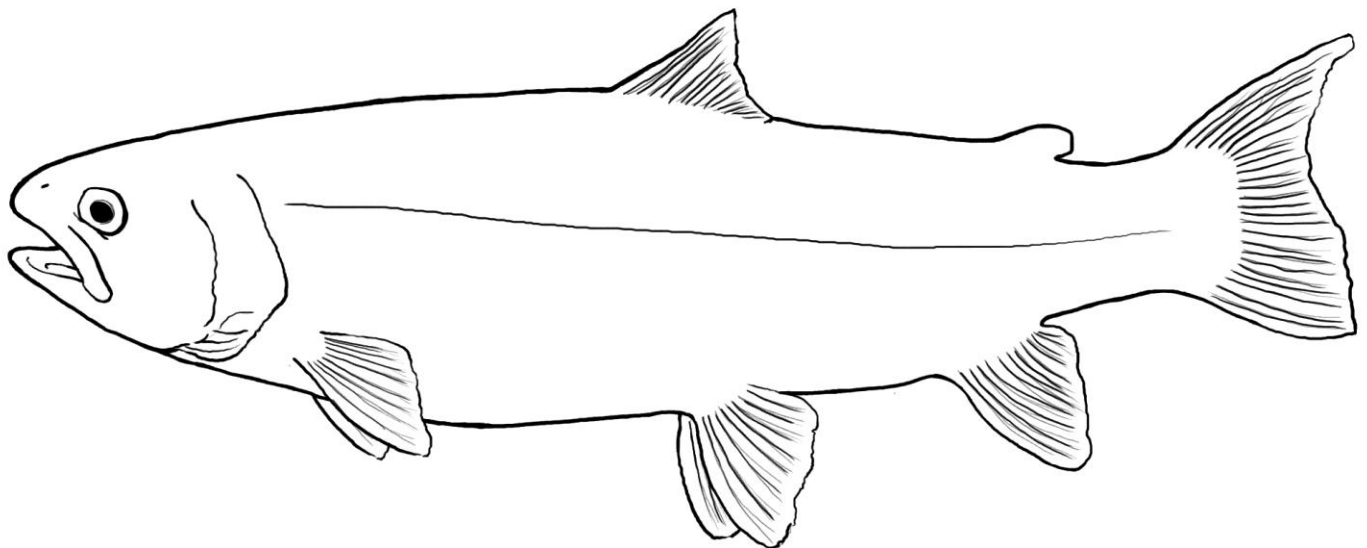
Credit: www.registrelep-sararegistry.gc.ca

Fun facts:

- I'm found from central to northern Idaho.
- I live in cool headwater rivers, streams, and lakes.
- Don't cha know I live in Canada too, eh!

Can you color me with my identifying colors and marks?

- Body greenish-gold to dark red
- Deep red slash under throat
- Small, irregularly shaped black spots
- Spots on back, upper sides, and head
- Concentrated spotting near my tail
- No spots on my belly
- Red or rosy gill plate
- White belly



Bonneville cutthroat trout

Oncorhynchus clarkii utah



Fun facts:

- I live in the southeastern corner of Idaho.
- I live in Utah, Nevada, and Wyoming too!
- I can grow up to 15 pounds in Bear Lake!

Can you color me with my identifying colors and marks?

- Body greenish yellow to silvery grey
- Orange-red slash under throat
- Large, rounded, distributed black spots
- Fewer spots near head
- Larger spots on my tail
- White belly

