



Volume 29/Issue 8

Cutthroat Trout

April 2016

Cutthroat Trout

Inside:
Family Trees
Cutthroats in History
Let's Go Fishing!



Cutthroat Trout



By National Park Service [Public domain], via Wikimedia Commons

Cutthroat trout are America's native western trout and Idaho's state fish! They are found from the Rocky Mountains west to the Pacific Ocean and from Alaska south to New Mexico. In Idaho, they are native to the northern and eastern parts of the state.

Cutthroat trout may live in many different places. They may live in small mountain streams, large rivers or lakes. There are even cutthroat trout that spend part of their lives in the ocean! Cutthroats can live in very cold mountain streams and warmer desert lakes.

As you can guess, cutthroat trout are adapted to many different habitats. They have many different lifestyles and come in different shapes, sizes and colors. There are cutthroat trout that never get larger than six inches long. Other cutthroats may weigh more than 40 pounds. There are silvery cutthroat, golden cutthroat and cutthroat that look like rainbow trout. Some cutthroat have large spots; some have tiny spots. Still others have almost no spots at all. One thing all cutthroat have in common is the striking birthmark that gives them their name. They have a red-orange slash mark under their throats.

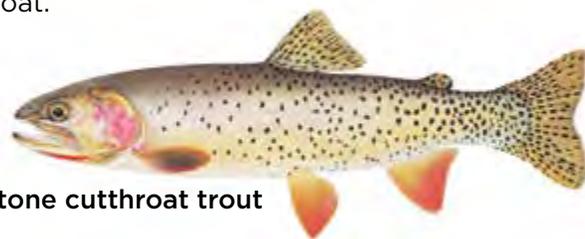
Idaho has three or four different kinds of cutthroat trout. It all depends on who you ask. Yellowstone cutthroat live in the eastern part of Idaho; they are found living in the Snake River and smaller rivers, streams and lakes. They are yellow-gold in color and have large, round spots concentrated near the tail. The Snake River fine-spotted cutthroat lives in the south fork of the Snake River. Some people think the Yellowstone and the fine-spotted cutthroat are different fishes because they look different. The fine-spotted cutthroat trout has the smallest spots of

any trout in western North America. Some have so many little spots that they look like they were sprinkled with pepper. Other fish biologists think the way the fish looks is not important; they think the fish are the same.

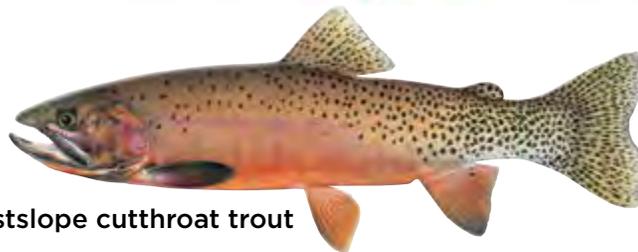
Westslope cutthroat live in northern and central Idaho. They are found in more areas than other cutthroat. Westslope cutthroat live in cool headwater rivers, streams and lakes.

Bonneville cutthroat live in the southeastern corner of Idaho. They live in Bear Lake and the streams around the lake. This fish can grow to be 15 pounds in Bear Lake! The reason they can get so big is because this cutthroat eats more fish. Most cutthroat eat mainly insects. Not very many insects live in Bear Lake, so the cutthroat living there eat zooplankton when they are small. Zooplankton are tiny floating animals in the water. When the cutthroat get larger, they eat fish. A whitefish called the Bear Lake cisco is a favorite food of Bonneville cutthroat. Most fish become a bit lazy in the winter; it is harder for fish to find food. Not the Bonneville cutthroat! Bear Lake cisco lay eggs in the winter. The cisco is very active. Since Bonneville cutthroat eat cisco, they are active too. Bonneville cutthroat are one of the only trout that get bigger and gain weight in the winter!

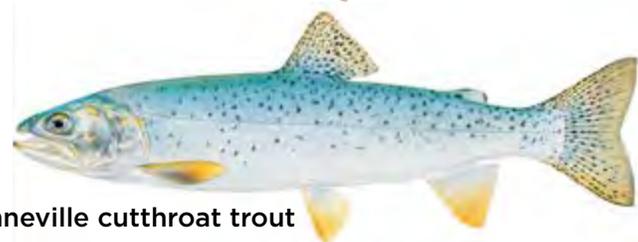
Keep an eye out for cutthroat next time you are exploring Idaho's waters. Remember to look for the red-orange slash on the throat. This is the easiest way to know if you are looking at a cutthroat.



Yellowstone cutthroat trout



Westslope cutthroat trout



Bonneville cutthroat trout

Illustrations by Joseph Tomelleri

What's a Fish?

Fish are vertebrates. They have backbones, just like you. Fish also breathe through gills, have fins and live in water. That seems pretty simple, right? Well, in nature, things aren't always as simple as we would like them to be.

Take that backbone for example. We know what our backbone is like, but in the fish world, not all backbones are created equal. Sharks and sturgeon have a backbone made of the same stuff that supports your nose and ears! It is called cartilage. Cartilage is not hard at all!

Fish need oxygen to survive. Most fish have a special way to get oxygen out of the water they live in—gills. Water, with oxygen in it, passes over the gills when the fish swims. The skin on the gills is thin. Oxygen can pass through the skin into the fish's bloodstream.

Does this mean that all fish use gills to get the oxygen they need? No, some fish actually have lungs! In fact, the African lungfish is so dependent upon breathing air above the water's surface that it will "drown" if kept under water. The Australian lungfish can survive out of water for months if it is in a wet burrow. Lungfishes are examples of fish that break the gill rule.

We usually think of fish as having fins on each side of their bodies, but what about lampreys? Lampreys look like eels. They don't have paired fins or jaws, and they are still fish. In fact, lampreys represent some of the first freshwater fish to appear on Earth.

So as you can see, defining what a fish is may not be so simple. Fish have been a part of our planet for 450 million years. There are over 20,000 different kinds of fish worldwide. They have had time to adapt to many underwater (and even out of water) habitats.

African Lungfish



By Gótehal.jpg: Mathae derivative work: Bff (Gótehal.jpg) [CC BY 2.5 (<http://creativecommons.org/licenses/by/2.5>), CC-BY-SA-3.0 (<http://creativecommons.org/licenses/by-sa/3.0/>) or GFDL (<http://www.gnu.org/copyleft/fdl.html>)], via Wikimedia Commons

Gills



Chris 73 / Wikimedia Commons [GFDL 1.3 (www.gnu.org/licenses/fdl-1.3.html), CC BY-SA 3.0 (<http://creativecommons.org/licenses/by-sa/3.0/>), CC BY-SA 2.5 (<http://creativecommons.org/licenses/by-sa/2.5/>) or CC BY-SA 2.5 (<http://creativecommons.org/licenses/by-sa/2.5/>)], via Wikimedia Commons

Juvenile Pacific Lamprey



USFWS, CC BY 2.0, Flickr

Family Trees

Have you ever made a family tree? It's fun to write down how all of your relatives are related to each other. You might have brothers and sisters, aunts and uncles or cousins. With a little research and hard work, you might be able to trace back your ancestors for hundreds of years.

Biologists can trace back the ancestors of animals, too. One way to trace back an animal's family tree is to look at fossils. If we look at cutthroat trout, we can find evidence of them living on our planet about one million years ago. Their ancestors first appeared on Earth about 100 million years ago! That's a very long time.

Cutthroats are in a large family of fishes that include salmon, trout, and fish that look like trout. Cutthroat trout are in the Pacific salmon and trout group. These fish live in waters that are in the western part of the United States or the "Pacific side" of the country. These fish are the cutthroat's cousins. They are the five Pacific salmon—sockeye, Chinook, Coho, chum and pink. Rainbow trout and steelhead are also in this group.



Chinook salmon



Coho salmon



Sockeye salmon



Steelhead



Rainbow trout

There are 12 subspecies, or types, of cutthroat trout living in North America. Calling something a subspecies is a way of separating plants or animals that are very similar. Take apples, for example. We can divide apples into three categories based on color. They might be red, green or yellow. Let's say we wanted to bake an apple pie. If we just said we wanted a red pie apple, who knows what we would get. But if we asked for a certain type of red apple, a Jonathan, then we would know exactly what to expect. The Jonathan part is like the subspecies. It describes exactly which type of red apple we want.

Here is how subspecies work in cutthroat trout. All cutthroat are members of the Pacific trout and salmon family. The scientific name for this family is *Oncorhynchus* (on-kor-HIN-kus). At the next level (color of the apple example), they are all cutthroat trout, *Oncorhynchus clarki*. If we see the name *Oncorhynchus clarki*, we know it's a cutthroat trout. Now, when we get really picky and want to know exactly what kind of cutthroat it is, we add a subspecies name. The westslope cutthroat trout is *Oncorhynchus clarki lewisi*. Can you guess who it is named after? The Bonneville cutthroat is *Oncorhynchus clarki utah*. The Yellowstone cutthroat trout is *Oncorhynchus clarki bouvieri*, and some people think the Snake River finespotted cutthroat should be called *Oncorhynchus clarki behnkei*.

Tracing back our family trees helps us see our connections to family members. Tracing back an animal's family tree helps biologists see the connections between an animal and its habitat and relatives.

Cutthroats in History

When you think of wildlife and history, do cutthroat trout spring into your mind? They might not. You may think of buffalo or beaver, but cutthroat trout have played an important role in Idaho history, too.



Lewis and Clark on the Lower Columbia

Charles Marion Russell [Public domain], via Wikimedia Commons

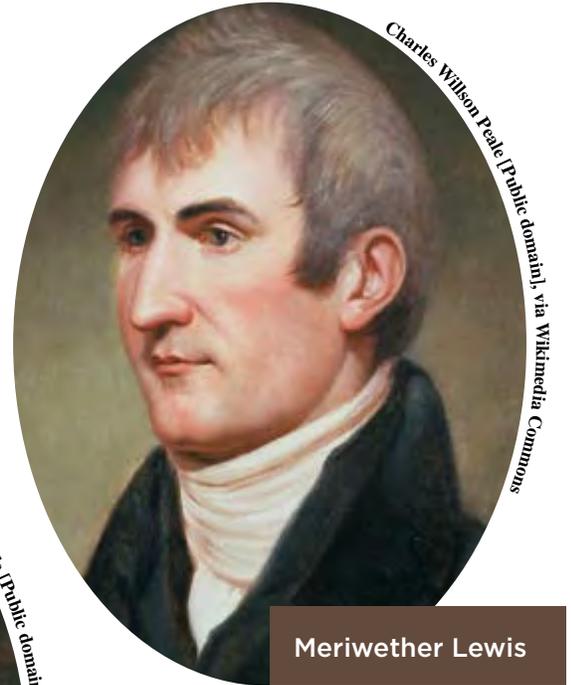
Cutthroat trout were important to Native Americans. They were and still are an important food just like salmon, berries or deer. Their relationship to cutthroat trout can be traced back about 10,000 years. They ate fresh fish and dried fish on racks. The dried fish would stay fresh a long time. It was eaten during the cold months of winter.

The cutthroat also played a role in the journey of Lewis and Clark. Lewis and Clark wrote down many of the first detailed descriptions of western wildlife. Cutthroat trout was the first trout the group saw on their journey west. They saw the fish near the Great Falls of Montana's Missouri River in July of 1805. This was before they entered the land we now call Idaho. They mention cutthroat in many of their journal entries.

Cutthroats were also important to early explorers and settlers. People on the Oregon Trail ate cutthroat trout while traveling through Idaho. Cutthroat trout also fed early miners. Thousands of trout were harvested from the Coeur d'Alene and Salmon Rivers to feed miners.

Cutthroat trout also hold a special place in Idaho. In 1990, they become our state fish. They were named our state fish because of their importance in our history, and because they are native to our state. They are also fun to catch!

If you catch a cutthroat, take pictures, make sketches and write about your experience in a journal. You can then add these beautiful fish to your own personal history.



Charles Wilson Peale [Public domain], via Wikimedia Commons

Meriwether Lewis



Charles Wilson Peale [Public domain], via Wikimedia Commons

William Clark

Lewis and Clark wrote down many of the first detailed descriptions of western wildlife. Cutthroat trout was the first trout the group saw on their journey west.

What's in a Name?



Photo Curtis Fry, CC BY-NC 2.0, Flickr

Names are interesting things. Learning where names come from and what they mean can be lots of fun. The cutthroat has had many names over the years.

The scientific name of the cutthroat is *Oncorhynchus clarki*. The first part of the name, *Oncorhynchus*, means hooked nose. *Clarki* is for the explorer William Clark. William Clark was the first person to describe cutthroat trout in detail. When Clark first saw the cutthroat trout, the red slash marks by the fish's throat caught his eye. He mentioned the red slash marks in his writings. This is where the fish got its common name of cutthroat trout.

The first people that ever saw cutthroat trout, Native Americans, had their own names for them. The Nez Perce people called them waw'aalam. The Northern Paiute-Bannock named them tama agai.

Next time you hear the name of an animal, think about the reasons why that name was chosen. Does that name refer to how the animal looks? Is the animal named after a person? Maybe the name mentions where the animal is found. There can be some interesting stories behind animal names!

waw'aalam

tama agai

Oncorhynchus clarki

Be Outside



Let's Go Fishing!

With summer vacation just around the corner, you may be thinking of things to do in the warm summer sun. How about fishing? Fishing is a great outdoor activity any time of the year, and it can be a blast!

Most people remember the first time they caught a fish. Feeling a fish tugging at the line and jumping in the air is exciting and spine-tingling. Fighting a big fish is a feeling most people remember for a long time. Even catching a small fish can be thrilling, but catching a fish is just one thing that makes fishing fun.

You may have heard the saying "There is more to fishing than catching a fish." This saying is so true. If you ask someone who fishes a lot why she likes to fish, catching a fish may not be the first thing she mentions. Fishing is about experiencing the great outdoors and all the wonderful things that it has to offer.

It is refreshing and calming to be outside. When fishing, you get to feel the warm sun on your face and listen to the trickling water. How great does it feel to dip your feet in a stream or lake on a hot day? You can't do that while playing video games in your house! Even if you are in the worst of moods, sitting outside, along a stream with a fishing pole in your hand can melt all those bad feelings away.

Now that we have you excited about fishing, you may be asking yourself, "How do I get started?"

You can join in the fun at one of our many "Take Me Fishing" trailer events planned this spring and summer. It's free! We supply everything you will need. Just show up and have fun.

At each event, we have fishing poles and bait available at no charge. If you are new to the sport, don't worry about not knowing how to fish. There are angler experts on hand to teach you casting and knot tying. They will give you tips on everything from reeling in your catch to cleaning a fish.

Both adults and kids can join in the fun. As long as you sign-in at the trailer, you do not need a fishing license to fish at the event. Mom, dad, older brothers and sisters, even grandma and grandpa can fish for free at the event as long as they sign-in. Before and after the event, a fishing license is required for anyone 14 years and older.

Most events are held at fishing ponds in or close to towns and cities. A list of where to find a "Take Me Fishing" Trailer will soon be posted on Idaho Fish and Game's website at www.fishandgame.idaho.gov. Click on the Fishing tab, then click the Learn to Fish tab, and then the "Take Me Fishing" Trailer schedule. Here you will find a list of all the places the trailer will be this spring and summer. Have fun fishing!

Free Fishing Event
Open to everyone!

Follow the Take Me Fishing Trailer!

- Fish & Game provides all the fishing supplies. Just show up!
- No license required for event participants.
- Learn the basics.
- Register at trailer.

Cutthroat Trout Word Search

F I N E S P O T T E D E V L C
G B R X L R C O I P N W E V L
S A O Z K H I A Y O U W R U A
B N T N B R G V T X I C T W R
S B M W N A A S E S C C E E K
T Y M G A E W M E R Y S B M H
W G Y M N O V M H K T P R A N
H B A O L Y K I P S A H A L T
G T T L I L B C L E A L T A N
Z Y E F B V G O T L Z L E A N
Y Y P C O D P N B R E A S W H
T H S I F E T A T S A U N A Q
F I S H I N G S L L I G I W X
J V V U N C F M F X C Z F E W
A Z D D X P R S Y L R I H Z Q

WORDS

BONNEVILLE
CLARK
FINE-SPOTTED
FINS
FISHING
GILLS
LAKE
LEWIS
RIVER
SLASH MARK
STATE FISH
TAMA AGAI
VERTEBRATE
WAWAALAM
WESTSLOPE
YELLOWSTONE

WILDLIFE EXPRESS

Volume 29 • Issue 8 • Cutthroat Trout • April 2016

Wildlife Express is published nine times a year
(September-May)
by the Idaho Department of Fish and Game

Lead Writer: Adare Evans

Layout: Kelly Kennedy Yokoyama

Contributors: Lori Adams, Vicky Runnoe



WE WOULD LIKE TO HEAR FROM YOU!
If you have a letter, poem or question for Wildlife Express,
it may be included in a future issue! Send it to:

adare.evans@idfg.idaho.gov

or

Wildlife Express, Idaho Fish and Game
PO Box 25, Boise, ID 83707