Trout \textit{(Salmonidae)}

Trout species in Indiana

- Brook trout \textit{(Salvelinus fontinalis)}
- Brown trout \textit{(Salmo trutta)}
- Lake trout \textit{(Salvelinus namaycush)}
- Rainbow trout \textit{(Oncorhynchus mykiss)}

Do they have any other names?

Some other names for these trout are:

- Brook trout: Eastern brook trout, coaster trout, and coasters
- Brown trout: German brown trout
- Lake trout: mackinaw, touladi, togue, grey trout, siscowet
- Rainbow trout: steelhead, coastal rainbow

Why are they called trout?

\textit{Salmo} is Latin for “to leap” and \textit{trutta} is Latin for trout. \textit{Oncorhynchus} is Greek for “hooked snout” and \textit{mykiss} is derived from the name used for rainbow trout in Kamchatka. \textit{Salvelinus} is the old name for char, \textit{fontinalis} is Latin for “from a spring or fountain,” and \textit{namaycush} is the name for lake trout used by some inland Southern East Cree communities.

What do they look like?

Brook trout have a slightly forked to straight-edged tail fin. They are olive to black on the back with orange or red on the belly of males. The sides have pink or red spots with blue halos and the dorsal fin (back) has light wavy lines or blotches. The tail fin has black lines and the lower fins have a white edge with a black line behind it.
Brown trout have a straight edged tail fin. They are olive to dark brown on the back, yellow-brown on the sides, and white to yellow on the belly. The sides and head have red and black spots and the back and dorsal fin also have black spots.

Lake trout have a deeply forked tail fin. They are olive to black on the back with green or grey on the sides and a white or grey belly. The sides, head, dorsal and tail fins have cream or yellow colored bean-shaped spots.
Rainbow trout have a slightly forked tail fin. They are blue, blue-green, or brown on the back and top of head, have silvers sides, and the belly is white. On the sides they have a pink stripe and many dark black spots. The tail fin and dorsal fin also have black spots.

Where do they live in Indiana?

All four trout are found in the northern area of the state near the Great Lakes region. Brook trout and lake trout are native to the Great Lakes area; however rainbow and brown trout have been introduced to Indiana. Rainbow, brown, and brook trout are stream trout but can also be found in lakes. Brook trout that are found in the Great Lakes are commonly called coasters. Rainbow and brown trout can also be found in certain areas in the rest of the state where they are stocked. Rainbow and brown trout are common in the state with brook trout considered rare and lake trout occasional.
What kind of habitat do they need?

Trout are cold water fish and need clean waters that can stay below 70 degrees F. They are found in both lakes and streams. In streams trout need deep pools and riffles for spawning.

How do they reproduce?

Brook, brown, and rainbow trout have similar spawning activities. These trout spawn in the fall and winter from October to December. The female makes a shallow pit in a gravel riffle and lies on her side to lay the eggs in the pit. A male will fertilize the eggs and then the female covers the eggs with gravel. No parental care is given and the eggs hatch in 2 to 3 months for brooks, 48 to 52 days for browns, and 21 days for rainbows.

Lake trout spawn in the fall on the rocky substrate of a shoreline at a depth from 10 to 120 feet. Lake trout scatter the eggs on the substrate and do not make a pit like the other trout species in Indiana. The eggs hatch the following March or April when the water temperatures are 34 to 38 degrees F.

How old are they when they reproduce?

Brook trout can reproduce around the age of 2. Brown and rainbow trout are mature in 3 to 4 years and lake trout are mature in 6 to 8 years.

How long do they live?

Brook trout live 3 to 6 years, brown trout live up to 20 years, lake trout live 20 or more years, and rainbow trout live a maximum of about 11 years.

How fast do they grow in Indiana?

Brook trout are an average of 7 to 9 inches and 2 to 3 pounds, but the coasters (brook trout in Great Lakes) can reach sizes of 25 inches and 10 pounds. Brown trout can reach a size of 19 inches and 5 pounds in 3 years and can reach sizes of 23 pounds. Lake trout average 7 pounds but can reach a size of 3 feet and 25 pounds. Rainbow trout are on average 10 to 15 inches and 0.5 to 1.5 pounds but sizes of 16 pounds can be reached.

What do they eat?

Trout eat aquatic insects, terrestrial insects, snails, crayfish, and fish.
**What eats them?**

Trout are eaten by fish-eating birds, other fish like salmon, and humans. Lampreys are also a major cause of death for trout in the Great Lakes.

**Are they safe to eat?**

Trout are safe to eat and a popular game fish. Wild caught fish are just as healthy for you as most commercially bought fish and in many cases are healthier. You have probably heard about the fish consumption advisories and wonder if any Indiana fish are safe to eat. *The fish consumption advisories that are posted are based on a model that people are consuming 8 oz. of fish on 225 days each year over 70 years. Most people do not eat fish anywhere close to that amount. However, any meat you consume will have some risk associated with it. If you are in a high risk group such as a pregnant woman or a child please consult the fish consumption advisory at: www.in.gov/isdh/23650.htm*. You can also see which water bodies have advisories on them (most lakes and reservoirs are lower risk than rivers and streams).

**How do I fish for them?**

Trout can be taken on a variety of live and prepared baits, including worms, grasshoppers, crickets, crayfish, salmon eggs, minnows, and cheese. Wet and dry flies, spinners, fly and spinner combinations, and small spoons also are effective. Fly fishing is a popular way to fish for trout.

**How is Indiana managing trout?**

Trout are stocked by the state in waterbodies in Indiana and specific regulations are enforced for harvest. These regulations are used to keep a healthy population and to prevent overharvest. Trout are also observed during fisheries surveys to determine the success of populations in each waterbody.