

Each year counts

Credit: Simone Lee

Calgary River Valleys (CRV) has been conducting a Brown Trout fish egg nest (Redd) count in the Elbow River for over 20 years. This count is used by many interested groups, including the City of Calgary, anglers' organizations, and tourism operators to understand the health of our urban fishery.

Each year, in November, a group of dedicated volunteers join to walk and raft the 12 kilometres between the Glenmore Dam and Fort Calgary to visually and virtually document the examples of Trout spawning in the Elbow.

Brown Trout spawn in October and November. While Fall seems to signal the end of a cycle to many of us, it is the beginning of these Trout's life cycle. The female fish picks a site to build a nest. She lies on her side and swims along the bottom, moving small rocks with her tail. When the female trout has built her nest, she deposits her eggs, and the successful male Trout can fertilize them. The female then covers the eggs, and both return to deeper water for the winter.

Their efforts make a depression that is visible to CRV's counters because of the indentation created which also cleans sediment from the Redds.

Brown Trout spawn in the fall so that their eggs will hatch earlier in the spring, and their hatch can grow quickly to compete with other later-hatching fish. But each year provides different conditions.

Chris Bjornson, Senior Fish Biologist at Golder Associates, long associated with CRV's annual account explained to Calgary River Valley's group that Brown Trout spawning is not as much affected by outside or water temperatures. The Trout respond to the daylight hours that govern their internal clocks when they spawn.

Every year the Brown Trout lay their eggs around the same time and this year, Calgary River Valleys was happy to continue the annual Redd count with Covid-19 safety measures in place.

The number of participants was kept within provincially proscribed Covid-19 limits which reduced the number by one half while CRV supplied twice the amount of ground and water transport to ensure social distancing.

This meant that fewer citizen scientists could be involved in the count this year. We hope that next year we can open this opportunity to more people to participate.

Each Redd our volunteers saw was also documented by geolocating their nests in an effort to see how Brown Trout react to spawning opportunities. The City of Calgary, with advisement from past Redd counts, has been working on enhancing the Brown Trout's opportunities for the past several years.

This year the final count recorded by CRV's volunteers was 275 - one more than 2019. It was a good year.