PRESIDENT'S MESSAGE

"*The Heat is On*" was part of the soundtrack for the film *Beverly Hills Cop* released in 1984. The tune was written by Harold Faltermeyer and Keith Forsey. It was Glenn Frey of the Eagles that really made it sizzle.

I suspect that most of us haven't been to a movie in quite a while, so I don't really know what the hot soundtracks are now, but as I write this in the last week of June, I can truly sing "The Heat is ON" with recent and forecast temps in record-setting 90s and triple digits. As anglers, we all know that heat stresses fish, especially our local native species. When you are out on the water, please keep an eye on the water temperatures and adjust your fishing habits as needed to give our fish a fighting chance. Bring fish in quickly and don't play them to exhaustion. Keep fish in the water and release them quickly. This is not the time for "grip and grin" photos. The fish and your social media followers will thank you.

Dan Short
President, Flathead Valley Trout Unlimited

MORE BUCKET BIOLOGY NEWS

By Tim Joern

As Montana continues to dodge the Mussel invasion that seems bound determined to make its way here, the more insidious spread of nonnative fish species continues. FWP has now established proof that Northern Pike are reproducing in Lake Mary Ronan and as if that weren't sufficient, Black Crappie have apparently been added to the mix. Another range extension is in the books for Smallmouth Bass that are now reproducing in the Lower Swan River upstream of the Bigfork Dam. And now comes word that the National Park Service has verified that Cisco (a nonnative whitefish species) were apparently added to the Yellowstone Lake cocktail after millions of dollars have been spent over the past decade in an unprecedented and thus far successful effort to reduce the damage from the illegal lake trout introduction. It just never ends! TU members need to be vigilant and report any rumors, suspicious activities, or unexpected species sightings to the nearest FWP contact. If you're uncomfortable doing so, report it to a TU Board Member and we will push it up the chain.

> *Young anglers love new rivers the way they love the rest of their lives. Time doesn't seem to be of the essence and somewhere in the system is what they are looking for.*
>
> *~ Thomas McGuane*

IN MAY, Flathead Valley Trout Unlimited members and friends spent a Saturday cleaning up the five FWP Fishing Access Sites along the mainstem Flathead River. The weather was great and we had a good turnout. A lot of fun was had by all and we hope we left the sites in good shape for the start of the fishing season. Thanks to all our friends who turned out to make the fishing experience in the Flathead a little more enjoyable.

Join FVTU and MTU for a Kid's Conservation Clinic

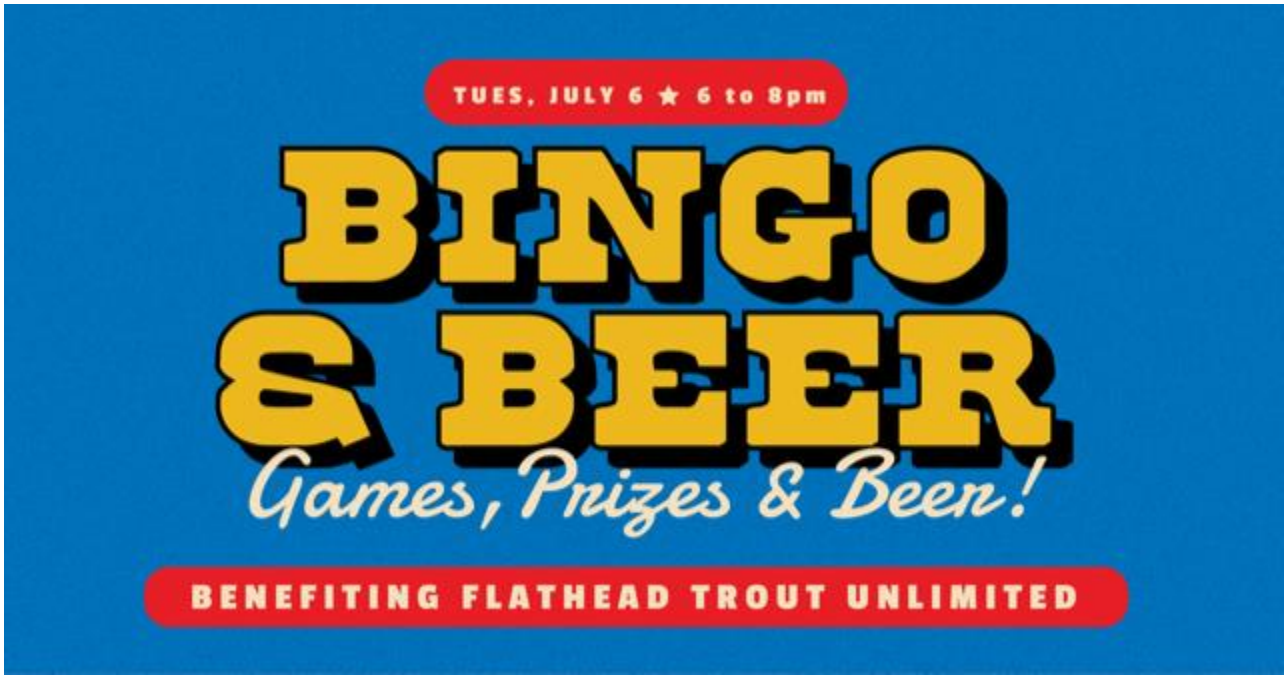
Flathead Valley Trout Unlimited is partnering with Montana TU to host a one-day youth clinic on fishing and conservation. Our one-day clinic will emphasize conservation ethics and provide young anglers with a solid basis in basic fly fishing skills in a safe, distanced, outdoor setting. Using habitat and conservation as a starting point, attendees will learn the basics of trout biology, how to read the stream and find fish, and how MTU helps to conserve, protect, and restore Montana's coldwater fisheries. Students will be introduced to fly casting and tackle, learning other important skills like knot tying, line management, how to land and safely release fish, and more. The day concludes with some real on-the-water fishing time to practice what we learned.

The clinic will be held on July 9th from 8 am to 6 pm at Pine Grove Pond MFWP fishing site near Kalispell. The camp will be free of charge, but we will accept only 10 young people ages 11-14 for the clinic to keep the group size small. All fly-fishing equipment is provided by Trout Unlimited or

anglers can bring their own rod and reel if they would prefer. Parents are also welcome to attend and volunteer. Participants will bring their own lunch and the Chapter will provide bottled water.

Montana Trout Unlimited has links to sign up a participant for the clinic, or to sign up as a volunteer. *All volunteers must submit to and pass a background check in order to volunteer at camp as per Trout Unlimited camp regulations.* For more information about the clinic call Dan Short at 406-250-5064, or email dan.short55@gmail.com. You can also see the clinic Schedule and Curriculum at the Montana TU site.

And, don't forget, Also coming up on July 6th - Flathead Valley Trout Unlimited will be hosting the ever-popular Bingo and Beer Pint Night at Sacred Waters Brewing Company - 3250 U.S. Hwy 2 E, North of Kalispell. Come on out from 6-8pm for some great prizes and great beer.



A cautionary tale of salmon and shrimp

By Ian Withrow – Bigfork Eagle
June 16, 2021 2:15 AM

According to the earliest accounts in the late 1800s from settlers of European descent, Flathead Lake was originally home to around 10 native fish species, westlope cutthroat trout (Montana's state fish) and bull trout (top predator of its time) the most notable among them. This relatively low level of diversity is not surprising. Flathead Lake has only been around in its recognizable form for 15-20,000 years, after all, and more time than that is needed for new fish species to evolve.

Today, Flathead Lake is home to 21 species of fish, and nonnatives (lake trout, lake whitefish, and yellow perch) have become the dominant species. Westlope cutthroat and bull trout populations, meanwhile, have plummeted and are under continued threat. What happened, you ask? Well gather around the campfire, friends, because the Flathead Lake food web story has enough drama and intrigue to rival anything HBO or Netflix might offer. Submitted for the approval of the FLBS Society, I call this one, "A Tale of Salmon and Shrimp."

As towns sprouted up in northwest Montana, early fisheries managers saw an opportunities to bolster recreational fishing. So they did what almost all fisheries managers of that era did: They began stocking nonnative fishes. Between 1890 and 1950, state and federal fisheries managers introduced nearly 25 fish species into Flathead Lake that were known elsewhere for being fun to fish and tasty to eat. These fish included rainbow trout from the West Coast (1914), brook trout from the East Coast (1913), and lake trout and lake whitefish from the Midwest (1905).

Then, in 1916, fisheries managers introduced kokanee salmon to Flathead Lake. Unlike their coastal cousins, which spend much of their lives in the ocean before traveling up freshwater streams and rivers to reproduce and die, kokanee are a landlocked sockeye salmon. In Flathead, they used the lake as their ocean and traveled up the Flathead River to reproduce.

Between 1940 and 1980, kokanee salmon flourished in the Flathead. Their abundant numbers attracted bears and fishermen alike, and soon bald eagles were migrating from afar to feed on the kokanee, creating internationally renowned wildlife watching opportunities and the largest eagle congregations in the United States outside of Alaska. And yet in spite of the unimaginable recreational and tourism achievements, the question re-emerged: How can we make it better?

And that's precisely where everything fell apart.

Starting the in 1950s, fisheries managers across the West began stocking lakes with a freshwater shrimp from the Midwest called Mysis. In many lakes like Flathead, the native zooplankton that serve as the foundation of the food web are barely visible with the naked eye. Mysis, on the other hand, can be over half of an inch. Between 1968 and 1975, believing the larger food source would create bigger numbers of bigger kokanee, managers introduced Mysis to five lakes in the Flathead Watershed, including Whitefish and Swan Lakes. By 1981, the Mysis had moved downstream and were discovered in Flathead Lake by a burgeoning lake monitoring program at the Flathead Lake Biological Station.

Instead of boosting the kokanee in Flathead Lake, however, Mysis caused a complete population crash of the species it was meant to enhance. In 1984, the kokanee in Flathead were estimated to be over 300,000. By 1989, that number was zero. The bears moved on and the eagles flew elsewhere. Flathead Lake's famous kokanee salmon were no more.

How did it go so wrong? There were actually three main mechanisms at work:

First, as the Mysis population exploded, they gobbled up large numbers of zooplankton, leaving little food for the kokanee and other fishes. Additionally, Mysis migrate vertically, spending the day on the bottom of the lake while the kokanee were feeding near the surface. At night, the shrimp would ascend and eat zooplankton, thereby stealing food from the salmon. In other words, the Mysis weren't a food option for kokanee, and instead were a direct competitor.

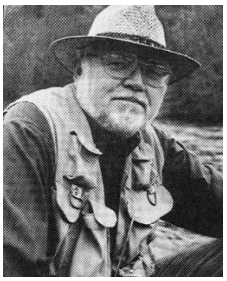
Second, two of the fishes introduced in the early 1900s, lake trout and lake whitefish, evolved with Mysis and feed on the bottom of the lake. Prior to the introduction of Mysis, lake trout and lake whitefish populations in Flathead Lake were modest at best. After the introduction of one of their favorite foods, their numbers increased dramatically, impacting not only the kokanee population, but westlope cutthroat and bull trout populations as well.

Third, lake trout are voracious and indiscriminate predators. They can eat a fish more than 50% of their own body size and will even eat their own young. As lake trout increased in Flathead Lake, greater numbers of our native trout and the kokanee were consumed. When young kokanee were stocked in the 1990s by Montana Fish, Wildlife and Parks (FWP) during an unsuccessful reestablishment effort, lake trout were discovered to have distended bellies and young kokanee tails protruding from their mouths.

The Mysis population has generally stabilized in recent years, and continues to be preyed upon heavily by lake trout and lake whitefish. Native bull trout are listed as threatened by the Endangered Species Act, while westlope cutthroat are a "species of special concern". Today, scientists and stakeholders have a far better understanding of the role nonnative species can play in altering an ecosystem, and a soon-to-be published collaborative study between USGS, FWP, and FLBS promises to shed additional light on the matter. Still, the "Tale of Salmon and Shrimp" remains a cautionary one in the annals of freshwater folklore, and an ever present reminder that more and bigger isn't always better when the Last, Best Place is on the line.

Quinnett's Quips

FROM *DARWIN'S BASS*



"Denial of reality is fishing's most dangerous threat. Denial linked with politics is positively deadly. Scientists count the fish as best they can. Scientists are not permitted to engage in denial because of an old scientific truth: Numbers don't lie. Fish scientists plot population declines with numbers and computer models and tell fish regulators what is going to happen if stocks, age classes and spawners are not protected by reducing the take. The regulators write regulations to protect the fishery, but fishermen and commercial lobbyists pressure the politicians to deny reality and tell the regulators to go to hell. The regulators then deny the scientists' numbers and soften up the regulations. Result: The scientists eat a lot of Maalox; the Regulators pee down both legs; the Politicians get re-elected; the Fishermen keep fishing; and the fish go on the endangered list or become extinct, whichever comes first."

aǝy is the Salish word for bull trout. This newsletter is a quarterly publication of Flathead Valley TU and does not necessarily reflect the views, agenda or policy of Trout Unlimited.