## Experts optimistic about efforts curbing invasive fish

**By KATE HESTON**Daily Inter Lake

Competition from lake trout in Montana waters continues to cut into the population of native fish, but experts are optimistic that ongoing efforts will manage and potentially reverse the decline.

Lake trout were introduced into the Flathead watershed at the beginning of the 20th century, disrupting the food chain relied upon by native fish. The addition of mysis shrimp in the 1980s allowed lake trout to continuously outcompete the native bull trout, said Barry Hansen, a fisheries biologist with the Confederated Salish and Kootenai Tribes.

See INVASIVE, A10

## INVASIVE

"[The introduction of mysis shrimp represents] one of the most pronounced and abrupt changes from a species introduction," said Hansen, speaking Friday at the Montana Lakes Conference in Whitefish.

Lake trout, who stay in deeper waters, feed on the mysis shrimp and bull trout themselves — outcompeting the native species. If lake trout invade a system that was previously dominated by bull trout, the bull trout decline.

In 1981, the majority of fish found in Flathead Lake were kokanee with a smaller population of bull trout. By 1992, lake trout held the majority, with overall numbers of bull trout seeing a decline, according to Hansen.

"The decline [of bull trout] and the increase [in mysis shrimp] were very coordinated," Hansen said.

Hansen's talk focused on the Confederated Salish and Kootenai Tribes' efforts to restore native fish in Flathead Lake through the suppression of non-native lake trout.

While the problem is likely without a permanent fix, Hansen said that limiting and removing lake trout from the ecosystem is a good way to alleviate it.

One way to achieve this is from angling pressures, Hansen said, for example through Mack Days.

Sponsored by the tribe, Mack Days encourages anglers to target tagged lake trout to win prizes. Gillnetting, a fishing method using vertical panels of netting, is also an advantageous way to catch lake trout.

While declines in bull trout numbers due to lake trout are evident, Northwest Montana remains a bull trout stronghold, especially in Glacier National Park, according to Vin

D'Angelo, a fisheries biologist with the U.S. Geological Survey's Northern Rockies Mountain Science Center Glacier Field Station.

"The future doesn't look terrible in this area," D'Angelo said.

After the introduction of mysis shrimp, lake trout expanded out from Flathead Lake, entering tributaries that lead into the park. In the first 80 years after lake trout were introduced in the valley, they moved to four lakes inside the park. The introduction of mysis shrimp acted as an accelerant.

"Post mysis, we're looking at a lot more lakes in a shorter time," D'Angelo

Of the 12 lakes that bull trout inhabit in the park, nine of those are also home to lake trout. Of those nine bull trout populations, eight of them are virtually extinct.

D'Angelo urged against despairing, however. By building barriers, suppressing lake trout before they move into new areas and translocating lake trout populations, scientists and conservationists may be able to hold off lake trout populations while helping bull trout prosper.

"Be proactive, but also be consistent," D'Angelo said about efforts to protect native species.

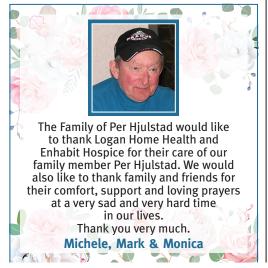
THERE ARE other native fish species that are not as negatively affected by the addition of lake trout and mysis shrimp, some of which scientists are just now learning more about. Pygmy whitefish, another native fish to the area, for example, have recently been documented in new lakes across the region, according to Sam Bourret, a fisheries biologist with Montana Fish, Wildlife and Parks.

"We did find these fish in lakes where previously they were undocumented," Bourret said, referring to the Tally and Big Salmon lakes.

Pygmy whitefish are considered to have the most discontinuous range of any fresh water fish in North America, ranging from Alaska and parts of Russia all the way to Lake Superior. They are found in areas where glaciers receded. The Flathead Valley is the very southern part of their range, Bourret said.

The fish are difficult to catch, Bourret said, as they stay in deep waters. However, the newly documented fish populations offer insights into genetic diversity, where distance between populations yields more genetic variations, according to Bourret.

Other populations of fish are struggling,



according to Kyle Flynn, a senior engineer and scientist at KF2 Consulting, PLLC., including arctic graylings in Southwest Montana, specifically in Red Rock Lake.

In 2015, there were over 1,000 spawning graylings in the population. In 2022, that number dropped to 73. Several attempts to bolster the habitat for graylings have been ground down in litigation.

The situation facing graylings in Red Rock Lake is more dire than that of the bull trout in the Flathead watershed.

"Graylings in the [Upper Red Rock Lake] are likely imperiled," Flynn said.

## SPEAKERS STRESSED

the need to coordinate efforts to tackle invasive species. Thomas Woolf, the aquatic invasive species bureau chief for Montana Fish, Wildlife and Parks, emphasized the importance of partnerships when defending Montana waters from invasive species, like mussels or milfoil.

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Woolf said that local efforts, such as those targeting milfoil in Beaver Lake near Whitefish, have proven successful.

"After this season we didn't find any milfoil at all ... the persistence in keeping up with invasive species is important," Woolf said.

From 2017 to 2023, more than 400 boats were found with zebra and quagga mussels in Montana. The most effective way to prevent these species from entering the ecosystem is through targeted detection.

"This is a humancaused problem, it is people who are moving these things," Woolf said. For more information

For more information about the Montana Lakes Conference, visit https://whitefishlake.org/mlc-2023-home/.

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## **Pet Talk**

Welcome to *Pet Talk*, an occasional column about homeless pets and related topics. Today we're focusing on how potential adopters match up with potential adoptees.

Given the difficulty of finding homes for homeless pets, maybe we need some snazzy online dating sites for animal adoption.

You know, some pet hookup sites like Match. com or eHarmony. So how about something like eRover.com, PitbullsForever, or KittyLove.com?

Consider the muchmaligned pit bull "breed." Did you know that the name doesn't signify an actual breed? It's merely an umbrella term given renowned physical strength, some states and cities in the U.S. have actually outlawed the breed as being too dangerous for public safety.

This includes several cities in Montana. For example, between 1991 and 2018, the town of Libby had breed-specific legislation banning pit bulls.

But talk to nearly any owner and they'll strongly refute the notion that pits are inherently dangerous—because most are as happy and loving as any dog.

Here's an interesting finding on the effect of breed perception on adoption rates. In one Phoenix shelter, the average length of stay for pit bull-labeled dogs was 42 days. Yet, the result was just 13 days for similar-looking dogs that weren't labeled by breed.

Given this sad info, maybe someone should create an adoption matchup site called "Pity.com" (Pun intended.)

Which brings to mind a touching adoption story that recently appeared in the Washington Post

senior gal Vanessa now happily romps with the woman's 3 other rescues and the gracious adopter said: "I just want to make her final years the best years she's ever known... she's definitely earned it."



Of course, whether you love pits or some other type of dog, there are always plenty available to adopt at the Flathead County Animal Shelter.

To give you an idea of how busy the the shelter has been, last year more than 600 dogs and cats were put up for adoption.

So, if you love pets please consider adopting today! You can also help spread the word among family and friends in rapidly growing Flathead County.

By the way, did you