

# Moberly Lake Trout Radio Telemetry

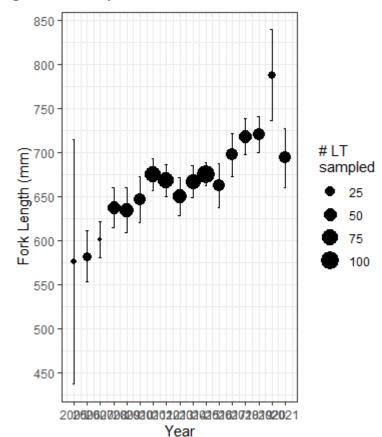




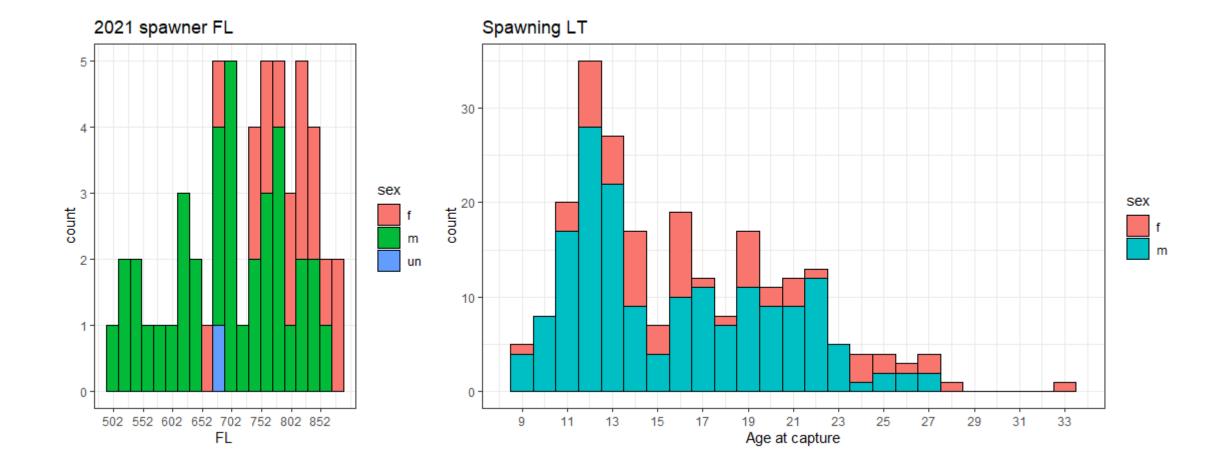
- Project objective is to confirm if Lake trout (LT) are spawning on the known shores, or if LT are spawning elsewhere in the lake
- Hatchery fish stocked in 2012, 2014 and 2016.
- 3 Year project. 2022 was year 1 and two radio transmitters were installed (1 wild fish, 1 hatchery fish)
- Telemetry scheduled for October 3-7.

## Moberly Lake Trout Mark Recapture

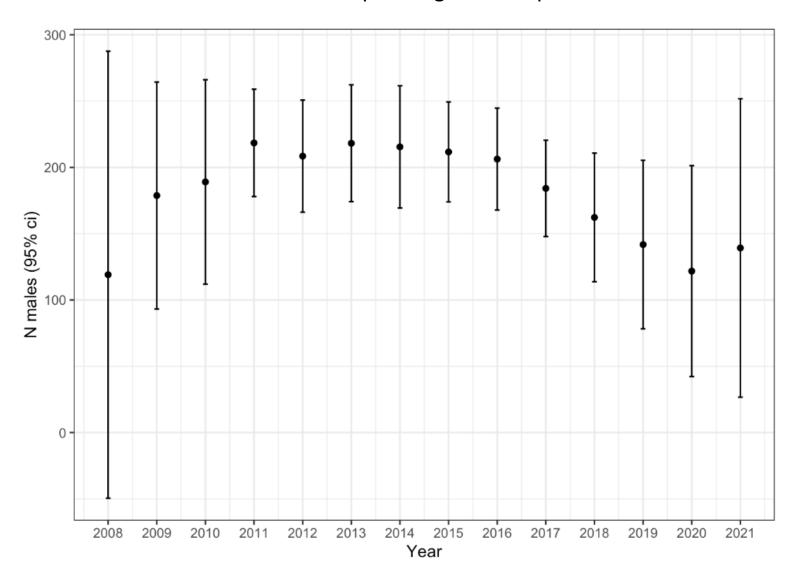
- Long standing dataset since 2008 provides the main metric for Lake trout recovery spawning size
- Occurs the second week of October when spawning is at it's peak







#### Number of Spawning Males captured



#### Small Lakes Assessments



Project Objective is to assess if stocking objectives are being met by stocking prescriptions.

AKA – Is the plan working and how can we make it better.

Inga Lake – Previously had winter killed in 2017.

High density of Rainbow trout of various size classes

Largest approximately 42cm (2 lbs)

Currently stocked annually with AF3n (All Female Triploid) yearlings

Iver Lake and Duhu lake Assessed in 2021.

Iver – Remote Alpine Rainbow trout lake. Fish up to 40 cm but in lower numbers

Duhu Lake – Arctic Grayling up to 32 cm. Multiple age/size classes.

### Charlie Lake Fall Walleye Index Netting



#### Completed September 19 to September 23

- Standardized lake assessment for determining density and population structure of Walleye (Northern Pike and Yellow Perch secondary).
- Initial results are favourable for the population of Walleye in Charlie Lake.
- In the past, Walleye in Charlie Lake have predated upon invertebrates and plankton. However, this survey showed that some walleye are transitioning to eating fish as Yellow perch and Spottail Shiners were found in their stomach contents.



#### Chowade River Creel

- Working with Halfway River First Nation to conduct an angling pressure survey
- Assess catch rates, angling hours, gear type and distance travelled

## Muskwa River Watershed Bull Trout Redd Surveys

- Includes Crehan Creek, Dead Dog Creek and Gatho Creek
  - Surveyors walk on either side of creek and enumerate redds
- Initial surveys of this area occurred in 2002.
  - Most recent surveys are becoming annual (2020, 2021 and most recently 2022).





# South Peace Bull Trout Wildlife Habitat Areas

- 6 new WHAs established under the Government Actions Regulation for known spawning areas for Bull trout in the South Peace area (March 16, 2022).
- General Wildlife Measures (GWMs) established provide protection within a 500 m buffer surrounding known spawning areas.



## South Peace Bull Trout Redd Surveys

- Part of annual monitoring for Wildlife Habitat Area (WHA) effectiveness.
  - 6 reoccurring spawning areas in the South Peace
  - Surveys have been completed annually since 2010.
- Bull trout redds in most surveyed areas appear to have increased from last year.
  - Alternate year/skip spawning

#### Work moving forward

- Bringing over the Alberta Arctic Grayling Fish Sustainability Index to applicable areas in the Northeast
  - Streams of high conservation value, potentially requiring mitigation
- Improving Signage throughout the region
- Swan and Maxhamish lake FWIN surveys

