

2020 State of the Teton River Fishery



Max Lewis

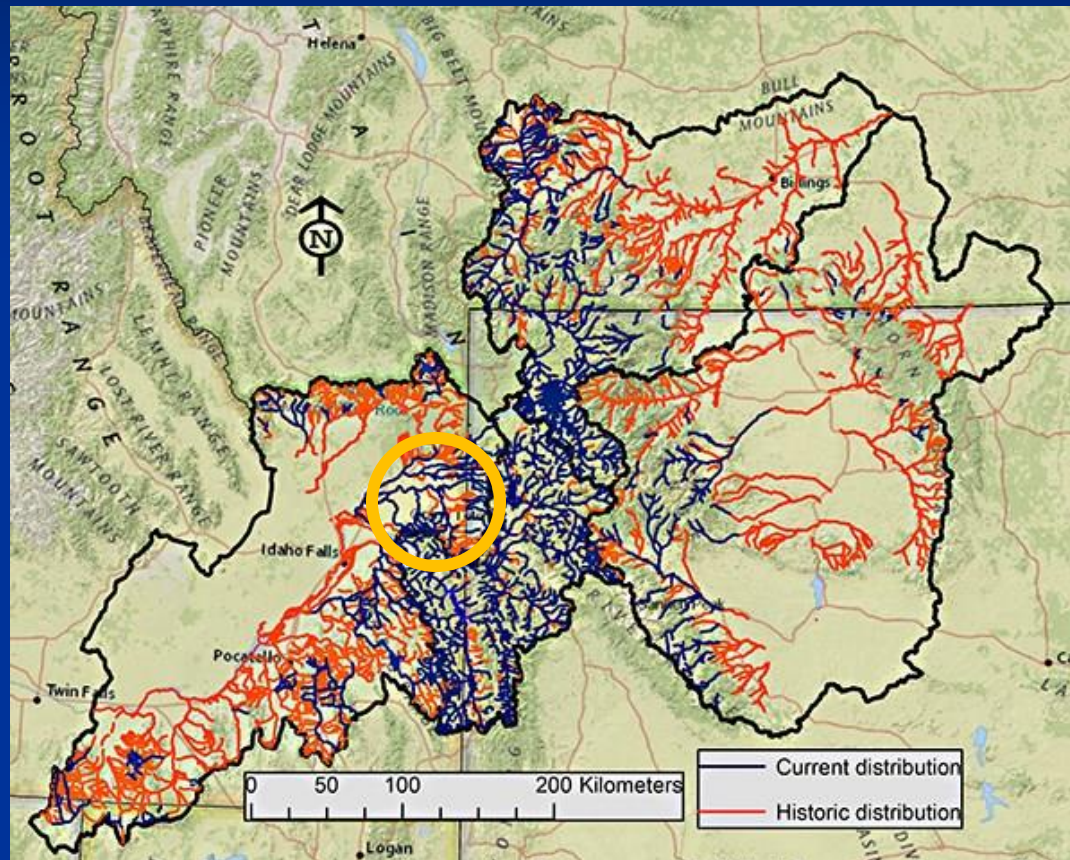
2020 Scope of Work

- Teton river tributary trout assessment
- Update on IDFG fisheries surveys
- PIT tag site operation and tagging efforts
- Spawning YCT Redd surveys
- Genetic sample collection
- Stream and riparian restoration

Teton River Watershed



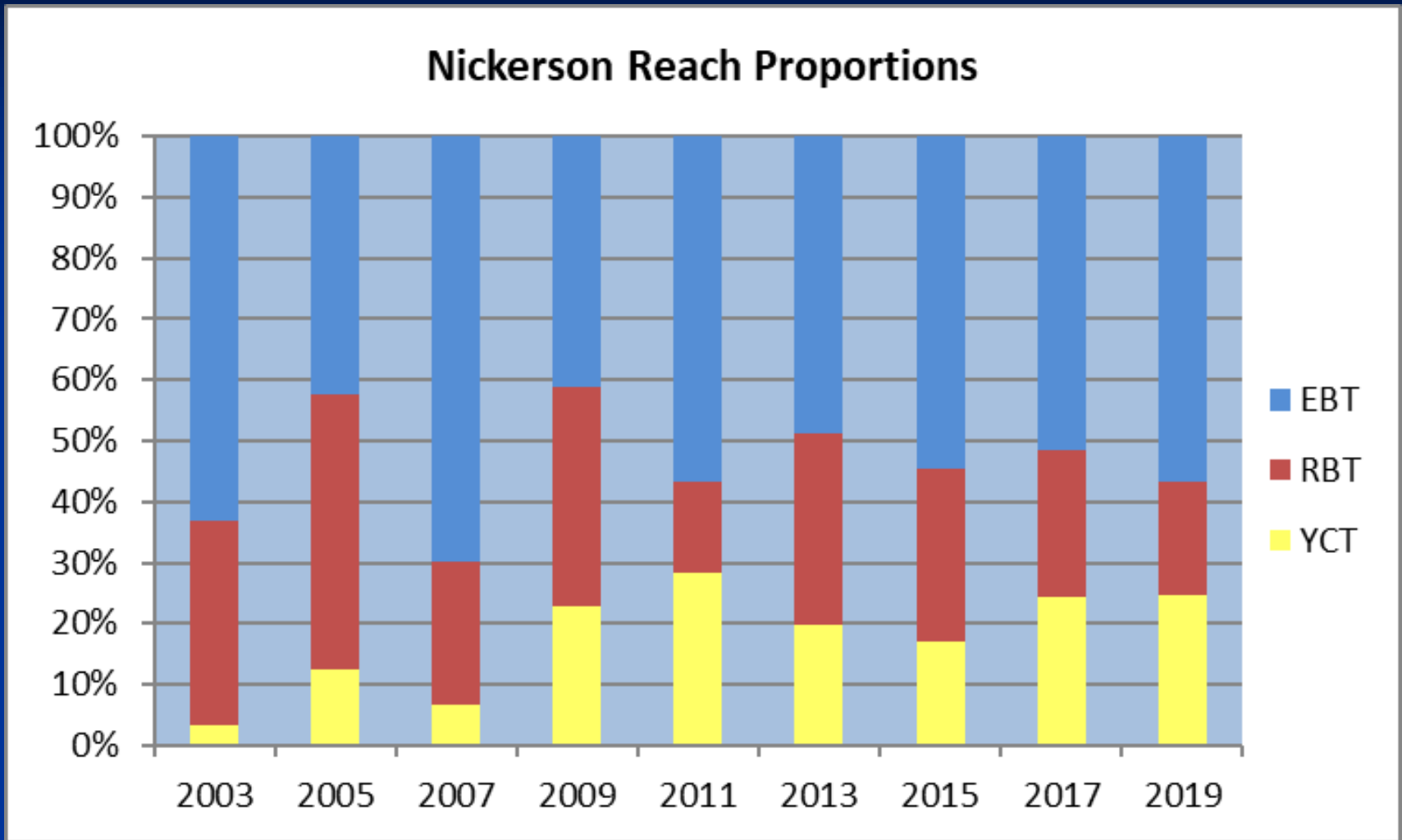
Yellowstone Cutthroat Trout Distribution



Al-Chockachy Et.Al. 2017

- 43% of historic range is currently occupied
- 23% of the current distribution is genetically unaltered

Historic Species Composition



The data and data analysis in this graphic was created by the Idaho Fish and Game Department.

Our Goals

- Determine long-term trout population trends
- Provide the agencies with additional data on the Teton River watershed
- Identify, prioritize and design YCT conservation projects
- Monitor the efficacy of conservation projects



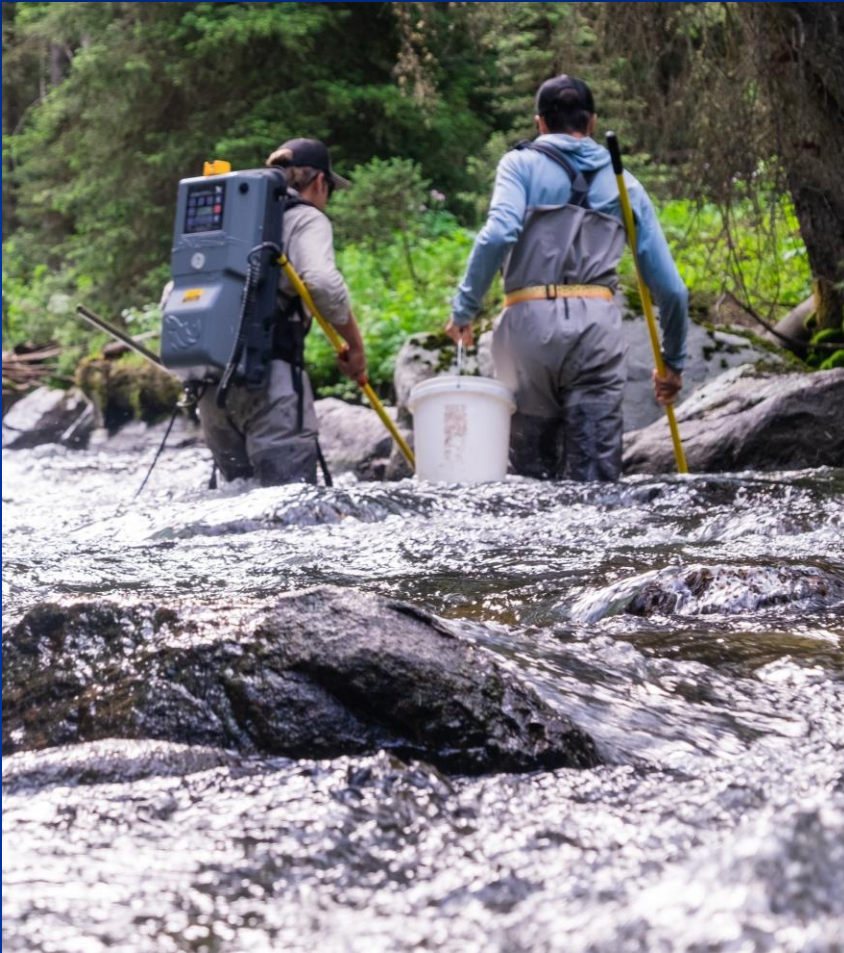
Will Stubblefield Photo

Basin Wide Electrofishing Survey



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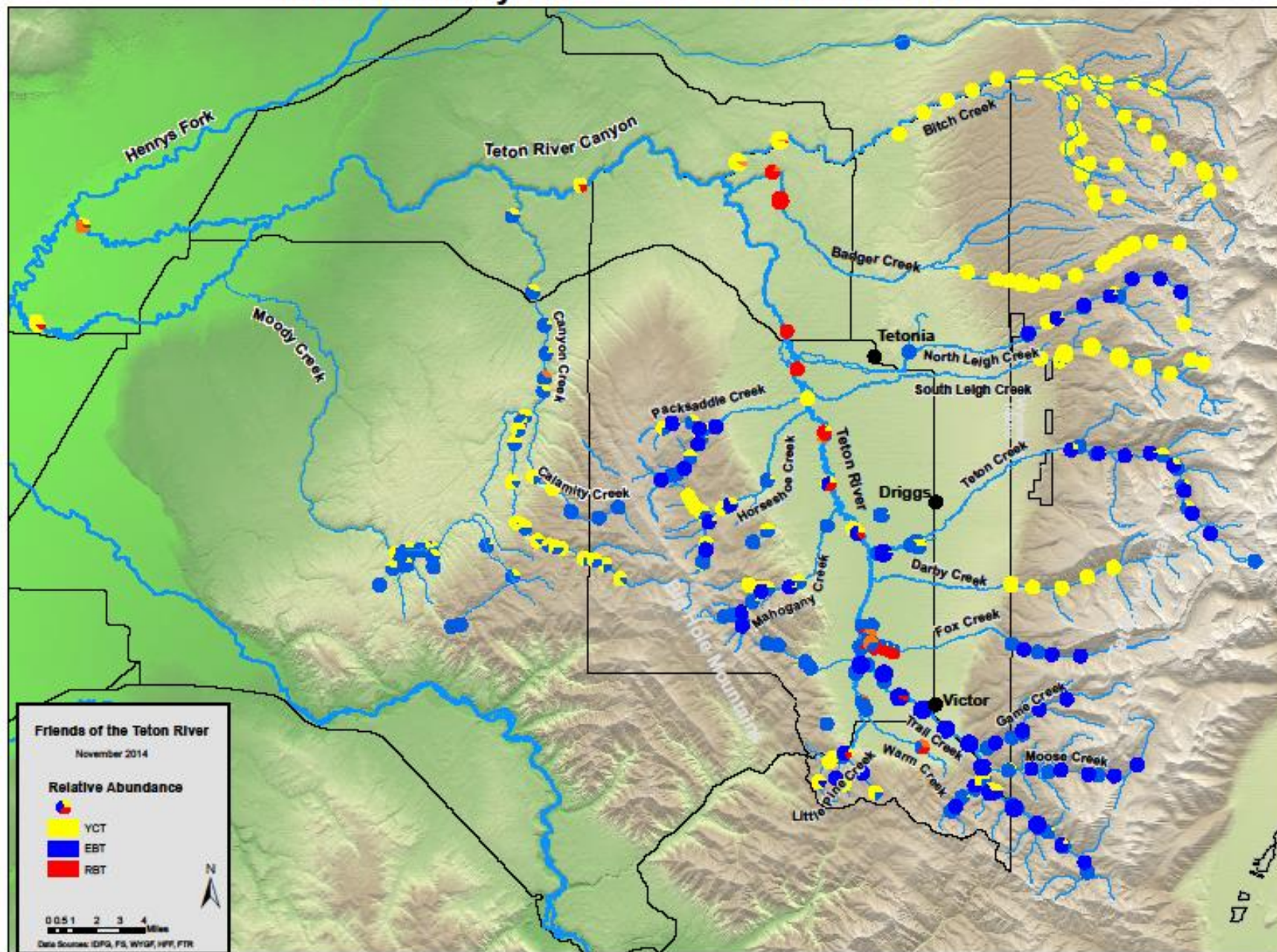
Survey History



Will Stubblefield Photo

- 133, 100 Meter sites established in 2005
- Survey Methodology and Statistical analysis was Developed by Dr. Rob Van Kirk of the Henrys Fork Foundation
- Original scope of survey includes sites on 11 Teton River tributaries

Teton Tributary Trout Assessment Sites 2015



2020 Survey

- 68, 100 M sites shocked during the summer of 2020
- Survey sites on Trail, Teton, South Leigh, North Leigh, Moose, Game, Canyon, Calamity, Bitch and Badger Creeks.
- FTR worked in partnership with WGFD and IDFG to complete the survey



Will Stubblefield Photo

Survey Methods

- Backpack electrofishing unit used to capture trout
- Exact site location is revisited for each survey
- All habitat changes are noted by surveyors

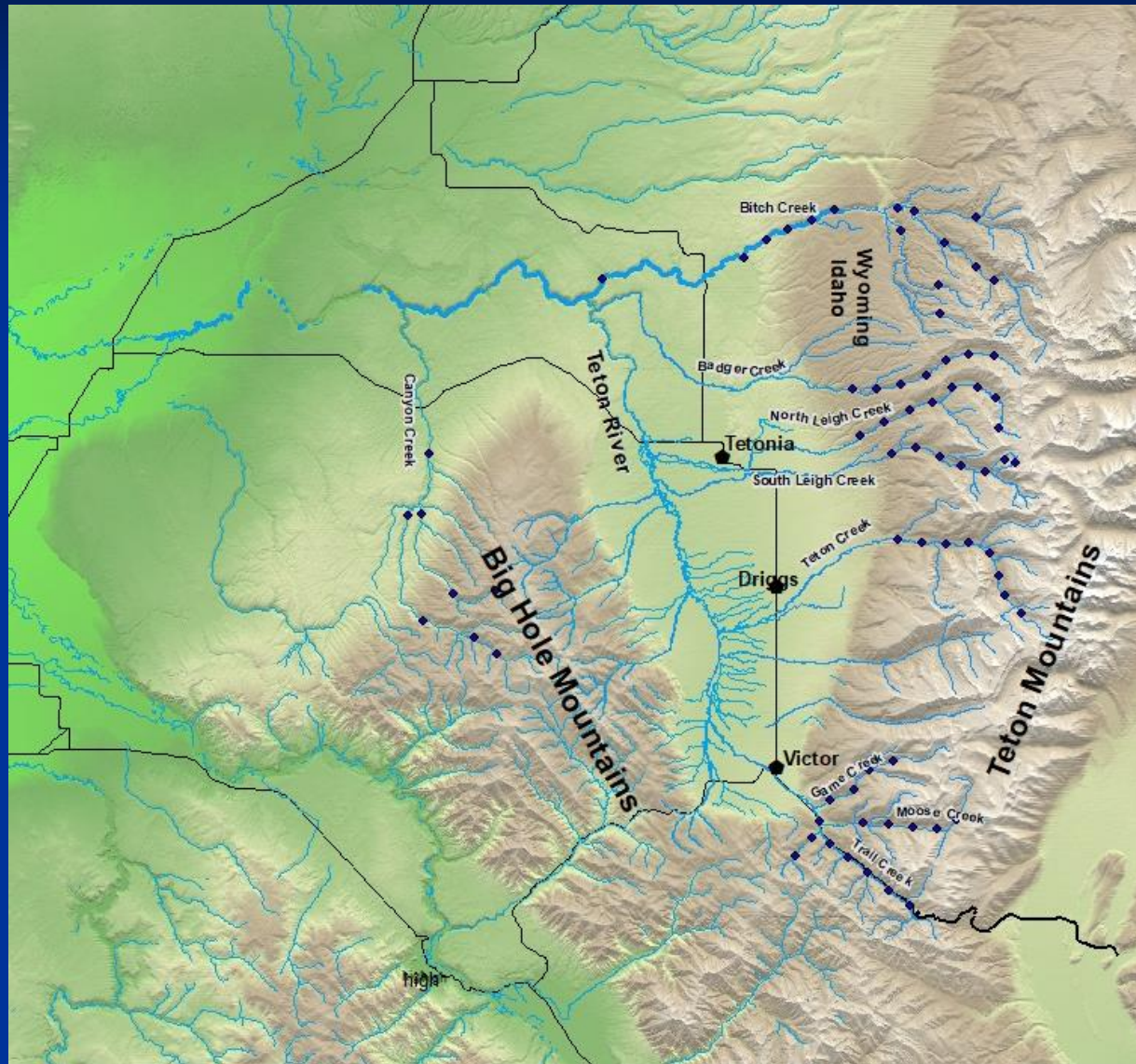


North Leigh Creek 2005

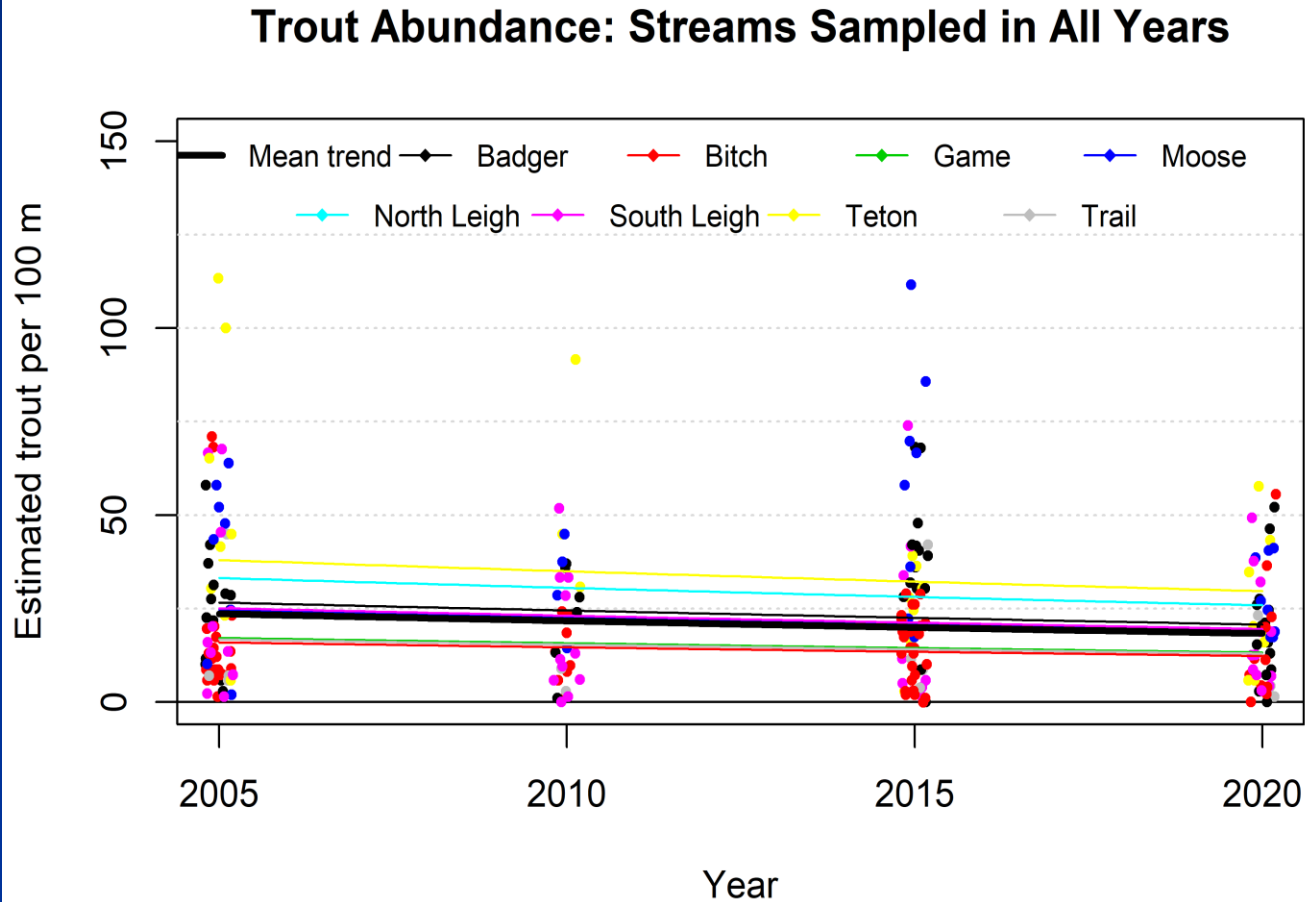


North Leigh Creek 2020

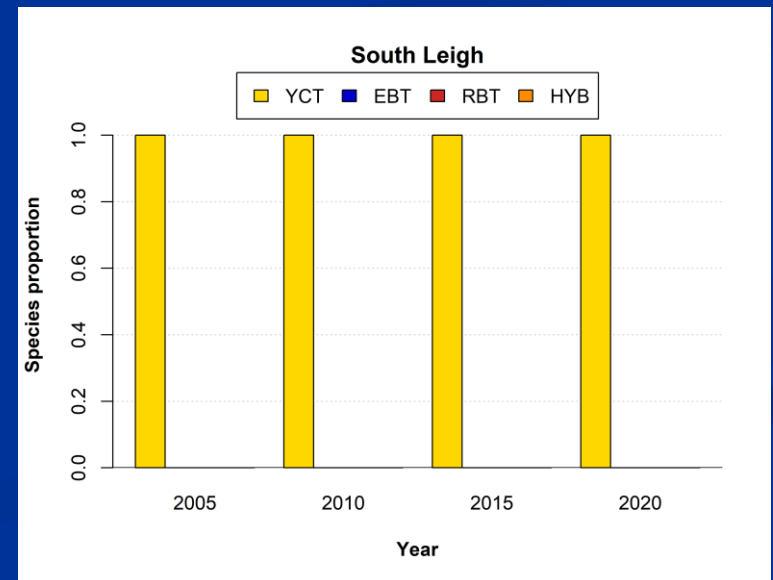
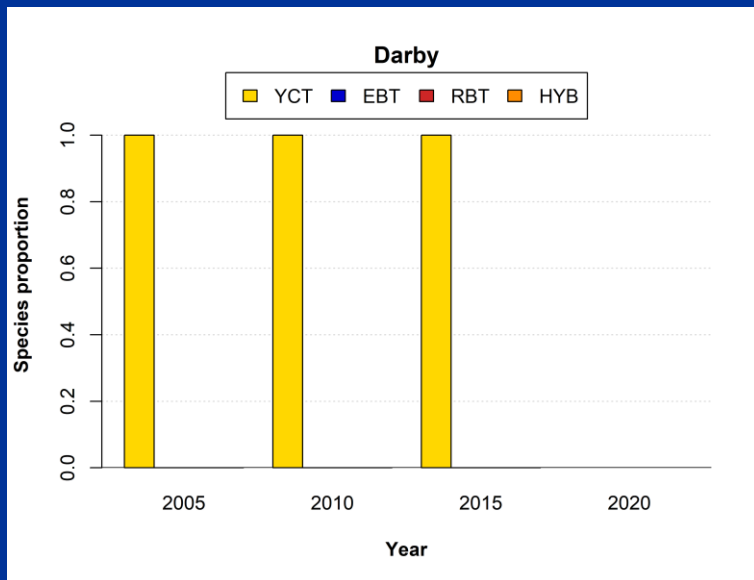
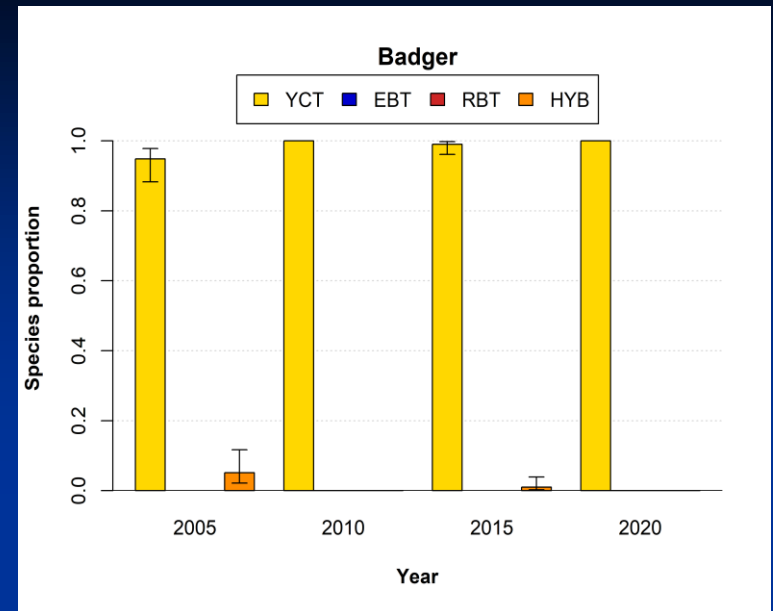
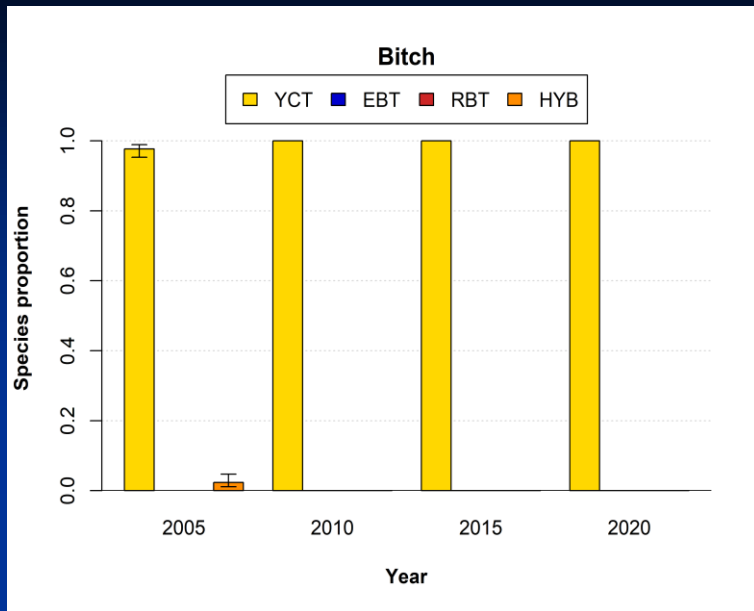
2020 Electrofishing Sites



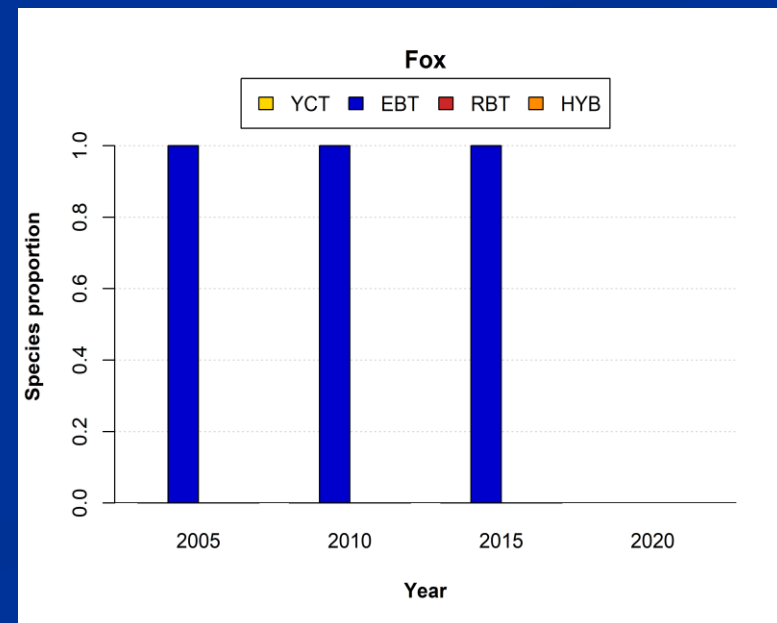
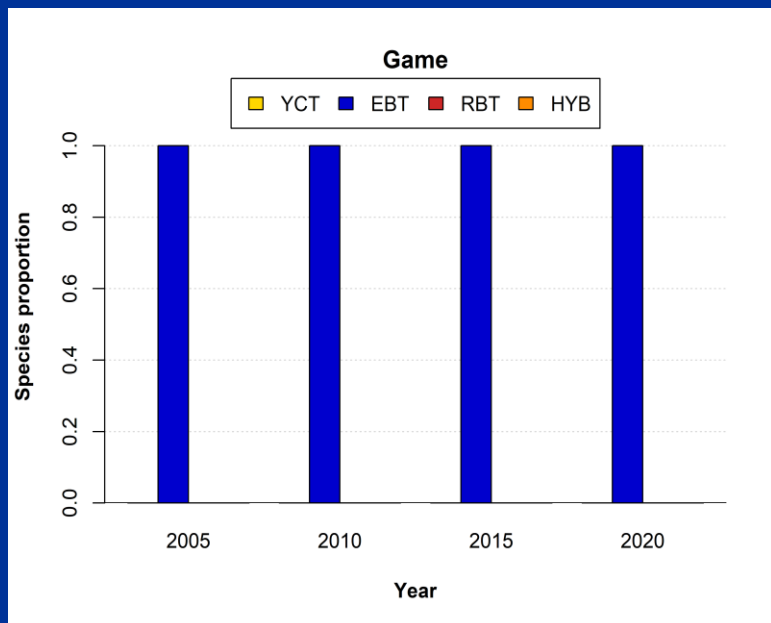
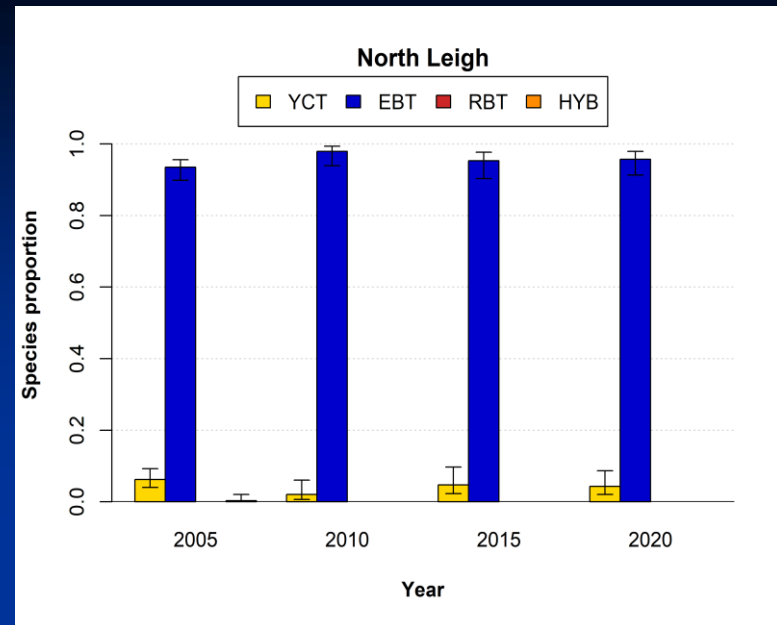
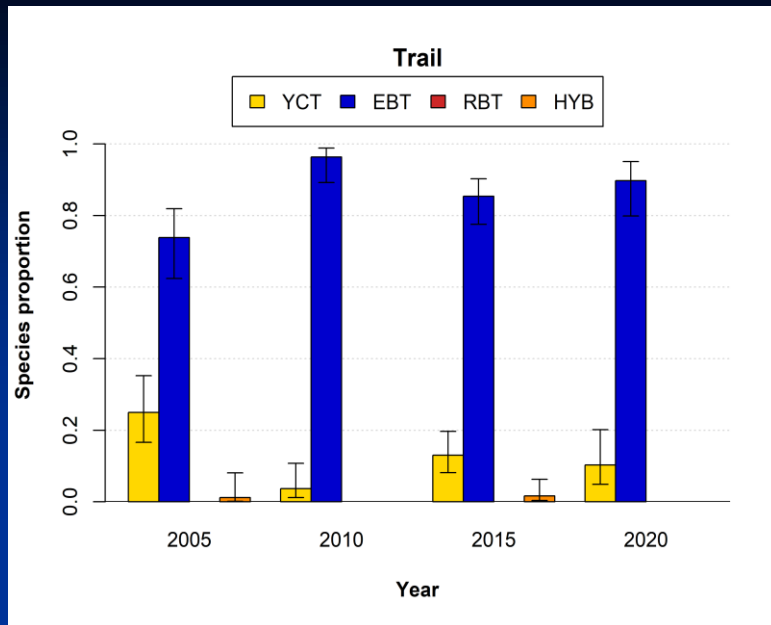
Results



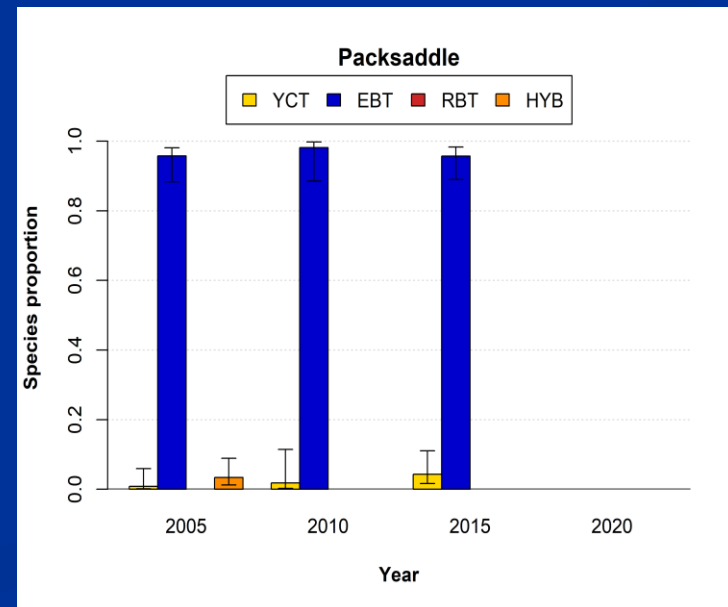
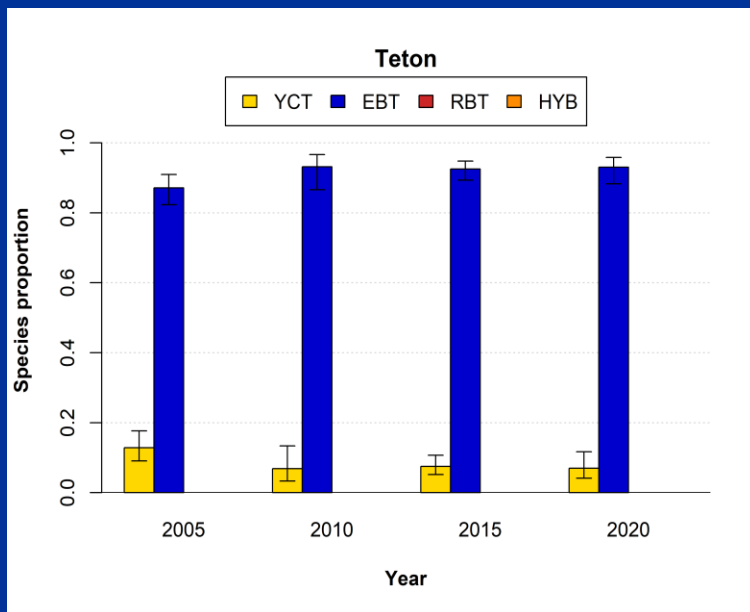
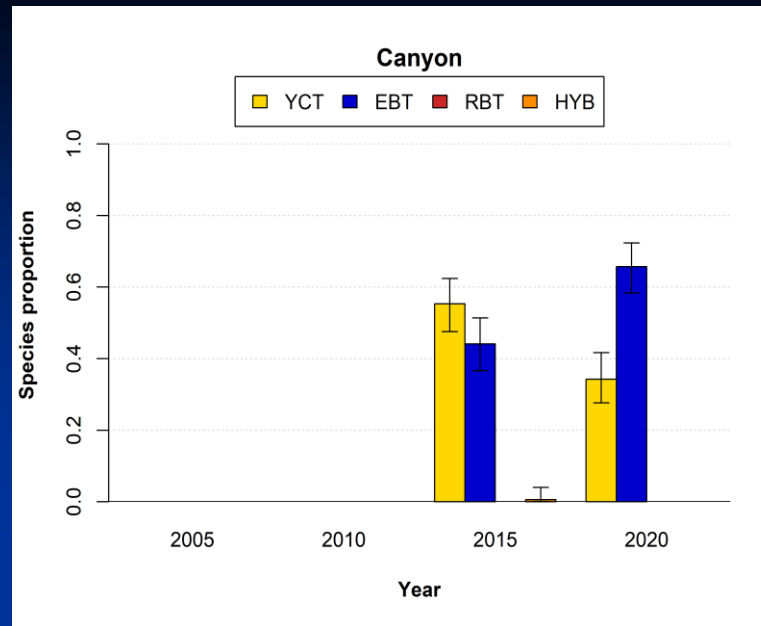
This graph and supporting statistical analysis was created by Rob Van Kirk of the Henrys Fork Foundation



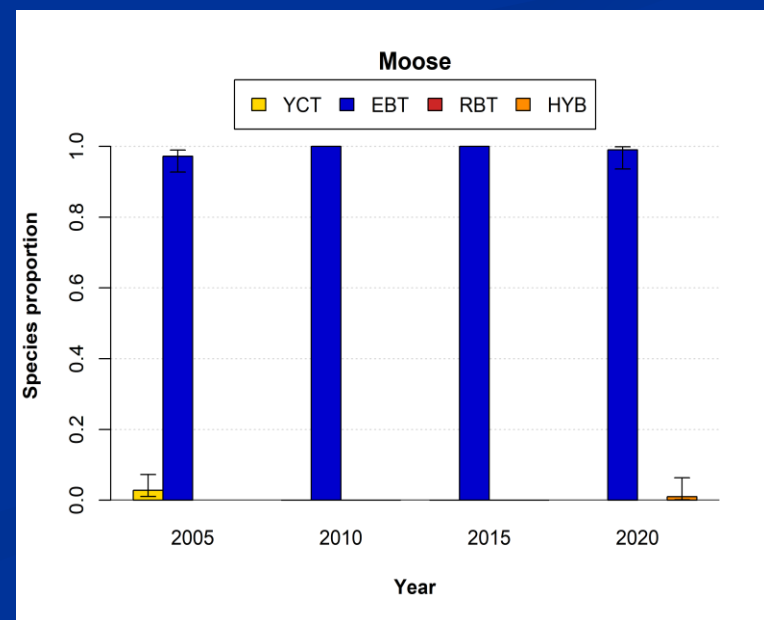
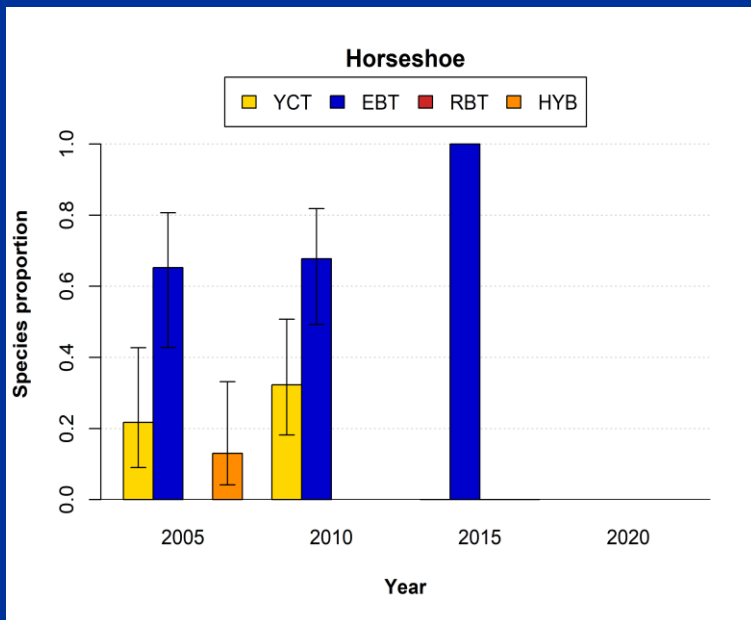
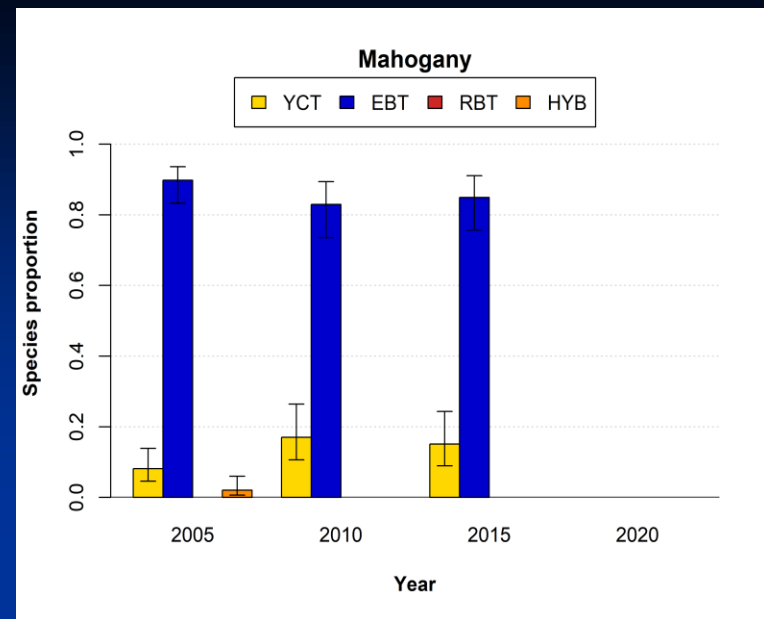
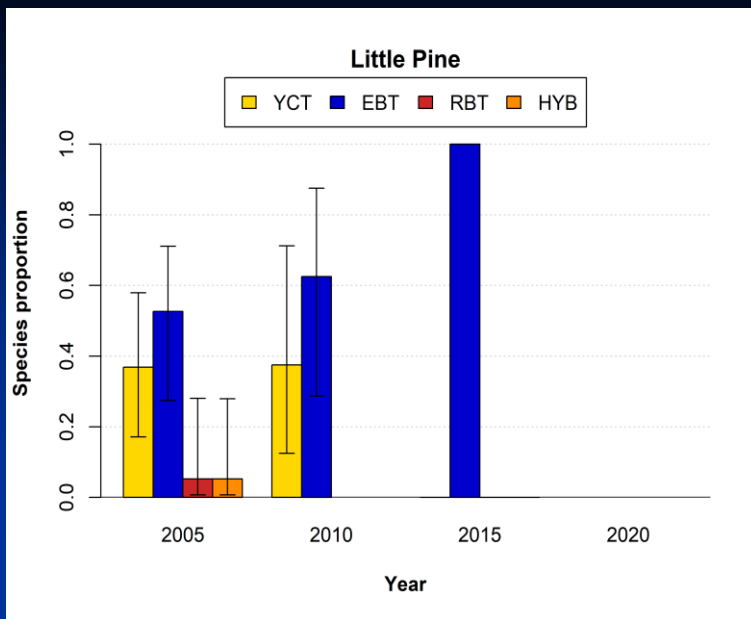
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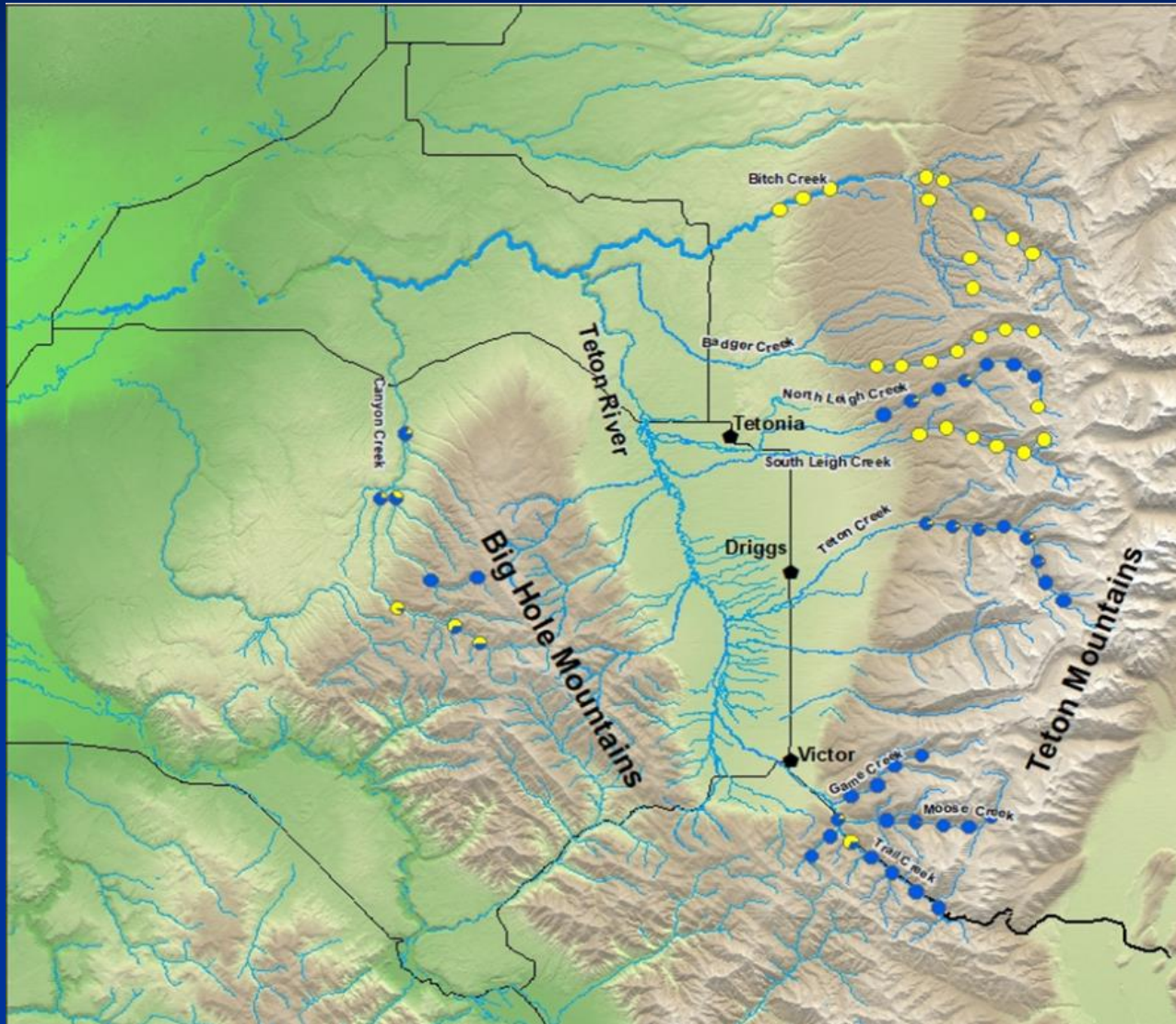


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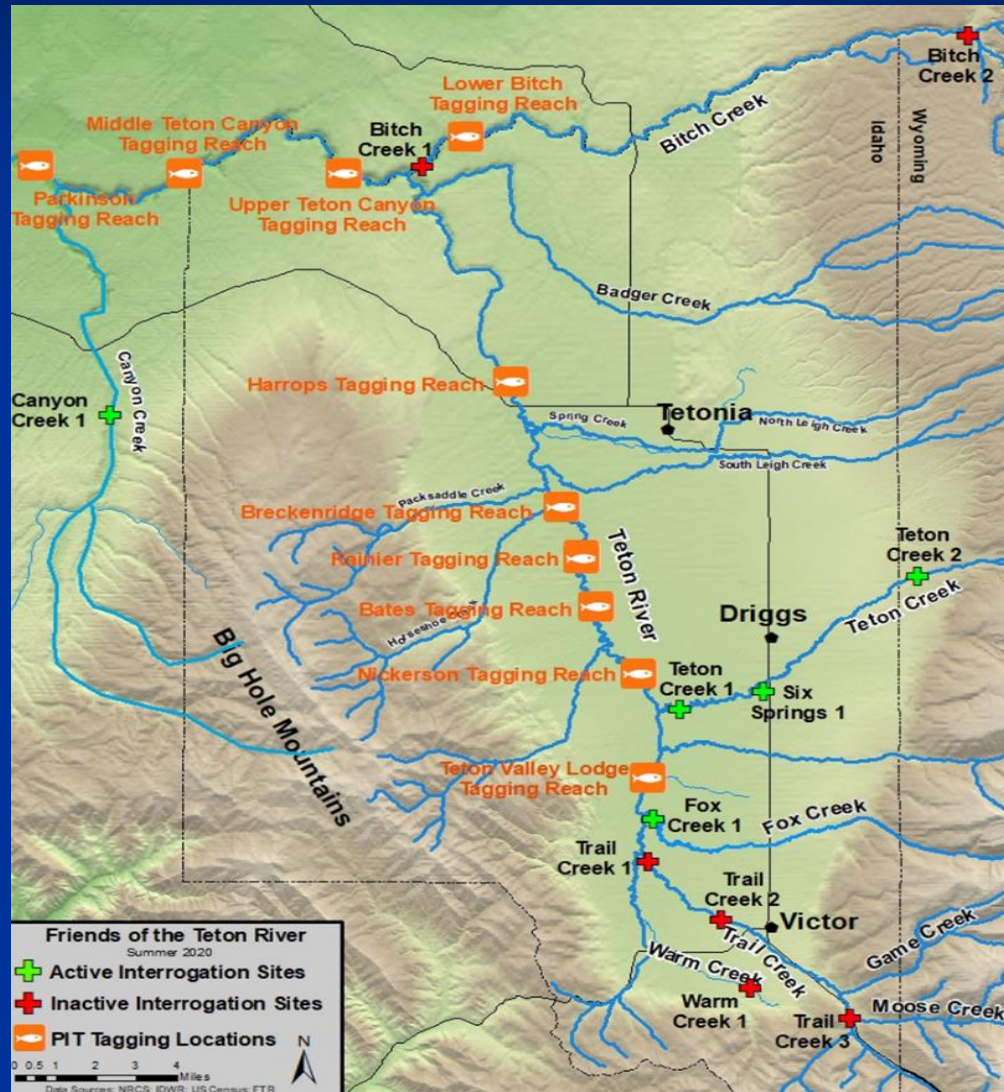


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Watershed Composition



IDFG Survey Sites



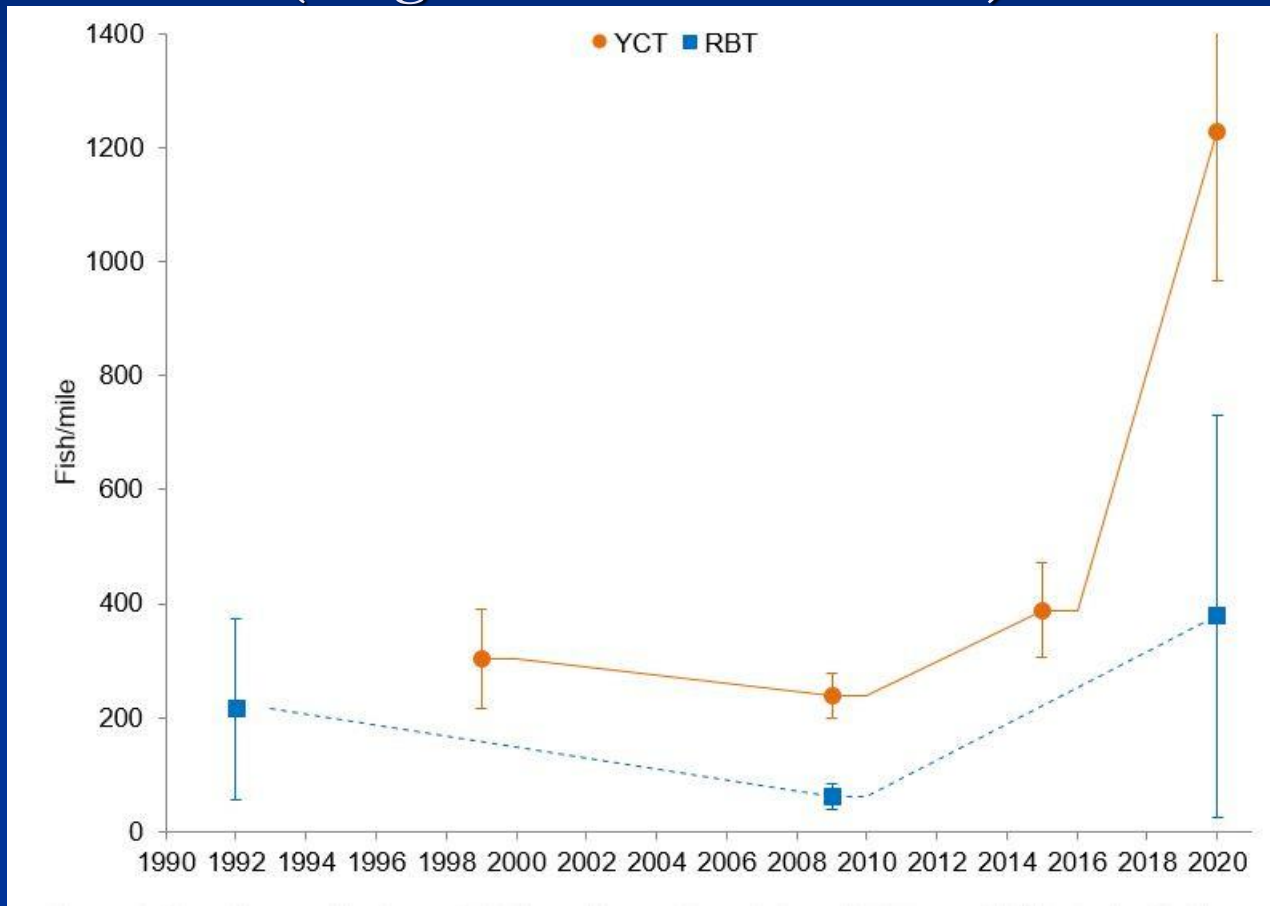
Teton River Canyon Electrofishing



Will Stubblefield Photo

YCT, on the Rise in the Parkinson Reach!

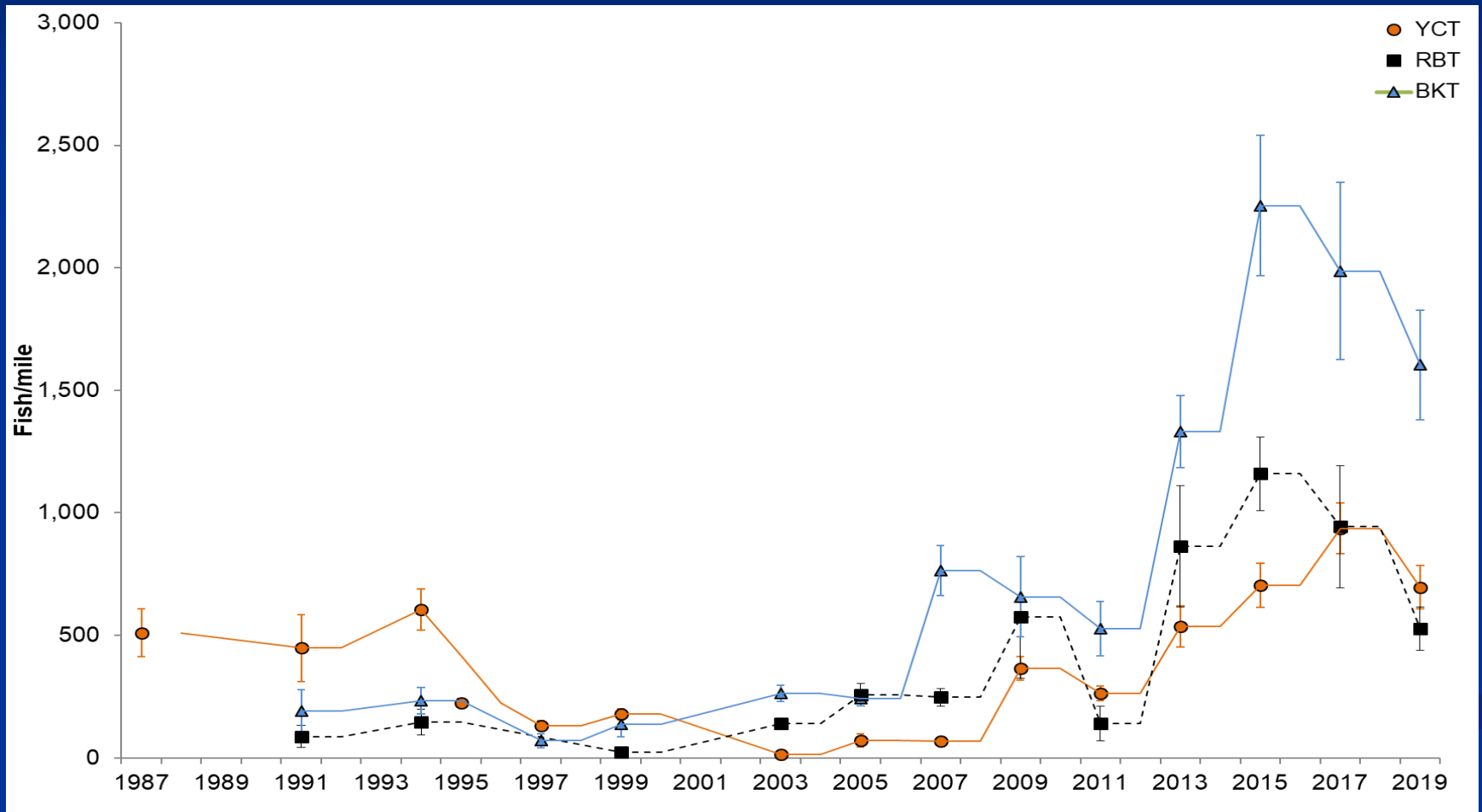
(Hog Hollow to Felt Dam)



The data, graph, and data analysis in this graphic was created by the Idaho Fish and Game Department.

Nickerson Reach

(S. Bates to Bates)

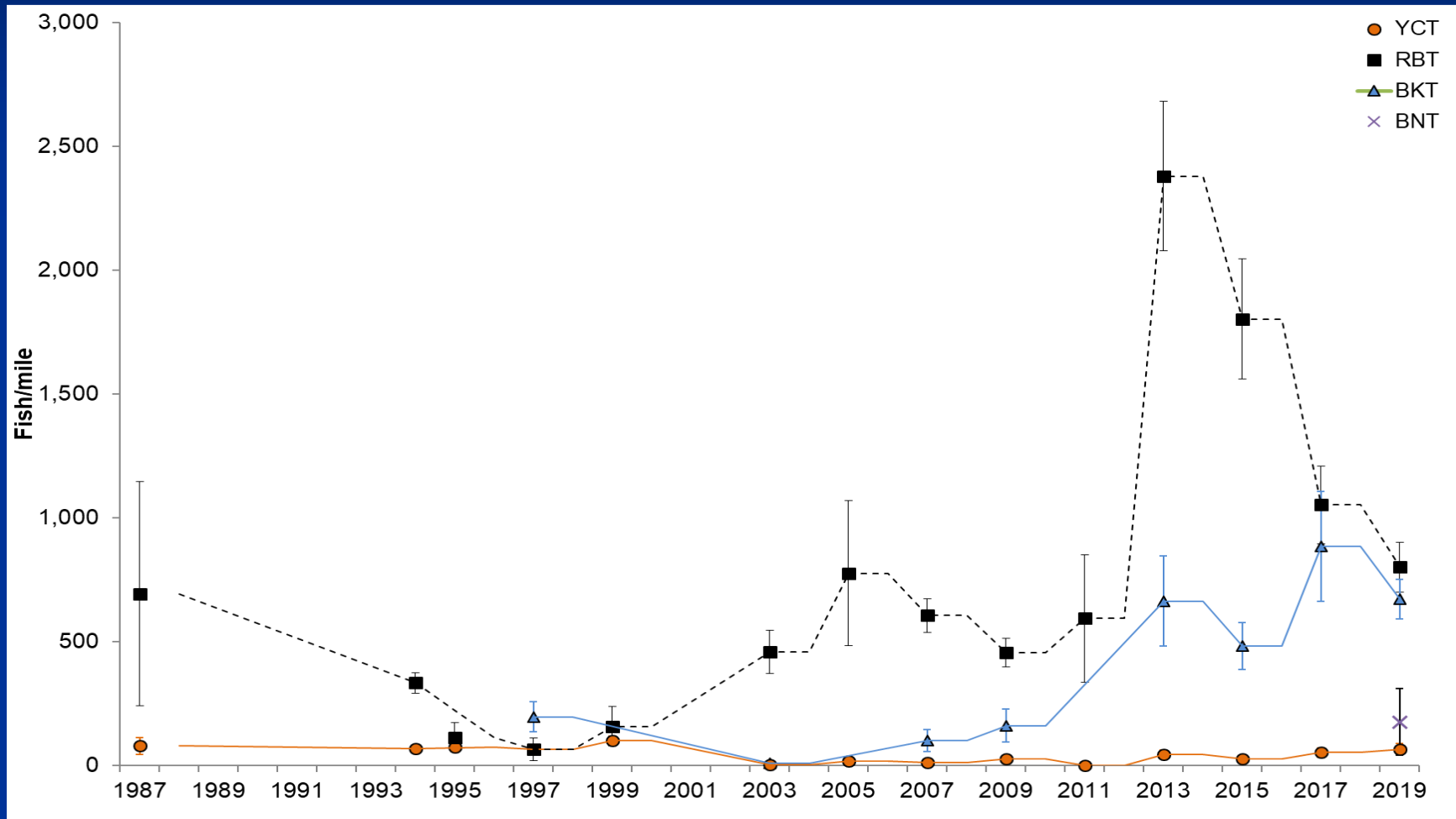


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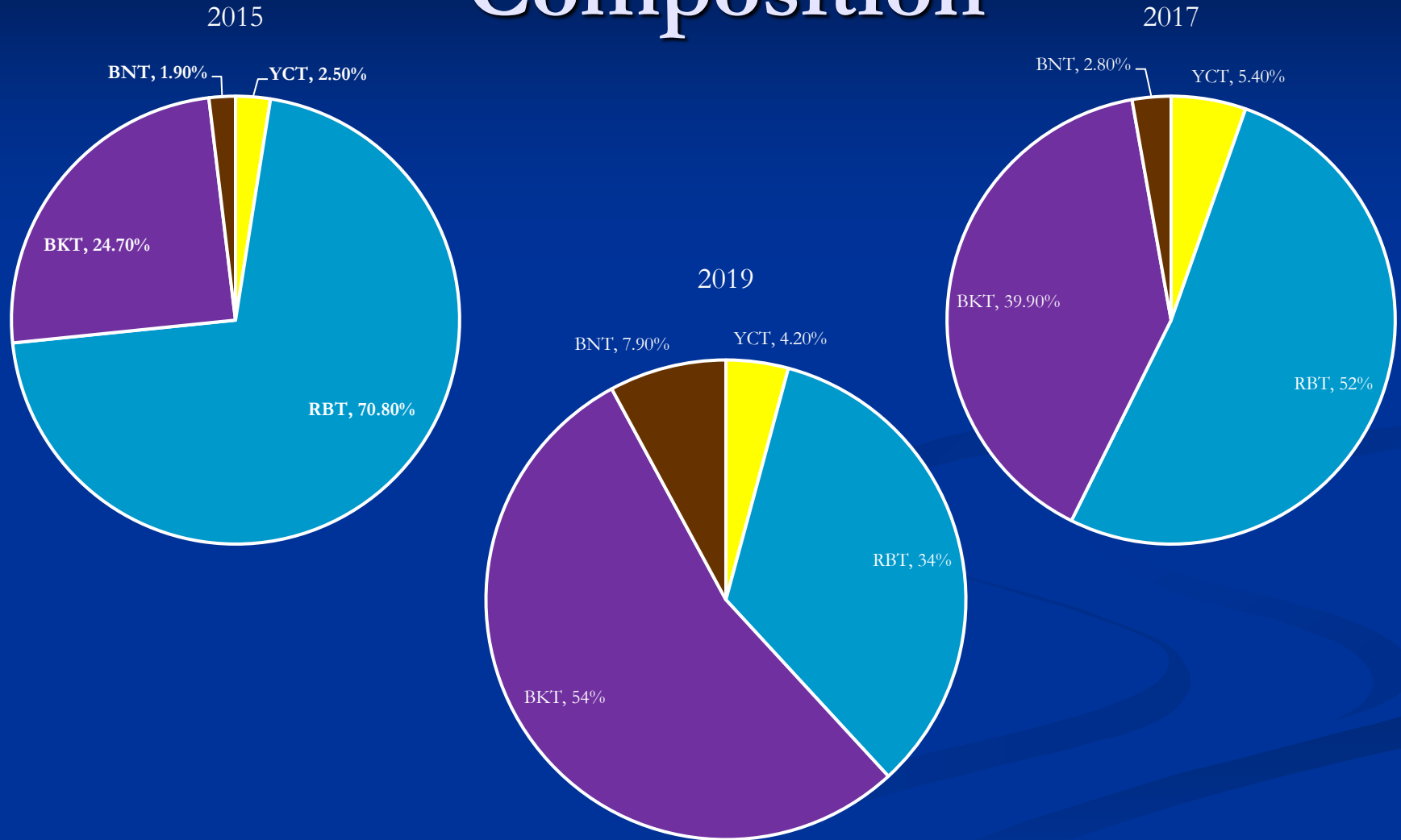
Breckenridge Reach

(Packsaddle to Harrop's)



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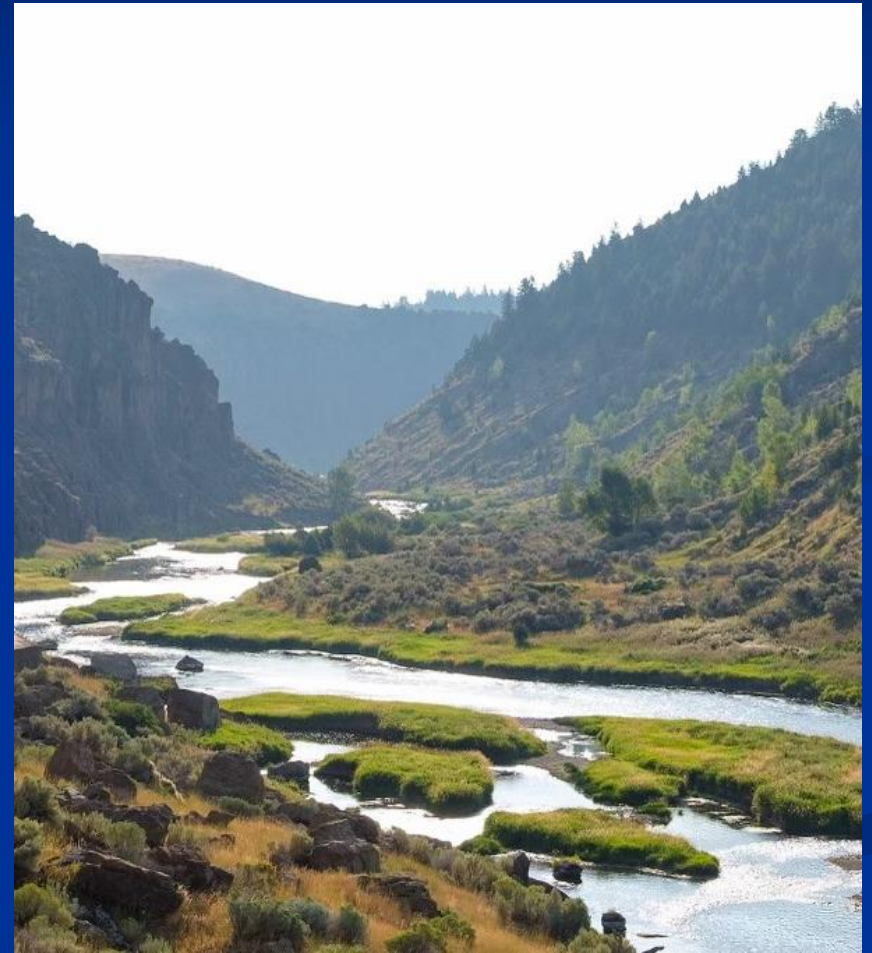
Breckenridge Species Composition



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Annual Monitoring

- PIT tagging
- PIT tag array maintenance
- YCT Redd Surveys
- Fish Screen maintenance



Will Stubblefield Photo

PIT Tagging

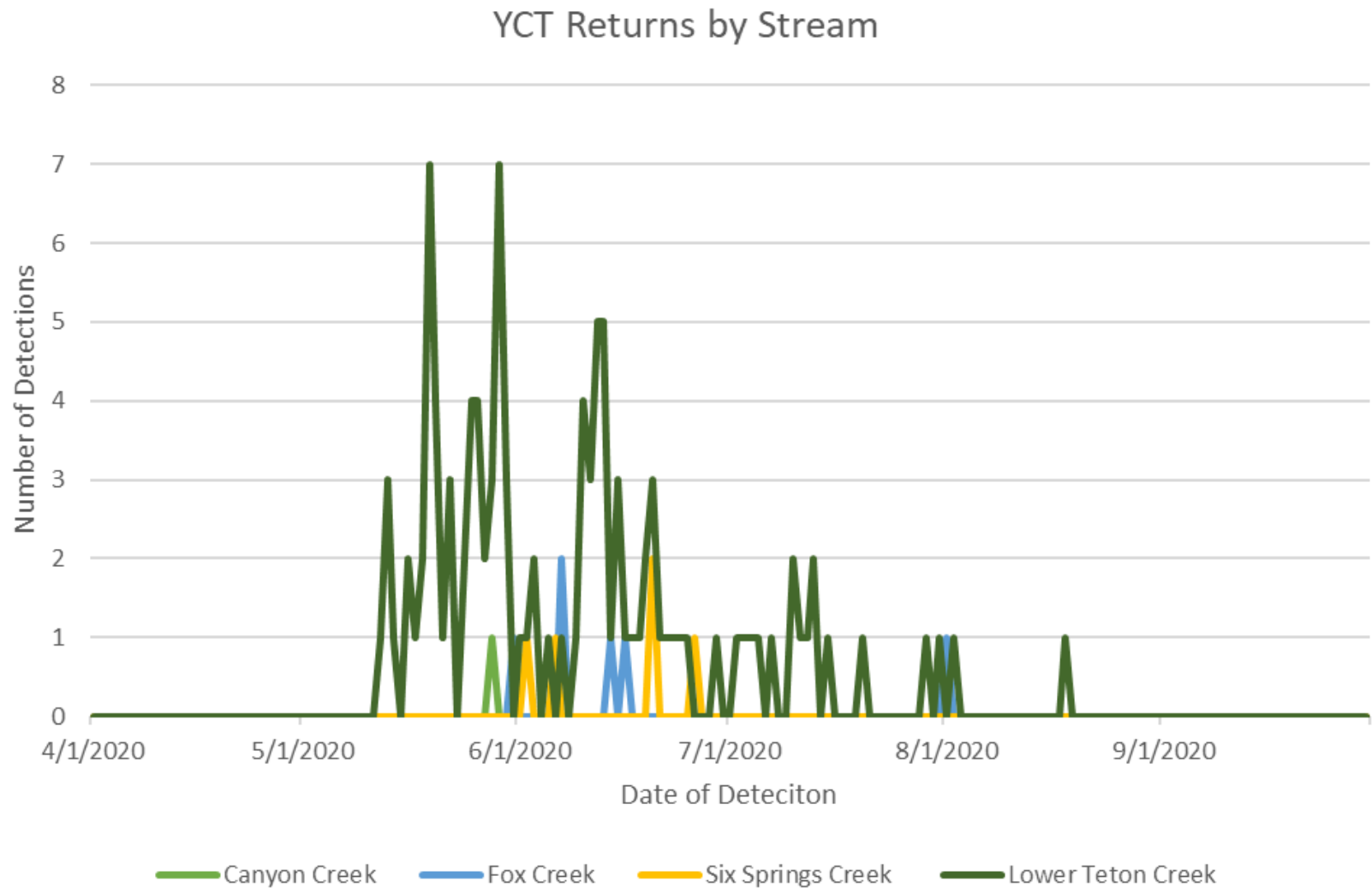
- Over 5,000 fish have been PIT tagged in the watershed
- Tags monitor fish movements and effectiveness of watershed restoration



PIT Array Maintenance

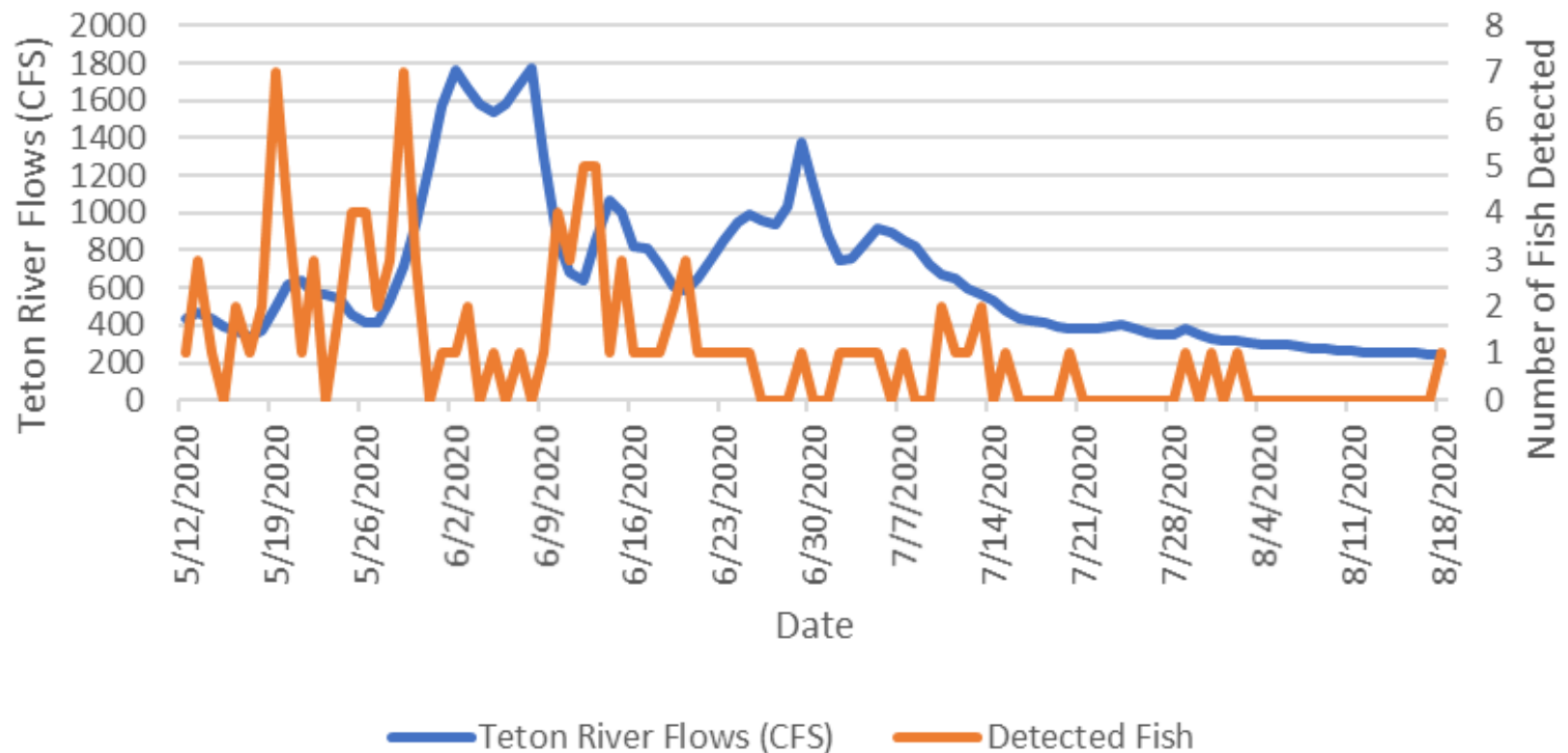


PIT Array Findings



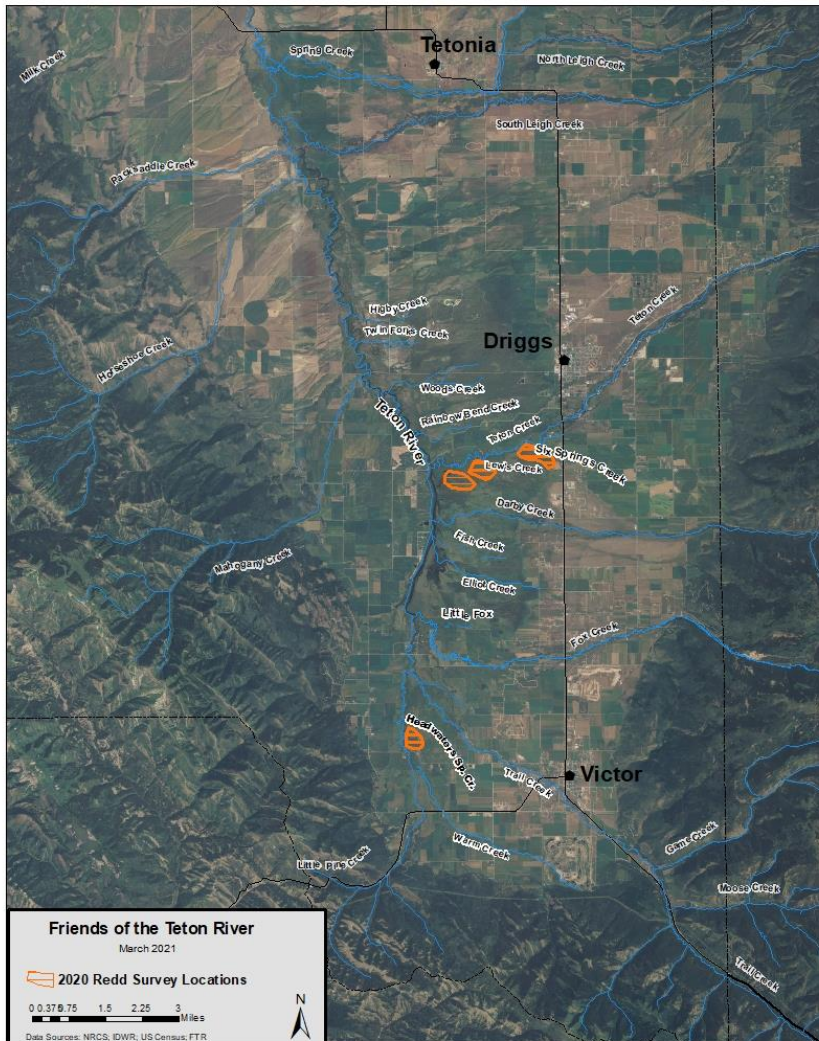
Spawning Timing

2020 Teton Creek YCT returns VS. Teton River Flows

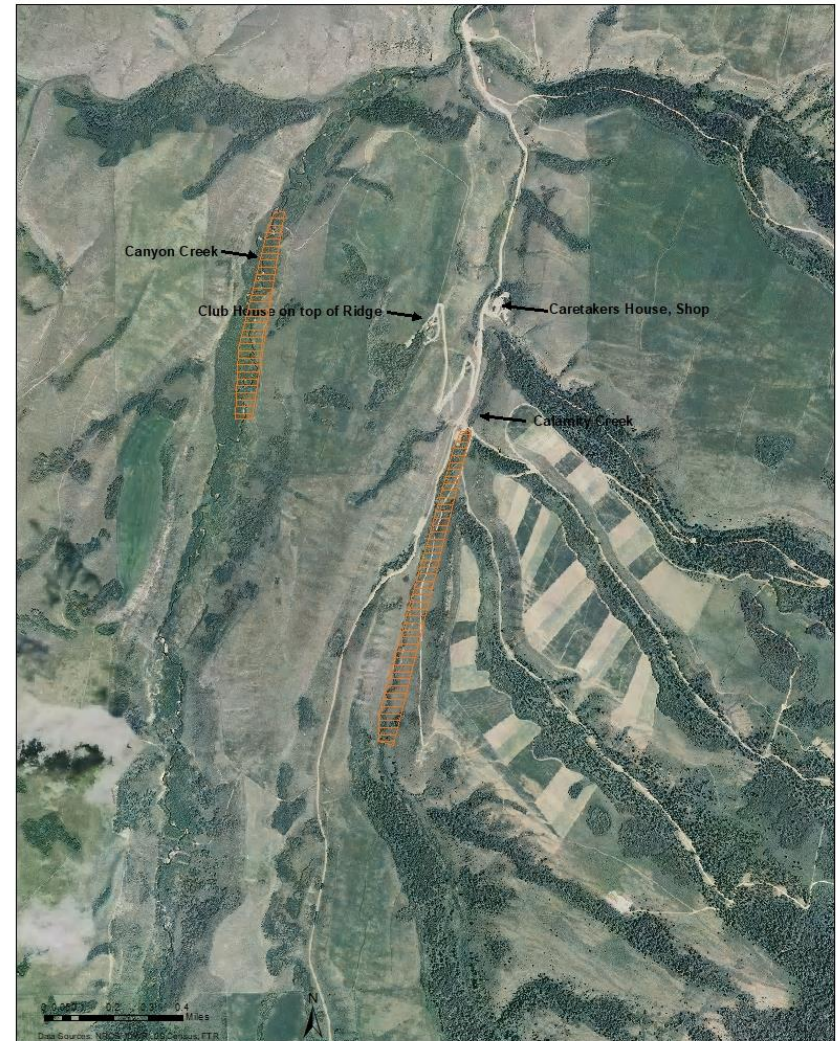


Redd Surveys

Redd Surveys on the Upper Teton River 2020



Redd Surveys on Canyon-Calamity Creeks 2020



Redd Count Results

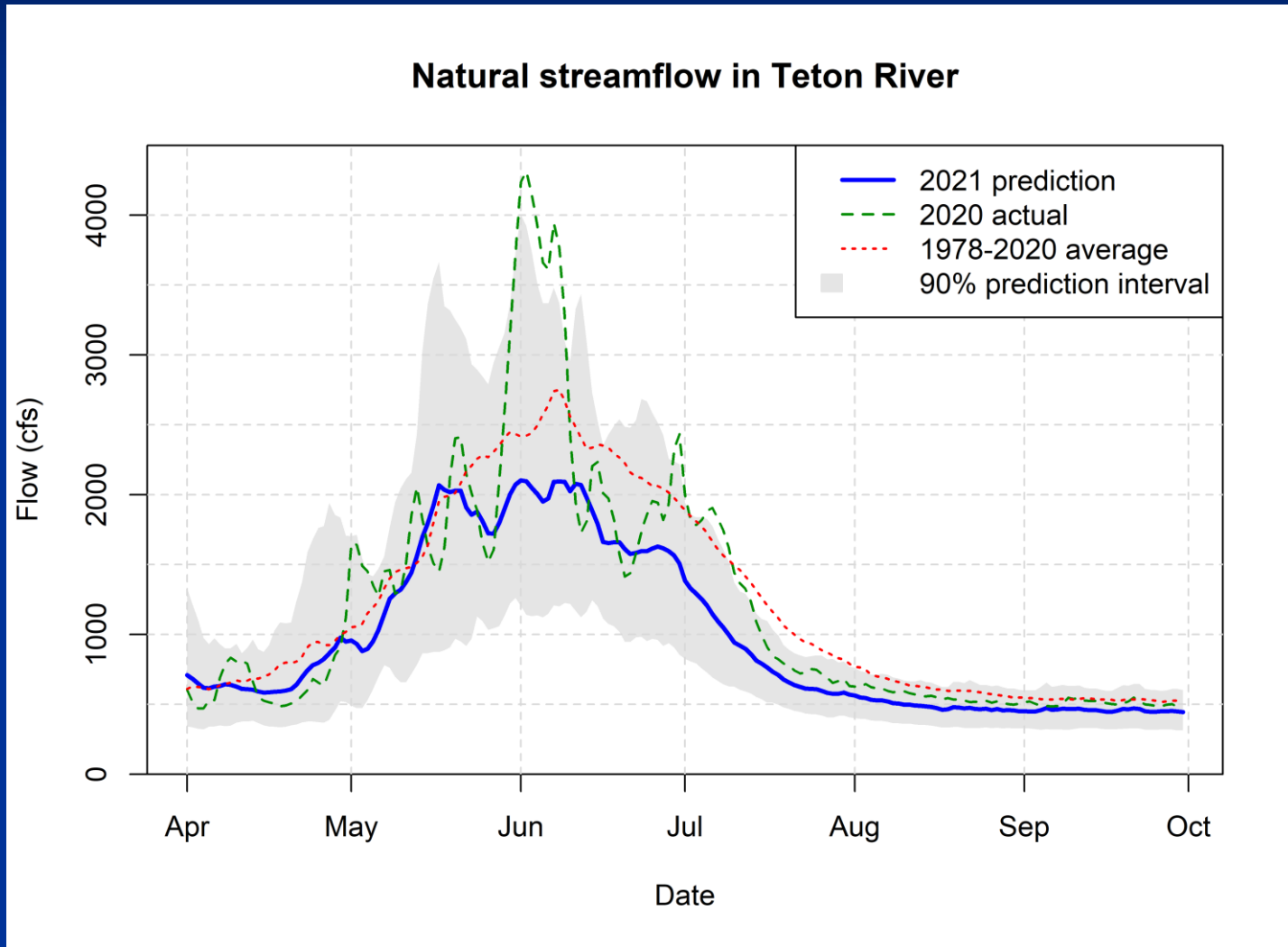
Stream Name	2020	2019	2018	2017
Six Springs Creek	26	9	28	6
Lews Spring Creek	3	N/A	N/A	0
Headwaters Spring Creek	0	N/A	N/A	N/A
Canyon Creek	0	N/A	N/A	0
Calamity Creek	3	N/A	N/A	N/A

Genetic Sample Collection

- Electrofishing and Rod and Reel collection methods
- Samples shared with the IDFG genetics lab



2021 Water Year and Angling Projections



This graph and supporting statistical analysis was created by Rob Van Kirk of the Henrys Fork Foundation

Thank You



Will Stubblefield Photo

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