# CARIBOU-TARGHEE NATIONAL FOREST FISHERIES PROGRAM 2000 ANNUAL REPORT

#### **C-T Forest FishFolks**

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US Bureau of Reclamation



Idaho Dept Fish & Game



Henry's Fork Foundation



US Fish and Wildlife Service



Federation of Flyfishers



Wyoming Game & Fish



Idaho Department of Environmental Quality



# New Cutthroat Strongholds Found and Restoration Opportunities I dentified

The Caribou-Targhee National Forest Fisheries Program slam-dunked fish population and habitat surveys during the 2000 field season. Two distribution survey crews and 1 habitat survey crew were working throughout the Forest.

The Caribou-Targhee Forest Fish Distribution Survey was used to sample 42 streams on Palisades, Soda Springs, and Montpelier Ranger Districts. Of the 31 streams sampled in the range of Yellowstone cutthroat trout, 20 were found to be strongholds for the subspecies. Of the 11 streams sampled in the range of Bonneville cutthroat trout, only 2 streams are considered strongholds for the subspecies. The outlook for the long term viability of Yellowstone cutthroat trout improved, but the concern for Bonneville cutthroat trout increased. The extent of the invasion of nonnative fish species such as brook trout was very alarming. Brook trout are outcompeting Bonneville cutthroat trout for habitat and displacing them in most of the Bonneville



Yellowstone cutthroat trout captured from a stronghold tributary of the South Fork Snake River.

cutthroat trout survey streams. The 2000 fish distribution surveys have identified restoration opportunities in most of the Yellowstone and Bonneville cutthroat trout drainages visited.

The habitat survey crew inventoried the entire Burns Creek and Pine Creek Watersheds. These are extremely important tributaries to South Fork Snake River Yellowstone cutthroat trout.

Plans for 2001 include fish distribution and habitat surveys in the Westside Ranger District and a habitat survey on Moody Creek in the Palisades Ranger District.

Support for the 2000 distribution and habitat surveys came from Federation of Flyfishers, US Fish & Wildlife Service, Greater Yellowstone Coordinating Committee, Wyoming Department of Game & Fish, and Idaho Department Fish & Game. Without their support, we couldn't have accomplished what we did.



Caribou-Targhee Forest Fisheries habitat survey crew begins work near the mouth of Burns Creek.

# Caribou-Targhee Forest Lake Survey Program begins at Upper and Lower Palisades Lakes

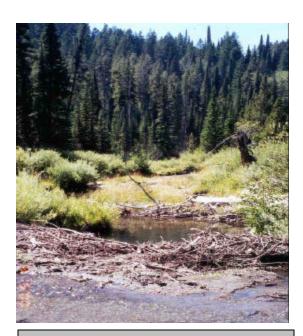
Lakes are favorite destinations for backcountry hikers and campers. They also provide important habitat for aquatic life. The conservation of our rare fish species will not be successful unless we consider all life history patterns of the fish, including adfluvial, or lake dwelling, populations.

In 2000, Upper and Lower Palisades Lakes were selected as our first lake survey locations because of the high recreational use in the watershed and the potential to find an isolated population of pure Yellowstone cutthroat trout. A team of Forest and IDFG Fisheries personnel surveyed the lakes in late August. Aquatic and riparian habitat surveys were conducted on the lakes and their inlets. Water quality and macroinvertebrate data were collected. More than 60 genetic samples were collected from the isolated cutthroat trout population found in the upper lake.



Upper Palisades Lake, home to an isolated population of lake dwelling Yellowstone cutthroat trout. The fish are isolated due to an ancient landslide that formed the lake. Riparian and aquatic habitat conditions at the upper lake were documented as near pristine.

# **Teton Basin Beaver Reintroduction Surveys**



Beaver dams provide excellent fish rearing habitat and are essential to the health of some streams.

Summer 2000, Lee Mabey and project partners developed and implemented a survey to identify areas where beaver reintroduction or population enhancement could help improve riparian and hydrologic conditions. These improvements could spin off benefits to riparian and aquatic dependent resources and enhance water quality.

This survey of 80 stream miles on tributaries of the Teton River was the next logical step after a recent watershed analysis indicated a decline in beaver populations in the analysis area. The decrease in beaver populations has contributed to the decline of several stable, functioning streams. Beaver transplant compatibility matrices were completed for survey units on each stream to assess the feasibility of introducing beaver to an area based on social, biological/ecological, and habitat suitability parameters. Instream fine sediment was also measured. A report including findings and recommendations was prepared and distributed to Districts and partners.

Project partners were Idaho Department of Environmental Quality and the Greater Yellowstone Coordinating Committee.

# Free Fishing Day Celebration Triples in Size (and fun)

One Saturday last June, the Caribou-Targhee National Forest hosted 3 Free Fishing Day Celebrations throughout Southeast Idaho. The traditional event at Mill Pond in Island Park was joined by new events at Little Lemhi Boy Scout Camp near the South Fork Snake River and a Kelly Park pond in Soda Springs.

The day was one of those rare, rainy Free Fishing Days but that didn't scare the kids away. An average of 25 kids and their parents participated in each of the events.



At C-T Forest Free Fishing Day events, humanfish encounters are practically guaranteed.



Fishing at the pond in Little Lemhi Scout Camp on the South Fork Snake River.

Valuable assistance was provided by Robin Jenkins at the Island Park event; Bud Alford, Lynn Merrill (IDFG Conservaton Officer), and Gregg Losinski (IDFG Public Affairs) at the South Fork event, and Darrel VandeWeg at the Soda Springs event. The festivities wouldn't have floated without them. Kid's prizes were contributed by local merchants, including Walmart, K-Mart, Shopko, Hydes Drift Boats, Cal Ranch Stores, Target, and Fred Meyers. Thanks to them, all the kids left the event with arms full of prizes and heads full of great memories.

# Fisheries Support to Other Forest Programs

A large part of what we do as Fisheries Biologists on the Forest is assisting other disciplines on the District and Forest levels in project planning. Some of the projects we assisted in 2000 include Box Canyon, East Beaver Miners Creek, and Emigration Timber Sales, West Camas and Moody Allotment Plan Revisions, road and bridge improvement projects, special use permits, mining permits, Bloomington Recreation Management Plan, Island Park Reservoir title transfer discussions, and range monitoring training sessions for permittees.

Mabey and Capurso assisted Walt Grows, the Forest Range Conservationist, in range monitoring training sessions for permittees throughout the Forest. The sessions introduced the Forest's range permittees to the new range monitoring module and several methods of riparian and stream assessment. The workshops provided a great opportunity to develop channels of

communication and understanding between range permittees and specialists on the Forest, including Fisheries staff.



Teton Basin range permittees learn riparian monitoring methods from Forest and District specialists in the shadow of the Tetons.

### Lower Rainey Creek gets Fish Friendly

In a partnership with One Fly Foundation and Bonneville County Road Crew, personnel at Palisades Ranger District implemented a restoration project to decrease human impacts to lower Rainey Creek. Palisades Ranger District employees Bud Alford and Brent Porter led this effort. Rainey Creek is an extremely important Yellowstone cutthroat trout spawning and rearing tributary of the South Fork Snake River.

Segments of Rainey Creek Road that encroached upon the stream were relocated out of the riparian area. Motorized access to Rainey Creek riparian area was minimized with the placement of rock and fence barriers. Riparian dispersed campsites were limited and replaced with hardened campsites out of the riparian area. Juniper revetments were placed on eroding stream banks. A hydraulic stinger was used to burrow deep into the ground to plant willow and cottonwood close to the water table. This work is expected to decrease sediment delivery to the stream and enhance riparian areas, providing direct benefits to Yellowstone cutthroat trout.



A backhoe places whole juniper trees on some eroded stream banks of Rainey Creek.



A road segment in the riparian area of Rainey Creek (right) is replaced with a new road at the foot of the hill (left), decreasing sediment delivery to the stream and impacts to riparian vegetation.

#### Golden Lake Gets its Second Treatment

In October 2000, Golden Lake and its tributaries received their second treatment of piscicide in an effort to significantly decrease the number of non-native brook and rainbow trout in the system.

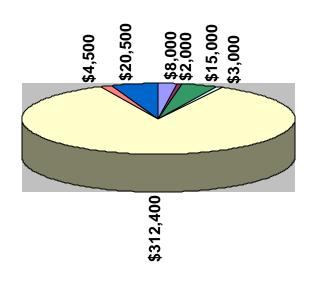
Monitoring of the 1999 effort indicated the need for an additional treatment after several hundred surviving brook trout were observed. In the 2000 treatment, both antimycin and rotenone were used. Drip stations, backpack sprayers, and a rotenone sand mixture were used throughout the watershed. Effectiveness monitoring will occur next Spring to determine if a third treatment is needed prior to the re-introduction of native Yellowstone cutthroat trout.

This project is an extensive cooperative effort between IF&G, ID State Parks, Nature Conservancy, the C-T National Forest, and other partners in the Henry's Fork Cutthroat Trout Subcommittee.



Capurso adjusts an antimycin drip station on West Thurmon Creek, upstream of Golden Lake. Drip stations and mobile backpack sprayers were set up throughout the watershed to evenly distribute piscicide.

# 2000 Caribou-Targhee Forest Fisheries Program Funding





# Forest Fisheries Program Emphasis Areas

The year 2000 was the first full year of service for the Caribou-Targhee Forest Fisheries Program. We have strived over that time to provide the best service possible to our 7 Districts. We have put a lot of effort into collecting quality data to provide decision makers with appropriate information for informed decisions. Based on what we have heard throughout the Forest, we have been successful. We will continue this emphasis in the upcoming year.

In addition, in 2001 the Forest Fisheries Program will emphasize providing assistance to our brothers and sisters on the range, the Forest's Range Conservationists. These range professionals are dedicated to the conservation of our range resources and the Fisheries folks will assist however possible.

Lastly, I want to share some staffing changes we have recently made in the Forest Fisheries program. Primary District level Fisheries Biologist responsibilities have changed. Upon graduation, our co-op student Alex Gouley will take on the role as District Fisheries

Biologist at Dubois. Until then, I will continue with that responsibility. Lee Mabey will be the primary District level Fisheries Biologist for the Henry's Fork and Teton Basin. Bill Janowsky will continue to be the primary District level Fish Bio at Soda Springs and Montpelier. In addition to my Forest Program Manager Responsibilities, I will be the primary District level Fish Bio at Palisades and Westside Ranger Districts. Ted Kellogg is the Forest Fish Biological Technician, responsible for maintaining the stream survey crews and the quality of their work. We are fortunate to hire the excellent survey team technicians we get each year. They provide quality data that ends up in reports and databases helping us and other agencies meet their responsibilities to the public.

We are looking forward to serving you in 2001.

James Capurso
Forest Fisheries Biologist

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