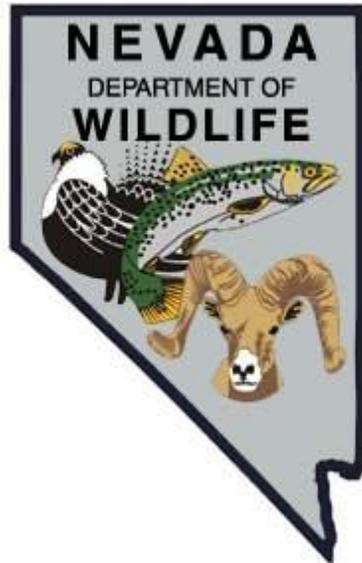


NEVADA DEPARTMENT OF WILDLIFE
STATEWIDE FISHERIES MANAGEMENT



FEDERAL AID JOB PROGRESS REPORTS
F-20-48
2012

MOUNTAIN WHITEFISH MANAGEMENT
EASTERN REGION



**NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION
ANNUAL JOB PROGRESS REPORT**

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**NEVADA DEPARTMENT OF WILDLIFE, FISHERIES BUREAU
ANNUAL PROJECT REPORT**

State: *Nevada*
Project Title: *Statewide Fisheries Program*
Job Title: *Native Sport Fish Management, Mountain Whitefish*
Period Covered: *January 1, 2012 through December 31, 2012*

SUMMARY

Low stream flows in September in the South Fork Owyhee River prevented the use of snorkeling to search for mountain whitefish. The afternoon river temperature near the upper end of the reach planned for the survey was 70°F. A snorkel survey in five areas that previously documented mountain whitefish in the East Fork Owyhee River failed to result in any sightings of mountain whitefish. Because of summer water withdrawals from Wildhorse Reservoir, snorkeling might only be possible using a wet suit in late summer. All Eastern Region files were searched for whitefish occurrence and a GIS database was created from the information. This database will be updated yearly with any new whitefish information.

BACKGROUND

Mountain whitefish were last documented in South Fork Owyhee River in 1980 when two were electrofished from a 200 ft reach located where the road crosses the river to access Big Cottonwood Canyon. Mountain whitefish were last documented in East Fork Owyhee River in 1980, when on two occasions mountain whitefish were electrofished at the Mill Creek confluence. On April 30, 1988, an angler brought in a 1.46 lb mountain whitefish caught from the East Fork Owyhee River. A mid-October electrofishing survey of nine, 200 ft or greater lengths of river located between Wildhorse Dam and the Duck Valley Indian Reservation failed to document mountain whitefish.

OBJECTIVES and APPROACHES

OBJECTIVE: Native Sport Fish Management

Approaches:

- Utilize snorkeling to document the presence of mountain whitefish in the last known occupied reach in the South Fork Owyhee River.
- Utilize snorkeling to document the presence of mountain whitefish in the East Fork Owyhee River if and when it is clear enough for underwater viewing.

- Conduct a file search of whitefish occurrence in northeast Nevada and create a GIS database.

PROCEDURES

Planned surveys on the South fork Owyhee River to snorkel stream areas between the Spanish Ranch and IL Ranch were cancelled due to low stream flow on 9/17/12. Digital photos were taken of the diversion dam and the river above the dam located near the IL Ranch. Photos were also taken of an improved riparian area within an area known as Swimmers Flat located in the canyon between the two ranches. Ocular surveys from the stream bank of a couple of reaches were conducted. A handheld thermometer was used to record water temperature.

The five previous known mountain whitefish collection sites from the East Fork Owyhee River were pre-plotted on 15 min topographic maps of the area. On locating a survey site, two snorkelers would enter from just below the starting location and move slowly upstream to note fish present. The two lowest elevation survey sites ended at water diversion dams, while others usually ended at shallow riffles. No attempt was made to measure lengths of surveyed stream.

Stream files of rivers and larger tributary streams in Northeast Nevada were reviewed for notations of mountain whitefish occurrence, place, and date. The list of streams with accompanied metadata was compiled and entered into a GIS database.

FINDINGS

Only minnow-sized fish were observed in the South Fork Owyhee River above the IL water diversion and in Swimmers Flat. The afternoon river temperature at Swimmers Flat was 70°F.

No mountain whitefish were observed at any of the five East Fork Owyhee River survey sites. No fish were observed at the site located 50 ft upstream of the Badger Creek confluence where the water was fast and more turbid than other sites. Rainbow trout were the most common game fish as a total of nine were observed. Five brook trout were among other fish observed at the Forest Compound Bridge site. One Sculpin was noted above Mill Creek confluence and several schools of redbside shiners were observed at the two lowest elevation sites. Crayfish were also noted at three of four upstream surveyed areas. Unidentified fish included a six inch fish above Mill Creek confluence and one, 12 to 14 in, below the Beaver Creek confluence, where the water temperature was 66°F at 1421 hrs.

All major drainage rivers flowing north into Idaho that entered the Snake River above Shoshone Falls had mountain whitefish as recorded in the file data. Current strongholds of the species occur in the Bruneau River and in both the East Fork and West Fork of the Jarbidge River. File notations suggested that mountain whitefish may

have been exterminated upstream of the fish barrier near the Stateline in Salmon Falls River following the 1960 rotenone treatment project aimed at reducing nongame fish abundance. The records of incidental mountain whitefish in tributary streams were few, but included Pine Creek (WF Jarbidge River drainage), Columbia Creek (SF Owyhee River drainage), and possibly Long Canyon Creek in the South Fork Humboldt River Drainage. More recent surveys have failed to document mountain whitefish in either the East Fork or South Fork of the Owyhee River where they have been noted as occurring before 1981 in the South Fork and before 1974 in the East Fork.

MANAGEMENT REVIEW

The below normal snowpack created extremely low flows in 2012 and prevented snorkeling in South Fork Owyhee River in late summer. Under normal stream flows the river could be suitable to survey mountain whitefish in June or possibly later in the summer.

A Department of Wildlife game warden reported having angled a mountain whitefish in Burner Basin within the Badlands a few years back, which might mean that mountain whitefish may have survived the two previous fish toxicant projects. It would be worthwhile to follow up on the possible report that mountain whitefish still exist in upper Salmon Falls River.

RECOMMENDATIONS

1. Snorkeling should be used to search for mountain whitefish in the South Fork Owyhee River if it was conducted in early summer providing that visibility is good.
2. Snorkeling should be used again in East Fork Owyhee River to search for mountain whitefish when visibility is good.
3. Snorkeling should be used to document mountain whitefish within the Badlands reach of the Salmon Falls River.
4. Lower Long Canyon Creek should be snorkeled to search for mountain whitefish.
5. Update the GIS database with any new whitefish sightings.

Prepared by: Gary Johnson
Biologist III, Eastern Region

Date: February 2013