

NEVADA DEPARTMENT OF WILDLIFE
STATEWIDE FISHERIES MANAGEMENT



FEDERAL AID JOB PROGRESS REPORTS

F-20-48
2012

HOBART RESERVOIR
WESTERN REGION



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

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

State: *Nevada*
Project Title: *Statewide Fisheries Program*
Job Title: *Hobart Reservoir*
Period Covered: *January 1, 2012 through December 31, 2012*

SUMMARY

A total of 94 volunteer angler surveys from the drop-box were received from Hobart Reservoir in 2012. During the months when surveys were received, 94 anglers fished for 388.5 hrs and caught 1,310 fish consisting of 435 brook trout, 178 rainbow trout, 8 bowcutt trout, and 689 tiger trout. Resulting catch rates (all fish) were 13.94 fish per angler and 3.37 fish per hour. Length frequency analysis shows tiger trout to consistently be the largest fish caught at Hobart Reservoir. A direct correlation can be made between angler success and satisfaction at Hobart Reservoir this year. This means that an increase in angling success led to an increase in angler satisfaction.

The Mail-in Angler Questionnaire Survey estimated use at 512 anglers and 1,500 angler days in 2011. Total catch was 7,194 fish and the success rate was 4.80 fish per angler day.

Hobart Reservoir was stocked on three occasions in June and July of 2012. The reservoir received a total of 1,097 catchable Eagle Lake-strain rainbow trout and 1,050 catchable tiger trout.

BACKGROUND

Hobart Reservoir is located in the Toiyabe National Forest at an elevation of 7,650 feet in the Carson Range. The reservoir is surrounded by conifer and aspen dominated forest. Hobart Creek, fed by snowmelt runoff as well as spring sources, is the main tributary to the reservoir. The present reservoir covers approximately 10 surface acres, stores 110 acre-ft of water, and has a maximum depth of 15 ft. The initial dam was completed in 1877. It was subsequently rebuilt in 1956 after a washout the previous year. State of Nevada currently owns the reservoir.

Hobart Reservoir supports hatchery maintained populations of rainbow trout, bowcutt trout, and tiger trout. Brook trout are abundant and self-sustaining. Hobart Reservoir was opened to public fishing in 1981. It is managed under the coldwater General Fishery Management Concept, which establishes an objective for angler success rates of 0.25 to 0.75 fish per hour and 1.0 to 2.0 fish per angler day.

OBJECTIVES

General Management Objectives:

- Conduct a general assessment of angler use, success, and harvest through opportunistic angler contacts, return of angler drop-box surveys, and mail-in angler questionnaire data.
- Maintain the Angler Information Center and angler drop-box when on site.
- Coordinate fisheries management activities with the Nevada Division of State Parks.

PROCEDURES

Conduct a general assessment of angler use, success and harvest through opportunistic angler contacts, return of angler drop-box surveys and mail-in angler questionnaire data. Scheduled and opportunistic visits were made to Hobart Reservoir throughout the year for the purpose of collecting creel survey data during an expected time to contact the greatest number of anglers as possible. Information on angler harvest, effort, and origin were recorded. Harvested fish were measured to fork length in millimeters.

During the course of other duties throughout the year, a volunteer angler survey box at Hobart Reservoir was periodically maintained and restocked. At the end of the calendar year, data was tallied.

Angler use and success at Hobart Reservoir was also assessed through the Department's Mail-In Angler Questionnaire Survey data. Angler questionnaire data is derived from a survey that is mailed to about 10% of license purchasers from the previous year.

Maintain the Angler Information Center and angler drop box when on site. When on site, both the angler drop-box and angler information center at Hobart Reservoir were checked. The drop-box was restocked with angler survey forms while information at the angler information center was updated.

Coordinate fisheries management activities with the Nevada Division of State Parks. Assistance and coordination in matters related to fisheries management at Hobart Reservoir was accomplished with the Nevada Division of State Parks as needs arose.

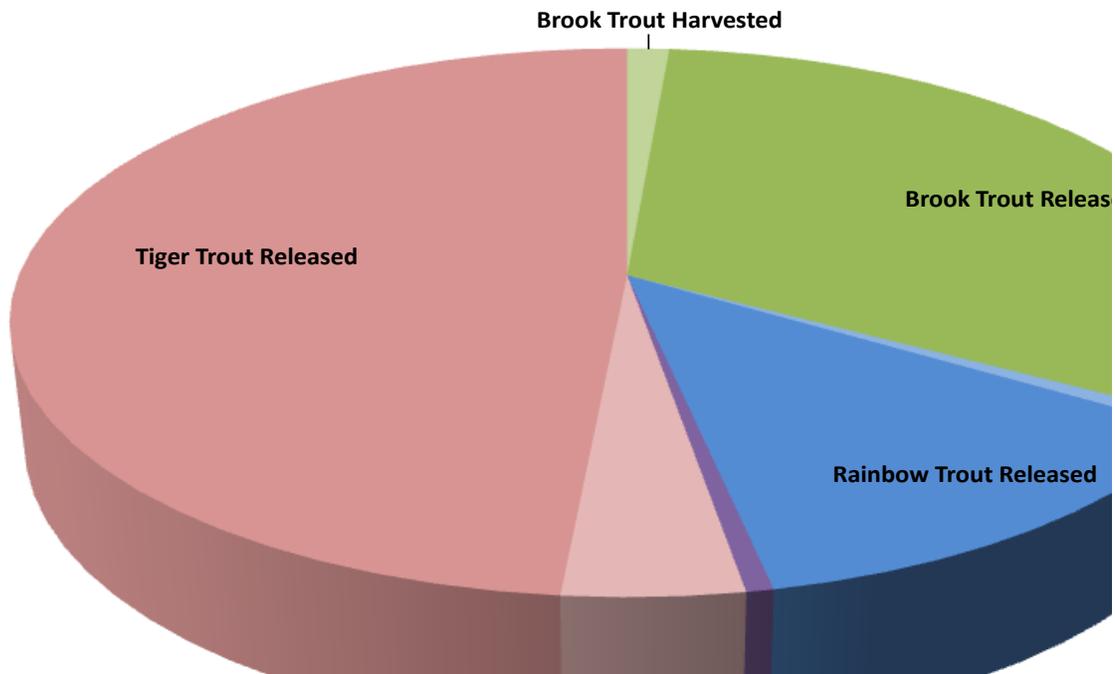
FINDINGS

Conduct a general assessment of angler use, success and harvest through opportunistic angler contacts, return of angler drop-box surveys and mail-in angler questionnaire data. No opportunistic angler contacts were made at Hobart Reservoir in 2012.

A total of 94 volunteer angler surveys from the drop-box were received from Hobart Reservoir in 2012. During the months when surveys were received, 94 anglers fished for 388.5 hrs and caught 1,310 fish consisting of 435 brook trout, 178 rainbow trout, 8 bowcutt trout, and 689 tiger trout. Catch rates (all fish) were 13.94 fish per angler and 3.37 fish per hour. Of the 1,310 fish reported, all but 78 (17 brook, 8 rainbow, and 53 tiger trout) were reported as released. Species composition for 2012 was 52.6% tiger trout, 33.2% brook trout, 13.6% rainbow trout, and 0.6 % bowcutt trout (Figure 1).

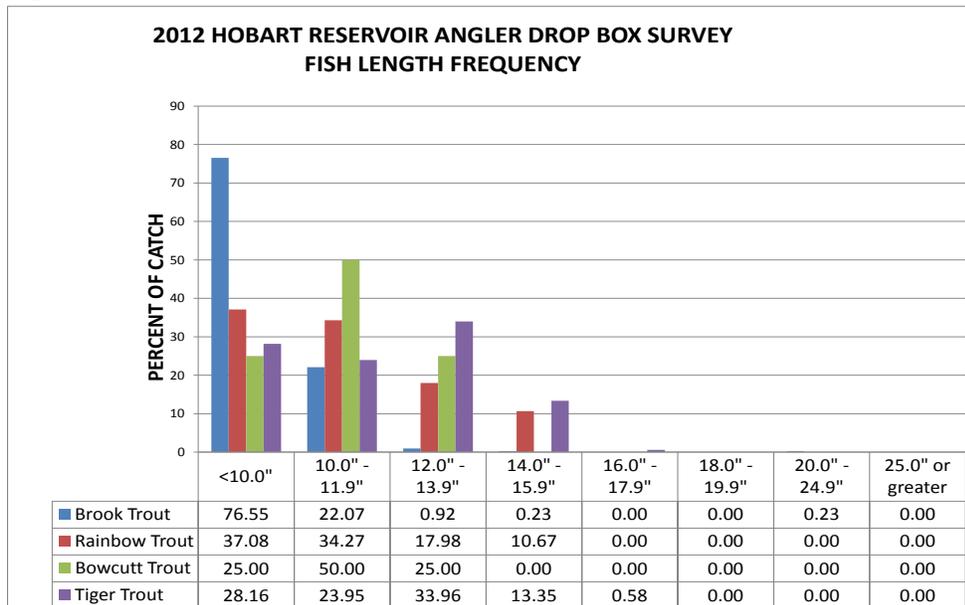
Figure 1.

Hobart Reservoir - 2012 Angler Drop Box Species Composition



Length frequency analysis of fish size reported through the drop-box survey showed tiger trout was consistently the largest fish caught (Figure 2). With only eight bowcutt trout reported, a proper analysis of the performance cannot yet be made. The smallest two size brackets (<10.0 in and 10.0-11.9 in) accounted for 98.6% of brook trout and 71.4% of rainbow trout caught this year, while tiger trout comprised only 52.1% of these same two size brackets. Although tiger trout are known for their piscivory and are managed as a biological control for brook trout, the larger size of tiger trout reported in the drop-box survey cannot be attributed to growth. Rather, their size can be attributed to a larger initial stocking size in the past three years.

Figure 2



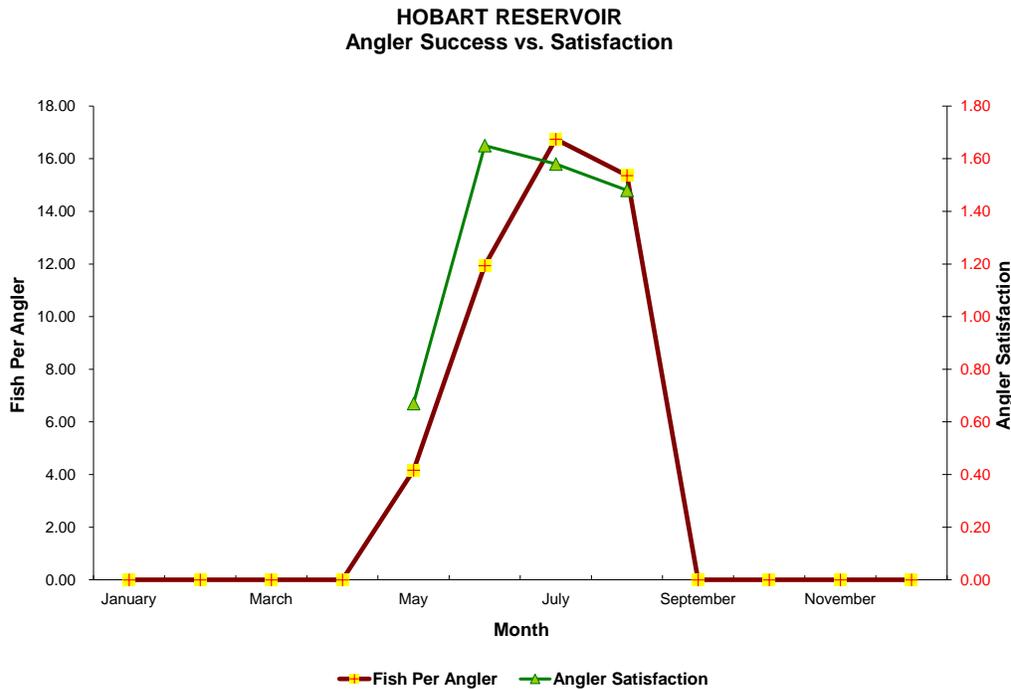
A majority of anglers (56.4%) fished from a boat or float tube, while the remaining anglers fished from shore. In addition, 70.2% of anglers reported fly-fishing and the remaining 29.8% used spinning gear with lures. Angler satisfaction in 2012 was rated on a scale of -2 to +2 with -2 being unsatisfied and +2 representing satisfaction. Average ratings were positive at 1.35 for total fishing experience, 1.01 for size of fish, and 1.30 for number of fish. Angler success corresponded nicely with angler satisfaction (Figure 3). This means that an increase in angling success generally led to an increase in angler satisfaction.

The mail-in angler questionnaire data estimated use at 512 anglers and 1,500 angler days in 2011. Total catch was 7,194 fish and the success rate was 4.80 fish per angler day. Estimates were nearly identical to the 506 anglers, 1,562 days, 6,968 fish, and 4.46 fish per day success rate found in the 2010 survey.

Hobart Reservoir was stocked on three occasions in June and July of 2012. The reservoir received a total of 1,097 catchable Eagle Lake-strain rainbow trout and 1,050 catchable tiger trout.

Coordinate fisheries management activities with the Nevada Division of State Parks. Assistance and coordination in matters related to fisheries management at Hobart Reservoir was accomplished with the Nevada Division of State Parks as needs arose.

Figure 3.



MANAGEMENT REVIEW

Angler success rates documented from the angler drop-box survey and the Mail-in Angler Questionnaire Survey far exceed the guidelines prescribed in the Coldwater General Fishery Management Concept. This fishery is generally popular with anglers for producing high catch rates and an opportunity to fish in a semi-remote setting. Given the fact that less than 6% of fish caught at Hobart Reservoir this year were harvested, it appears that angler harvest is currently having no appreciable effect on the fishery. Comments received on many angler drop box surveys were overwhelming in favor of tiger trout stocking.

RECOMMENDATIONS

General Management Objectives:

- Conduct a general assessment of angler use, success, and harvest through opportunistic angler contacts, return of angler drop-box surveys, and mail-in, angler questionnaire data.
- Maintain the angler information center and angler drop-box when on site.
- Set gillnets 2 net-nights in the fall.

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Date: February 15, 2013