

NEVADA DEPARTMENT OF WILDLIFE
STATEWIDE FISHERIES MANAGEMENT



FEDERAL AID JOB PROGRESS REPORTS

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2016

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, 2016 through December 31, 2016*

SUMMARY

The mail-in angler questionnaire estimated use at 573 anglers and 2,072 angler days in 2015. Total catch was estimated at 12,958 fish and success rate at 6.3 fish per angler day. Estimates for number of anglers and angler days were substantially higher than in 2014 (366.3 and 728.8, respectively).

A total of 67 volunteer angler surveys from the drop-box were received in the months of May, July, and August, with 60 anglers fishing for 248.5 hrs and catching 469 fish consisting of 119 rainbow trout, 113 brook trout, four bowcutt trout, and 233 tiger trout.

BACKGROUND

Hobart Reservoir is located in the Toiyabe National Forest at an elevation of 7,650 ft 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 initial dam was completed in 1877 and was subsequently rebuilt in 1956 after a washout the previous year. The State of Nevada currently owns the reservoir. The present reservoir covers approximately 10 SA, stores 110 acre-ft of water, and has a maximum depth of 15 ft.

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 established 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

- 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.

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. One attempt to survey anglers was made during the 2016 season at Hobart Reservoir. Two anglers were present at the reservoir on this occasion and unfortunately they were offshore and unable to be contacted. Angler use and success data was supplemented with the return of angler drop-box surveys and the Department's Mail-In Angler Questionnaire Survey. Angler questionnaire data for 2015 was derived from a survey that is mailed to 30,000 Nevada fishing license purchasers.

Maintain the Angler Information Center and angler drop-box when on site. One scheduled visit was made to Hobart Reservoir in the spring prior to the season opening to maintain the angler information center and angler drop-box. The information center was updated with current fishing/lake information and the drop-box was fully stocked with forms and pencils in preparation of the 2016 season. Subsequent trips were made throughout the season to ensure the drop-box remained stocked.

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. One opportunistic visit was made to Hobart Reservoir during the 2016 season in an attempt to survey anglers for creel data. While two anglers were present at the reservoir, neither was contacted due to them being offshore.

A total of 67 volunteer angler surveys from the drop-box were received in the months of May, July, and August, with 60 anglers fishing for 248.5 hrs and catching 469 fish consisting of 119 rainbow trout, 113 brook trout, four bowcutt trout, and 233 tiger trout. Resulting catch rates (all fish) were 7.8 fish per angler and 3.3 fish per hour. Of the 469 fish caught, all but 41 (11 rainbow, six brook, and 24 tiger) were reported as released. Species composition was 25.4% rainbow trout, 24.1% brook trout, 0.9% bowcutt trout, and 49.7% tiger trout (Figure 1).

Similar to 2015 sizes reported for the drop-box survey, the 2016 results showed tiger trout made up the majority of larger (12+ in) fish caught. Rainbow trout were the second most frequently caught in the larger size brackets (Figure 2). The higher proportion of larger tiger trout can be partly attributed to their piscivorous nature and the availability of brook trout as forage. Additionally, late fall stocking in 2015 at a larger initial stocking size and then overwintering allowed for more larger fish being represented in 2016. Brook trout continue to make up the majority of the smaller fish caught with 93% being less than 12 inches.

Figure 1.

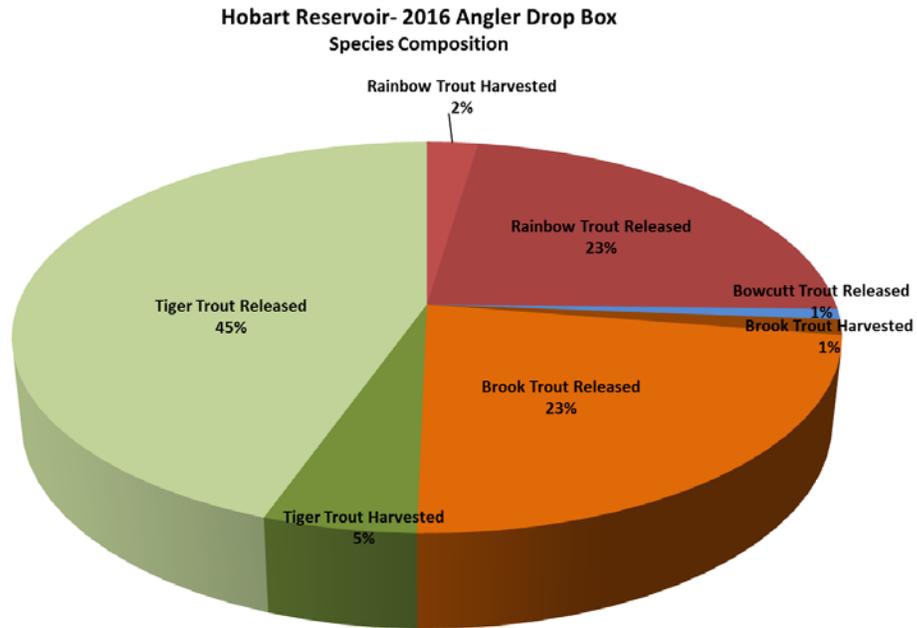
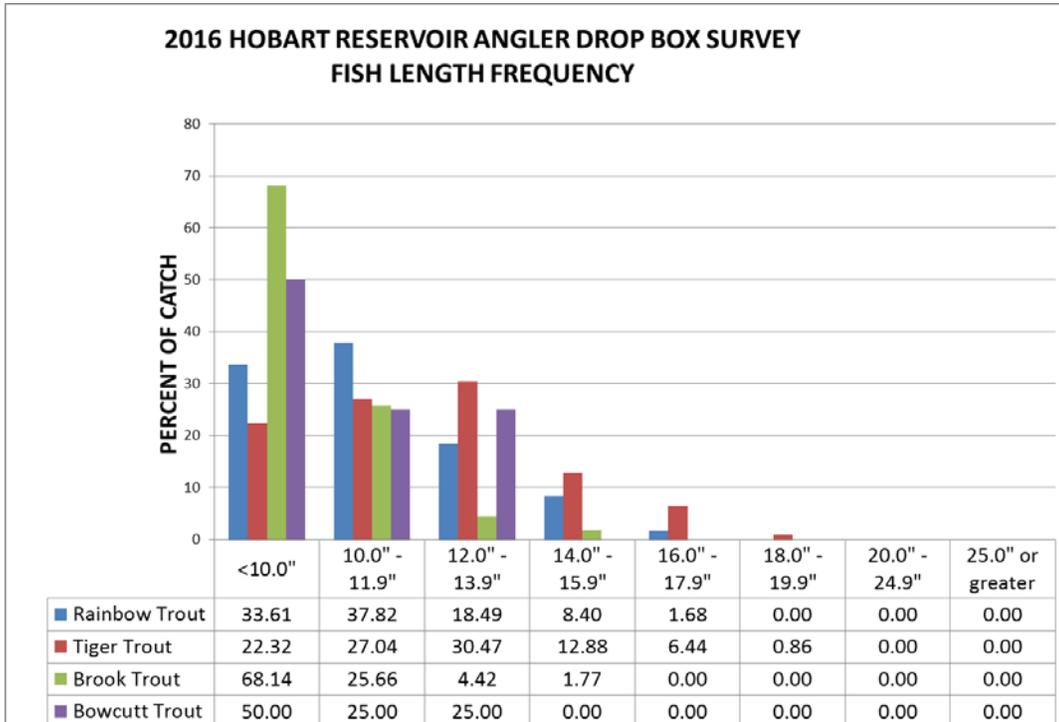
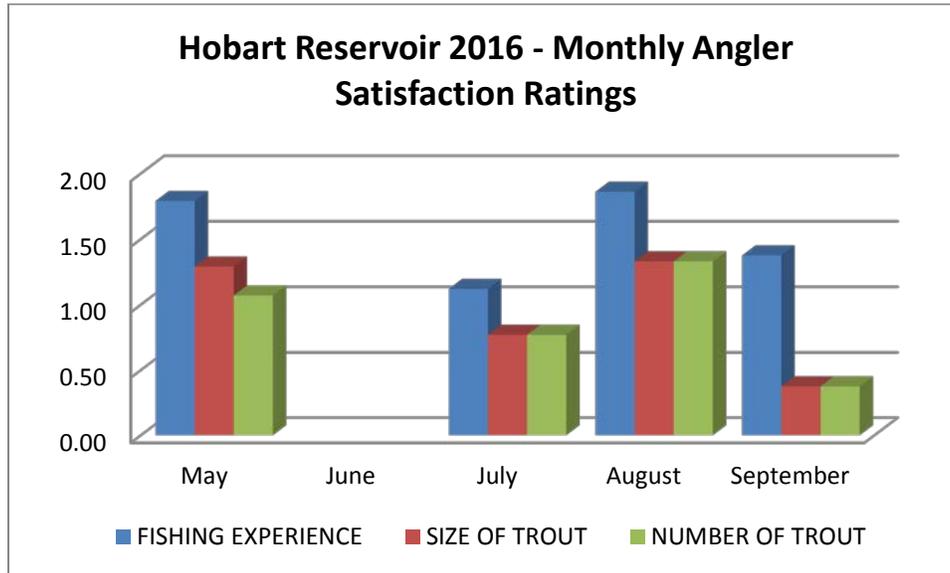


Figure 2.



Angler satisfaction rates are based on a scale from -2 (not satisfied) to +2 (satisfied). Participating anglers are asked to rate their fishing experience, size of trout, and number of trout. Overall, 2016 ratings were positive with fishing experience rating the highest at 1.5 followed by size of trout (0.9) and number of trout (0.9). Figure 3 breaks down the monthly averages for angler satisfaction.

Figure 3.



The mail-in angler questionnaire estimated use at 573 anglers and 2,072 angler days in 2015. Total catch was estimated at 12,958 fish and success rate at 6.3 fish per angler day. Estimates for number of anglers and angler days were substantially higher than in 2014 (366.3 and 728.8, respectively) and may be a function of the drought the region is experiencing. Hobart Reservoir has not realized the effects of the drought like other area waters and therefore continues to provide an above average fishery. Fish per angler (22.6) is in line with the 35 year average of 21.8, while fish per angler day (6.3) is slightly lower than the 35 year average of 9.

Hobart Reservoir was stocked on two occasions in 2016, receiving 1,800 catchable trout consisting of 750 tiger trout and 1,050 Tahoe strain rainbow trout (Tables 1 and 2).

Table 1. Hobart Reservoir Stocking Summary – 2016

Date	Species	Strain	Size (in.)		Number
6/15/2016	Rainbow	Tahoe	8.9		1050
6/15/2016	Tiger	Tiger	10		750
Average			9.45	Total	1800

Table 2. Hobart Reservoir Stocking History 2008 – 2015

Hobart Stocking History				
Year	Species	Strain	Size (in.)	Number
2008	TT	Tiger	7.9	1,010
Total				1,010
2009	RB	Tasmanian	10.1	999
2009	TT	Tiger	7.1	527
Total				1,526
2010	TT	Tiger	11.39	1,099
2010	RB	Eagle Lake	10.2	999
2010	TT	Tiger	11.4	423
Total				2,521
2012	TT	Tiger	11.3	1,050
2012	RB	Eagle Lake	10.2	598
2012	RB	Eagle Lake	10.3	499
Total				2,147
2013	RB	Triploid	9.9	722
2013	TT	Tiger	4.2	1,028
2013	RB	Tahoe	9.4	1,001
2013	TT	Tiger	7.1	1,006
Total				3,757
2014	RB	Eagle Lake	9.7	1,112
2014	RB	Eagle Lake	9.2	2,616
2014	RB	Eagle Lake	9.5	1,786
2014	TT	Tiger	10.3	961
Total				6,475
6/5/2015	Tiger	Tiger	10	1,313
6/12/2015	Tiger	Tiger	10.4	500
Total				1,813
Total				19,249

MANAGEMENT REVIEW

Angler success rates documented from Mail-in Angler Questionnaire and voluntary angler drop-box surveys 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 with relatively easy access. The popularity of this fishery has increased substantially in the last few years that can most likely be attributed to the drought conditions experienced in other area waters. The fishery has shown the ability to support an increasing numbers of anglers with little impact on the satisfaction ratings of anglers and the trout numbers within the reservoir.

While stocking rates were scaled back in 2015 and continued to be lower than the 7 year average in 2016, the catch rates of all trout species appear to be consistent with the long-term trend. Future gillnet surveys will need to be conducted to determine if the reduced stocking rates have had a positive effect on the growth rates and health of the fishery.

RECOMMENDATIONS

- 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 for two net-nights in the fall.

Prepared By: Travis Hawks
Biologist III
Western Region

Date: November 17, 2016