

Trout Angling on Timber Coulee Creek Then (1984) and Now (2008)

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Summary

We conducted a creel survey in 2008 to assess the Timber Coulee trout fishery and compare our results to a similar survey conducted 24 years earlier in 1984.

We found that in 2008, as in 1984, Timber Coulee provided a high quality brown trout fishery in terms of catch rates and average size.

We observed significant changes in harvest and angler demographics.

Trout angling was heavily oriented towards harvest in 1984, with anglers keeping 1,859 trout from 1.6 miles of Timber Coulee; in 2008 anglers primarily released trout and kept only 119 trout from 4.1 miles of Timber Coulee.

In 1984, 89.5% of anglers were local residents living within 25 miles of the stream, whereas 79% of anglers in 2008 lived greater than 50 miles away.

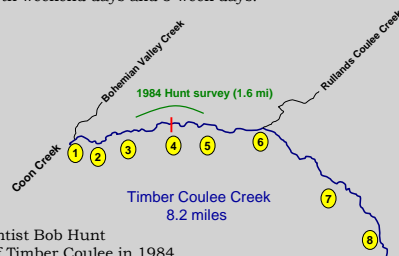


Timber Coulee Creel Survey

Timber Coulee Creek is an 8.2 mile stream managed as a Class I wild trout fishery consisting almost entirely of brown trout.

We counted vehicles and interviewed anglers at 8 access points and areas in between to quantify effort, catch, harvest, and angler demographics.

Our creel clerk worked a stratified random schedule that included an AM or PM shift on both weekend days and 3 week days.



WDNR research scientist Bob Hunt surveyed 1.6 miles of Timber Coulee in 1984.

We used a subset of our data from access points 3-5 to compare directly to Hunt's study.

Trout Fishing Regulations

2008 Early season

Mar-Apr
Catch & release with artificial lures only

2008 Regular season

May-Sep
Catch & release with artificial lures only (between access points 1 and 4)
5 trout bag limit per day, size < 12 inches (between access points 4 and 8)

1984 Early season

Jan-Apr
2 trout bag limit per day
6 inch minimum length

1984 Regular season

5 trout bag limit per day
6 inch minimum length

Study Objectives

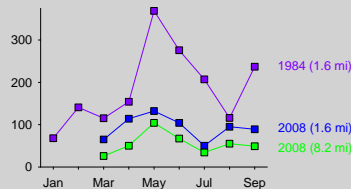
1. Quantify trout fishing effort, catch, and harvest and angler demographics in Timber Coulee Creek
2. Compare and contrast characteristics of the Timber Coulee trout fishery in 2008 to that observed on the same stream in 1984



Effort, Catch and Harvest

The dynamics of angler effort on Timber Coulee changed from 1984 and 2008.

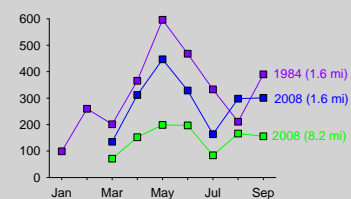
Trips per mile



Trout anglers made about 60% fewer trips to Timber Coulee in 2008 versus 1984 during the regular open season.

Anglers made 752 trips in 2008 versus 1,928 trips in 1984 in a 1.6 mile section of Timber Coulee from May to September.

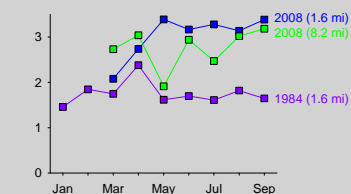
Hours per mile



However, angler effort in 2008 more closely approximated effort in 1984 in terms of time spent fishing per mile.

Completed trip length increased about 76% from an average of 1.7 hours per trip in 1984 to an average of 3 hours per trip in 2008.

Hours per trip per mile



This change in the dynamics of angler effort becomes evident when effort is expressed as the number of hours per trip per mile.

The increase in average trip length likely reflects the change from a harvest fishery (1984) to a catch & release fishery (2008).

1984 Catch and Harvest Rates:

1.5 trout/hour caught
0.4 trout/hour harvested
1,859 trout kept from 1.6 miles of stream

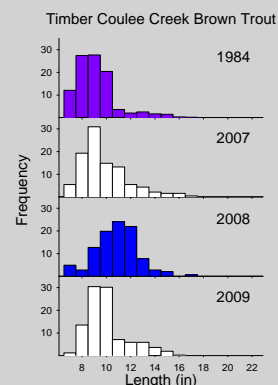
2008 Catch and Harvest Rates:

1.25 trout/hour caught
0.04 trout/hour harvested
119 trout kept from about 4 miles of stream



Trout Size

The average trout length harvested in 1984 was 10.6 inches, and the average trout length caught in 2008 was 10 inches.



Trout size structure in October at the end of the regular open season included more larger-sized trout in 2008 than in 1984, likely reflecting decreased harvest pressure.

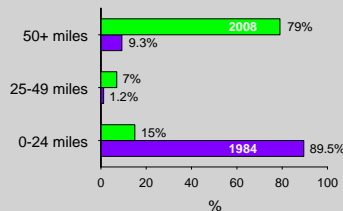
In 1984 only 12% of trout were 11 inches or larger.

In 2008 about 60% of trout were 11 inches or larger at the same stream site.

However, data from 2007-2009 show considerable year-to-year variability in size structure with the percentage of trout 11 inches or larger ranging as low as 25%.

Angler Demographics

Distance traveled to Timber Coulee

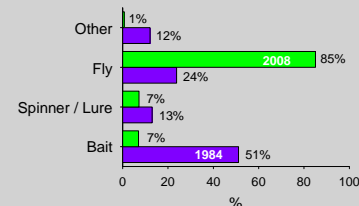


What used to be a harvest-oriented local trout fishery in 1984 has become a catch & release trout fishery primarily fished by anglers willing to travel greater distances to fish.

This willingness to travel to the Driftless region likely reflects the high-quality wild trout fisheries not only in Timber Coulee but throughout the region.

The preference for fly fishing in 2008 is consistent with the current catch & release ethic and declining interest in harvesting trout from Timber Coulee.

Type of Angling



Conclusions

In 2008 as in 1984, Timber Coulee provided a high quality brown trout fishery. Angler demographic changes and regulations have eliminated overharvest concerns raised by the 1984 creel survey. However, despite the high proportion of quality-sized 8 to 11 inch trout (60-80% in 2007-2009) and regulations allowing for their harvest, few anglers kept trout in 2008. If increasing harvest of quality-sized trout is a goal, a uniform regulation allowing harvest of trout less than 12 inches throughout Timber Coulee may be necessary.