North Platte Angler Newsletter

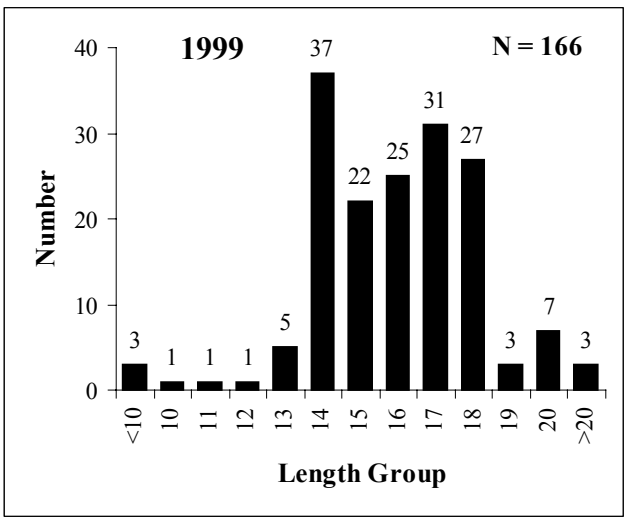
2001

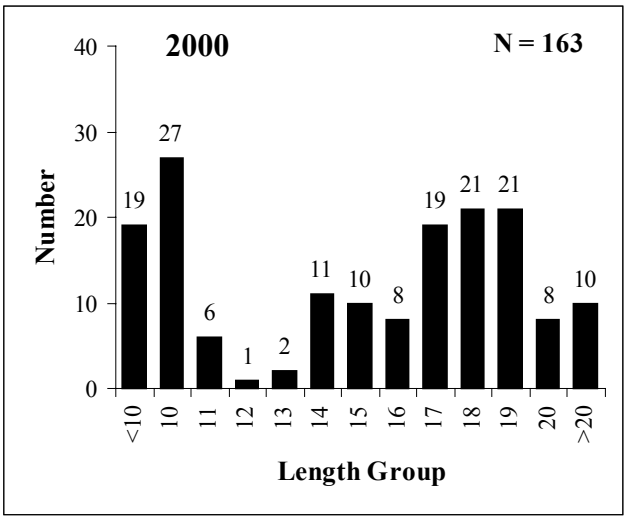
GLENDO RESERVOIR CREEL SURVEY

A Wyoming Game & Fish Department (G&F) creel clerk contacted many of you who fished Glendo Reservoir last year. The clerk conducted 3,667 angler interviews and measured 3,888 walleye. We used an airplane to count anglers several times each month to generate estimates of 52,470 anglers who fished 250,360 hours. Anglers caught an estimated 154,450 walleye, 17,770 yellow perch and 3,930 channel catfish. Of the caught walleye, 88,100 were taken home to the frying pan.

Most of the fishing pressure occurred from mid-May through mid-July. After mid-July, gizzard shad really come on and the walleye are much harder to catch. In addition to the shad, non-fishing recreational use like jet skis and water skiing increases making fishing more difficult.

Many of the anglers we talked to in 2000 asked why don't we have more restrictive walleye regulations on Glendo. The foremost reason is the walleye population is in good shape without a more restrictive regulation. Several anglers thought that since Nebraska and South Dakota have walleye slot limits that they must be good for our waters too.





These two graphs show the length frequency of our net catch in 1999 and 2000. Between our samples in 1999 and 2000, the creel estimated over 88,100 walleye were harvested. Even with this harvest, there are still lots of walleye in 17 to 19 inch range. This suggests to me that the population is not being

overfished. If angler harvest were having a negative impact on the population, we would not have seen many walleye in the 15 to 20 inch range following the fishing season in 2000.

Thanks for all your cooperation with the creel clerk in 2000. G&F will continue to keep tabs on the Glendo fishery through spot checks and roadblocks in the years to come.

GUERNSEY SLOUGH

Guernsey Slough is an old oxbow of the North Platte River located near the Guernsey Golf Course. The Slough has largemouth bass, pumpkinseed sunfish, green sunfish, channel catfish and carp. Water depths are fairly shallow on the upstream end and reaches depths near 15 feet downstream. There are good numbers of largemouth bass and both sunfish species. Channel catfish numbers also appear good. Some of the carp are very large (>10 pounds) and would be a real challenge on rod and reel.

The bass and sunfish reproduce on their own and G&F stocks 500 channel catfish each year. The Slough also has some neat historic sites nearby so it is definitely worth the trip.

SEMINOE RESERVOIR

Both trout and walleye populations are looking good for 2001 at Seminoe Reservoir (Table 1). Our nets caught 171 rainbow trout that averaged 15.0 inches and 1.27 pounds. Some of the areas that appear to have good trout numbers include Coal Creek Bay, Sand Mountain area and both river arms (North Platte and Medicine Bow).

Walleye populations also appear to be in good shape. A worrisome finding in our netting program is there have been few walleye the last few years in the 15 to 20 inch range. We feel since the current limit is 20 walleye, anglers are harvesting the walleye as soon as they grow to 15 inches or so. In the regulation meeting this spring, G&F will propose lowering the limit from 20 walleye to the statewide limit of 6. We have biological evidence this change is warranted plus it also reflects that walleye are a valued sportfish in Seminoe Reservoir.

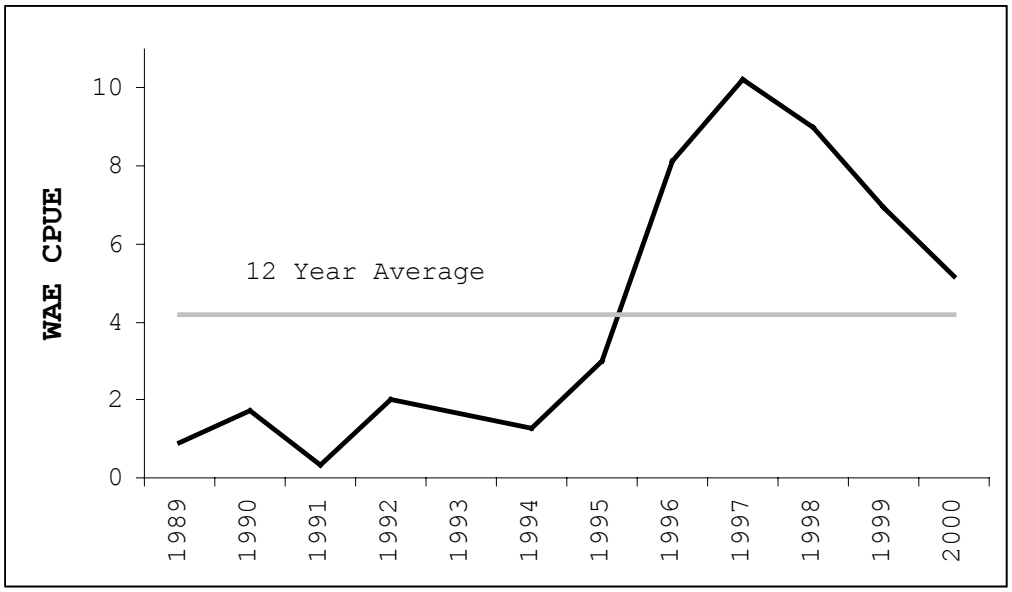
Table 1. Seminoe gill net summary, September 2000.

Species	Number Caught	Catch/ Hour	Avg. L (in.)	Largest (in.)	Avg. Wt (lbs.)	Largest (lbs.)
Rainbow Trout	171	0.51	15.0	18.4	1.27	2.32
Cutthroat Trout	18	0.05	14.1	16.7	1.09	1.81
Brown Trout	7	0.04	16.8	20.9	1.80	3.15
Walleye	93	0.59	14.6	32.1	1.74	12.88

A spot creel survey in 2000 found the 803 anglers we talked with had a catch rate of 0.42 rainbow trout/hour fished. Catch rates for walleye was nearly the same at 0.45 walleye/hour fished. Overall, the Seminoe fishery looks to be in good shape for 2001.

GLENDO RESERVOIR

Glendo Reservoir kept humming along in 2000. The creel survey in 2000 (see related story) showed great catch rates for walleye, almost as good as Grayrocks Reservoir in the late 1980s. Catch in our gill nets has gone down over the last two years but remains above the historical average.



Catfish appear to be very abundant in the reservoir. However, during the creel survey we found very few anglers, only 3% of the anglers we talked with, were fishing for catfish. Anglers who do harvest catfish rave about the flavor of this species.

The new state record white crappie (15 inches and 2.31 pounds) was caught in 2000. Both black and white crappie are in Glendo Reservoir. The easiest way to differentiate a white from a black is by the number of dorsal spines. The whites usually have 5-6 dorsal spines where the blacks usually have 7-8. Another good indicator is the way the fish's side looks. If it looks like it has bars it is probably a white and if it looks more checkered it is probably a black. Both species of crappie have some good-sized adults in Glendo in 2001. I wouldn't be surprised to see a new state record crappie, white or black, in 2001

With the recent high walleye numbers, yellow perch numbers have really taken a beating. Two years ago, G&F caught 17 yellow perch per gill net hour. In 2000, we only caught 1.3 yellow perch per hour. On the bright side, some really nice-sized perch, over 11 inches, are in Glendo.

Walleye, channel catfish and crappie fishing should be good in 2001. It will probably be hard to find many yellow perch this year. G&F plans to stock adult gizzard shad this spring to bolster the forage base at Glendo.

PATHFINDER RESERVOIR

The biggest change at Pathfinder from 2000 to 2001 will be the water level. The Bureau of Reclamation is projecting runoff to be below normal so water levels are likely to fall. How far levels fall is dependant on how much spring moisture the drainage receives. There are lots of nasty rocks that appear when water levels fall so be careful boating in 2001.

Trout numbers look good for 2001 (Table 2). Pathfinder is still the best reservoir in the Casper area to catch big trout. In addition to trout, there is a good year class of walleye in the 12 inch range. As this group of fish gets bigger, the walleye fishing should be good for years to come.

Table 2. Pathfinder gill net summary, June 2000.

Species	Number Caught	Catch/ Hour	Avg. L (in.)	Largest (in.)	Avg. Wt (lbs.)	Largest (lbs.)
Rainbow Trout	184	0.77	16.2	21.6	1.88	3.72
Cutthroat Trout	85	0.36	16.5	20.0	1.91	3.16
Brown Trout	18	0.16	18.5	23.2	2.29	4.28
Walleye	55	0.48	14.7	27.9	1.50	8.62

In 2001, the Marina boat ramp will receive a face lift partly thanks to a Fish Wyoming grant. The ramp will be repaired this summer.

MIRACLE MILE

We electrofished the Miracle Mile in July and found overall trout numbers have declined while overall pounds of trout have remained fairly steady (Table 3). What this means is there are fewer fish but they are, on average, bigger fish. Recruitment, especially of brown trout (BNT), seems to have declined in recent years.

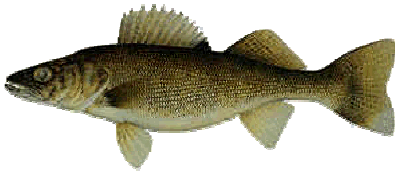
A new player in the Mile in recent years is Snake River Cutthroat (SRC) trout. We don't stock SRC in the Miracle Mile but we do downstream in Pathfinder Reservoir. We believe we have refined our stocking of SRC in Pathfinder to the point they are surviving very good. One odd thing we have found is anglers rarely catch SRC in Pathfinder but seem to do well catching them in the Miracle Mile.

We are doing an intensive creel survey from April through October in 2001. A creel clerk will work the Mile several times each month to collect information on catch rates and angler numbers. In addition, we plan to get fish population information (through electrofishing) several times in 2001 to compare what the anglers are catching to what is living in the Mile.

Populations naturally go up and down and we may be just in a down cycle. By spending more time than usual on the Miracle Mile this year with creel survey and population work, hopefully we can figure out why the rainbow and brown trout numbers are declining.

Table 3. Population estimates, mean length and weight for trout greater than 6.0 inches captured from the Miracle Mile electrofishing station, North Platte River.

Date	Species	No./Mile	Pounds/Mile	Mean Length (in.)	Mean Weight (lbs)
7/00	BNT	735	662	13.0	1.17
	RBT	920	1,350	14.4	1.70
	SRC	687	1,348	17.3	2.01
7/98	BNT	2,953	1,205	10.5	0.73
	RBT	1,257	1,662	14.3	1.71
	SRC	229	474	17.8	2.06
7/96	BNT	3,216	2,120	10.8	0.75
	RBT	893	946	12.7	1.16
6/95	BNT	3,719	2,920	9.3	0.82
	RBT	793	1,407	15.1	1.71
6/93	BNT	1,378	2,811	14.8	1.86
	RBT	192	419	14.4	1.72



GOLDENEYE RESERVOIR

If you've fished Goldeneye Reservoir the last few years you probably didn't catch many trout. We've been working for a number of years to come up with options to improve this fishery. The main problem is the abundant carp that have likely decreased the productivity of Goldeneye. The trout in the reservoir are in poor shape with an overall relative weight (Wr) of less than 80 in 2000. Wr is an index of how fat a fish is or essentially how healthy it is. In comparison, trout in Pathfinder had an average Wr of 100, 96 in Alcova and 87 in Seminoe.

We thought of using rotenone, a fish poison, to kill the fishery and start over with trout. The problems with this are the cost (>$25,000 just for the chemicals) and it hasn't worked for more than few years in Goldeneye in the past and probably won't again. Eliminating carp in the up and downstream drainage is likely impossible so the carp and their problems would soon return.

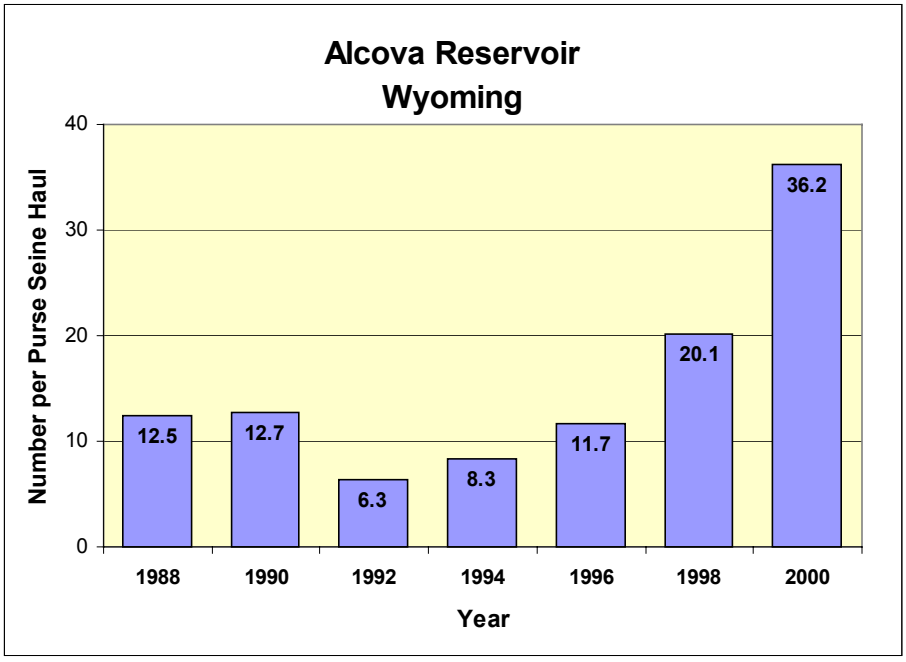
We propose to shift Goldeneye from trout to walleye. We plan to stock very small walleye for three years starting in 2001. If the stocking is successful, we will likely stock gizzard shad in 2002 and perhaps add some other coolwater predators in the future.

Even if the walleye do work, they won't be big enough (~12 inches) to catch until 2002. In 2001, there will still be a mediocre trout fishery if you want to fish at Goldeneye. In addition to trout, it would be great if anglers would help us reduce the large numbers of large carp by trying to catch this powerful species.

ALCOVA RESERVOIR

Long time residents of Casper know that Alcova Reservoir supported an exceptional rainbow trout population through stocking fingerling-sized trout before walleye arrived in the mid-1980s. Fishery biologists, conducting annual summer purse seining, averaged trout catches exceeding 100 trout per haul in the early 1980s. The invasion of walleye forced the G&F to stock larger trout to minimize losses to predation, placing a serious strain on hatchery capacity. Even with this stocking change, average purse seine catches dropped precipitously to a low of 6 per haul in 1992.

Between 1992 and 1996 all hatchery trout were tagged with coded-wire tags (CWT) to evaluate survival and strain performance and to refine trout stocking for the best use of hatchery fish. Tag data were collected through creel survey and biological sampling. Although differences between rainbow trout strains were noted, the most important finding from the CWT study was that trout stocked in the fall survived and returned to anglers significantly better than spring-stocked trout. Since beginning the shift to fall stocking in 1996, purse seine catches have risen every year and currently are over 300% higher than 1996 levels.



Walleye activity declines considerably in the fall when the water temperature cools. We found that by stocking in October, more trout avoid predation immediately after release. As a bonus, we also found that trout continue to grow through the winter months, increasing as much as 3 inches in length, so that when walleye metabolism increases in the spring, trout which survive and grow through the winter are too large to be eaten by the average walleye.

Although we have data to show that trout numbers have increased dramatically in Alcova, the next step is to determine the effect on fishing. We plan to conduct spot creel checks this summer to find out if angling has dramatically improved. These checks will be made several days per month from April

through October. These spot checks will be less intensive than the full creel survey the G&F conducted in 1995 and 1996 but similar spot checks on Seminoe and Pathfinder were very successful last year.

THE AMAZING GIZZARD SHAD

Gizzard shad (*Dorosoma cepediannum*) are a very important walleye forage item in the North Platte drainage and Keyhole Reservoir. The most amazing attribute is the fecundity of this species. Females can produce about 500,000 eggs each year.

If you have fished Glendo the last few years you have probably seen huge schools of small gizzard shad swimming the shoreline by mid July. By August, the young shad are 2-4 inches long, just perfect size for most walleye. One of the main reasons walleye fishing slows down in August and later is once the gizzard shad have come on, walleye are probably pretty full and not as likely to bite your lure.

Most winters, gizzard shad will die under the ice so they don't overpopulate like they do in the Midwest and cause problems. During some mild winters, gizzard shad will survive to the next year. If shad don't survive, G&F travels to Nebraska and collects adult gizzard shad to stock in some of our walleye waters.

WILD TROUT

There is something special to some anglers about catching a trout that was born in the water it is caught from. In the Casper area, wild trout can be caught in the North Platte River and many of the streams that flow into the Platte.

Very few of the rainbow trout in the reservoirs are wild. G&F did a coded-wire tag study a couple years ago; many of you likely remember us cutting the nose off your trout. By tagging all the hatchery trout that went into the Platte system from Seminoe Reservoir to Casper, we were able to determine the amount of natural reproduction in the Platte and the three big reservoirs. From 1992 through 1996, G&F marked every stocked trout with a fin clip and a coded wire tag. A creel survey in 1995-6 found over 90% of all the trout anglers caught in Alcova, Pathfinder and Seminoe reservoirs were hatchery trout.

G&F hatchery system has worked very hard to produce quality trout. Many anglers say the trout they harvested cannot be a hatchery fish because it is too pretty or its fins are too perfect. The truth is it is very hard if not impossible to tell a hatchery trout from a wild one.

GRAY REEF TO BESSEMER BRIDGE

Trout populations in North Platte River from Gray Reef Dam to Bessemer Bridge were sampled in fall 2000. The Gray Reef station starts just below the boat ramp below Gray Reef Dam and continues downstream for about 2½ miles. The Bessemer station starts just above the Narrows and ends about 3½ miles downstream near Speas.

Electrofishing estimates found high trout numbers in both areas, some of the highest trout per mile estimates in Wyoming (Table 4). Rainbow trout (RBT) make up the bulk of the fishery in both stations. On average, the RBT are larger in the Gray Reef station but are more abundant in the Bessemer station.

Both brown trout (BNT) and Snake River Cutthroat trout (SRC) make up a small percentage of the fishery in both areas. Even though these species are scarcer than RBT, there are some large individuals of both species.

Table 4. Population estimates, mean length and weight for trout greater than 6.0 inches captured from the Gray Reef and Bessemer electrofishing stations, North Platte River.

Date	Species	No./Mile	Pounds/Mile	Mean Length (in.)	Mean Weight (lbs)
GRAY REEF STATION					
10/00	BNT	269	624	17.4	2.48
	RBT	2,736	5,687	16.7	1.99
	SRC	90	208	17.5	1.99
BESSEMER STATION					
10/00	BNT	28	140	16.0	2.19
	RBT	4,020	3,083	13.5	1.23
	SRC	12	14	18.7	2.83

Fishing in 2001 should be great on the Platte all the way from Gray Reef Dam to Casper. Remember, much of the river in this area flows through private lands. Land ownership is marked with Blue/Red access signs. As you float downstream, a blue sign identifies the bank downstream the sign is public. The bank downstream a red sign is private land. Not all private lands are marked and it is your responsibility to know where the private lands are. If you float the river, you do not need landowner permission to fish as long as you stay in your boat and do not anchor in private lands. If you don't know where the private and public lands are, a good resource is a BLM map available at the BLM office in Casper or most of the sporting goods/bait stores. Good luck fishing.

WHIRLING DISEASE IN HATCHERIES

Whirling Disease (WD) has been a big issue in trout populations for a number of years now. Fortunately, in Wyoming, WD has had little impact on wild trout populations. Unfortunately, WD did infect some fish at one G&F hatchery in 2000. One of the water sources for the Dubois Hatchery is the Jakey's Fork. The WD parasite was found in the Jakey's Fork and the fish at Dubois became infected. These infected fish were destroyed.

The G&F's Fisheries Division takes any disease causing organisms that affect fish very seriously. In fact, G&F hatcheries are sampled for WD twice a year to assure that disease-free fish are stocked. No fish are stocked or transferred to another hatchery or rearing station until they are given a clean bill of health. Policy is in place that states, "No fish that are carriers of the WD parasite will be stocked in Wyoming's lakes or streams". As managers of your resource, the G&F doesn't want to add to the problem of spread, introduction or perpetuation of any disease. This conservative approach has been received with applause from several state game and fish agencies.

As happened at Dubois, an open water source (Jakey's Fork) is a possible route for disease transmission into a hatchery. Fortunately, most of the G&F hatcheries use well and spring water (closed water sources) that has little chance of harboring disease-causing organisms. G&F is in the process of removing the exposure to open water sources to protect the hatcheries and the fish they produce. For example, a huge building now covers all the fish raised at Daniel Hatchery. Forty Rod Creek flows right past the Daniel Hatchery and was found to be positive for WD. This new building isolates the hatchery from the creek helping keep the fish WD free. In addition, the dirt brood ponds at Auburn Hatchery have been replaced with concrete ponds and the water source at the Boulder Hatchery has been covered.

Dubois Hatchery has been a challenge. The G&F is currently drilling a well to supply water to the facility. Jakey's Fork water will not be used again. The goal is to have water piped to Dubois Hatchery by this fall.

Where do we go from here? WD is always a challenge to the Fish Culture stations. Anytime living organisms are held at high densities the chances for infection and transmission of disease is multiplied. The people that preceded current personnel should be commended for a great job of insight and sound practices that have prevented diseases from coming onto these facilities. It is because of these dedicated people that the G&F can have a disease free status at the 11 Fish Culture stations. Traditional Fish Culture rearing units (raceways, brood ponds, etc.) are being replaced and upgraded in some of the aging facilities. Dirt ponds will likely be replaced with concrete units to aid in the management of fish disease concerns. All changes will reflect the goal of the G&F's Fish Culture Section and that is to provide the most genetically diverse, disease free, and highest quality fish for public use.

If you want to know more about WD, the regional G&F offices and G&F website (www.gf.state.wy.us) has some great information available.

ODDS AND ENDS

 Yesness Pond underwent a renovation last winter. The City of Casper obtained a Fish Wyoming grant from the G&F to deepen the pond and fix the outlet structure. The deeper pond did overwinter trout and rainbows from 9 to 13 inches were sampled in late March. Speas Rearing Station stocks the pond throughout the spring and summer so fishing should be good this year at Yesness.

 A new river section near Casper will soon be a reality. What is being called the Cardwell Fishing Easement is located below Pathfinder Dam and will flow to the top of Alcova Reservoir. Following stream channel work this summer/fall, the flow will be turned on for good by the Bureau of Reclamation. A flow of at least 75 cubic feet per second will perpetually be in the channel.

 Water levels at Burlington Reservoir were very poor going into last winter. The deepest area in the reservoir was about 5 feet last August. With financial and labor assistance from the Wyoming Fly Casters, we installed and maintained an aerator system hoping to save this bass, sunfish and trout fishery. Even with the aerator, we fought an uphill battle with the low water levels and severe winter this year. Sampling in May found the reservoir did not overwinter any fish. Small rainbow trout (4-5 inches) were stocked in early May and should be catchable size by July.

Thanks go out this year to Jim Barner, Roy Whaley, and Brian Olsen for their contributions to this years' newsletter.

Remember that we manage your fisheries for you. We always want to hear from anglers, so let us know what you think.

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