

BIG HORN BASIN ANGLER NEWSLETTER



FEBRUARY 2000

QUOTABLE QUOTES: "FISHING AIN'T AS GOOD AS IT USED TO BE, AND NEVER WAS"



If you have ever heard an angler talk about how good the fishing used to be back in the "good ol days," then you know what I am talking about. Seems the older we get the more cloudy our memory of past fishing experiences becomes. As a kid in Illinois, I was fortunate enough to have a fishing pond just ½ mile up the road. One day the gang and I were at the pond (we were always at the pond) and the fish biologists showed up to do some sampling. As they shocked around the pond our eyes began to bulge. Big bass and bluegill were popping up everywhere. Of course my recollection is

of giant bass (10 pounders) and bluegill (pounders) in such an abundance as to overwhelm even the most sophisticated and experienced 10-year old angler. That was my memory at age 10. Over the next 17 years, I fished that pond hundreds, maybe thousands, of times. Not once did I catch a bass that weighed over 6 pounds. In fact, in a 3 county area, I don't remember seeing or hearing of a bass greater than 6 pounds.

All right, I guess you get the point. By nature, we anglers tend to exaggerate a bit, because our brains are programmed differently. When we think of fishing, our central nervous system tends to conjure up images of the biggest fish and the best of fishing times. Some have argued, and effectively so, that fishing was better. However, they are always talking about a specific fishery. For example, walleye fishing at Yellowtail Reservoir was much better in the 70's and 80's. Sediment accumulation and changes in water management hurt the fishery. But since the 70's, changes have occurred to make our fishing better.

New technology has improved our research and helped us to better understand our fisheries. This has led to better fishing. New fisheries, like Markham, New Cody, and Harrington reservoirs have emerged as good places to fish and the new Walk-In-Area program offers a chance to fish places previously off-limits. New species have been introduced to make angling a bit more interesting (e.g. crappie, sunfish, splake, bluegill). And finally, we are communicating better with the people we work for (you the angler), so we know what you want. So, I guess it is true..."Fishing ain't as good as it used to be and never was (that good)." Surely, these are the best of times.

If you have any thoughts about our management strategies, please let us know. We have a toll free line set up just for this purpose (1-800-654-1178) and would like to hear from you. You can also send feedback via the US Postal Service (Fisheries Feedback, 2820 State Hwy. 120, Cody, WY 82414), or e-mail (mwelke@state.wy.us). See you out on the water!

WALK-IN AREA PROGRAM PROVIDES MORE PLACES TO FISH IN 2000



In January 1999 Game & Fish launched an aggressive new program to secure fishing and hunting access to private lands. We held a series of public meeting last year and the message from anglers and hunters was clear! You want more access to public wildlife resources located on private lands. In response, the Walk-In Area (WIA) Program got off to a great start in the Big Horn Basin in 1999! Between the fisheries management crew, wildlife biologists and game wardens, access was secured to hunt and fish on some 25,000 acres of private lands, including 23 miles of stream fishing. Not bad!

Access is now available on the Big Horn, Nowood, Greybull, and Shoshone rivers and Paintrock and Medicine Lodge creeks in Big Horn County, the Shoshone River and Bitter and Alkali Creeks in Park County, and the Big Horn River in

Washakie County. WIA brochures, showing access locations and designated uses, will be available at Game and Fish regional offices and license selling agents this summer.

MY NEIGHBOR ED GOES FISHING...AND CATCHES A ROBIN!



My neighbor Ed is a "seasoned citizen" who really loves to fish. One day Ed and I decided to try fly-fishing at a local pond. Since Ed had not been fly-fishing in a while (pre-Roosevelt Era), some preparation was necessary. After accepting my invitation, Ed shuffled off into his garage and returned (an hour later) with a museum-quality fly rod (probably the prototype for all future rods). After attaching the reel (another museum-quality specimen), Ed began the setup process familiar to all fly-fisherman. While setup takes only minutes for the average angler, Ed takes a little longer. You see,

although Ed has the heart of a young lion, his eyes are more like that of an aged mole. Peering through his Mr. Magoo glasses, Ed began the tedious process of applying the leader to the dust covered fly line. About three hours later Ed had the line ready. Dusting off his old fly box, Ed selected a beautiful red and white, handcrafted popper and tied it on with blazing speed (about 30 minutes). Finally we were ready to go, or were we? Much to my chagrin, Ed felt he needed a few practice casts before heading out.

Ed began to wave the bamboo stick through the air, creating a tremendous whooshing sound and apparently altering atmospheric conditions (wind gusts at the airport were recorded at 29 mph). Eventually Ed worked out enough line to get the popper snapping about twenty feet out across the yard. Unbeknownst to Ed (apparently Ed's glasses don't do much to enhance his vision), that beautifully colored popper had attracted the attention of a Robin. This Robin was a well-fed specimen, approximately the size of a small chicken. His beady little eyes set on the prize, the Robin swooped toward the popper with all the grace of...a small chicken. What happened next could have made me a wealthy man...if only I would have had a video camera (America's Funniest Home Videos would have loved it).

No sooner had Ed's popper hit the ground than the Robin pounced on it with all the speed of...a small chicken. Ed began his back swing to bring the fly to him, but the Robin (weighing about as much as a small chicken) was not about to relinquish his grip on the popper. Totally bewildered, Ed began to pull on the line, apparently thinking he was hung in the grass. The Robin, digging in his little bird feet, was not going to be denied. When Ed suddenly let off the pressure, the Robin must have thought he had won the battle and proceeded to fly away with his quarry. Of course, feeling the tension, Ed's natural reaction was to set the hook. Which he did, bringing the bird back down to earth. By this time I was rolling around on the grass and laughing uncontrollably. The Robin, apparently not enjoying the fiasco as much as I, dropped the popper and fluttered off to resume his quest for lunch.

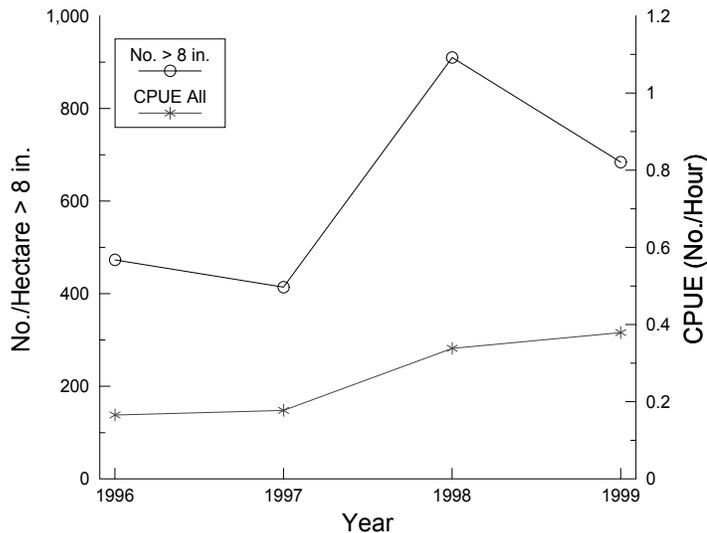


After regaining my composure and patching up what was left of Ed's ego, we loaded up and headed out to the pond. Ed did catch some nice brookies that day, but I was not so fortunate. I didn't catch much, since I was keeping a close eye on all those blackbirds (saliva dripping from their little beaks) that were hungrily eying Ed's popper.

RENNER RESERVOIR: STILL THE MOST POPULAR BASIN BASS FISHERY



Renner Reservoir is still the hot spot for bass fishing in the Big Horn Basin. With the decline of the Harrington Reservoir fishery, it seems that more anglers are piling into Renner. On the two days that I fished Renner last year (both weekdays), there were at least 10 other anglers there. Hardly the kind of fishing pressure you see in the Midwest and south, but still more than we Wyomingites are accustomed to. Despite the increased fishing pressure, Renner continues to provide good bass fishing. Although we didn't catch any over 13 inches, we had great time trying to keep the 10-13 inchers off the hook.



In 1999, our sampling found slightly fewer adult bass, but not enough of a drop to sound the alarm bell. The biggest difference between 1998 and 1999 was fewer bass larger than 13 inches. Abundance of all bass has continued to increase since 1996 (see graph). Good reproduction and survival of smaller bass has kept the fishery thriving. Although adult abundance is below peak 1995 levels, maximum size in 1998 and 1999 (15.1 inches) was greater than 1995 (10.5 inches). Bass fishing should be good again this year, but the size may shift a little toward smaller bass.

In 1997 we began to stock green sunfish-bluegill hybrids. Hybrid sunfish were stocked in 1997 (6,750), 1998 (20,500), and 1999 (8,000). Our sampling found that

abundance of hybrid sunfish was low in both 1998 and 1999. Poor survival of the sunfish was likely due to predation by the bass (little sunfish are a tasty treat for Renner bass). We hope to overcome predation and increase sunfish abundance by stocking more hybrids. Growth of the hybrids was excellent (average length=4.2 inches; range=2.6-7.0 inches). Catch rates should increase in future years as past plants reach a size vulnerable to anglers and density increases with more sunfish stocked.

BROOK AND CUTTHROAT TROUT ABUNDANT IN BEARTOOTH LAKES

Sampling last summer in the Beartooth Mountains revealed an abundance of brook and cutthroat trout. If you are looking for high catch rates target those waters with the greatest number of trout per net hour. A complete list of Beartooth Mountain Lakes (location, number stocked, and most recent sampling data) is available at the Cody Regional Office.

Water Name	Species	Number Caught	Number Per Net Hour	Average Length	Length Range
Heart Lake	Brook	77	4.53	8.6	4.7-10.2
Upper Shepherder L.	Brook	50	1.41	9.5	4.3-15.9
Emerald Lake	Brook	8	0.44	12.8	12.5-13.0
	Cutthroat	8	1.78	13.0	9.8-16.0
Little Glacier Lake	Brook	15	6.00	8.0	6-9-9.9
Glacier Lake	Brook	13	0.71	9.8	8.3-12.0
	Cutthroat	27	1.48	10.0	6.7-14.5

SHOSHONE RIVER TAILWATER: AN URBAN ANGLER'S PARADISE



We are fortunate to have a river like the Shoshone, flowing through our area. The Shoshone has aesthetic (beautiful scenery) and olfactory ("Stinking Water River") value, but most important is the recreational fishery it provides. The Shoshone tailwater fishery is an urban angler's paradise. Although some claim the Shoshone is over-fished and over-harvested, annual sampling has proven otherwise. Population estimates in the fall (upstream of Belfry Bridge) found a total trout density of 2,625 per mile, which is nearly identical to the 1998 estimate (2,649 per mile). Adult brown trout abundance has increased steadily since 1997 (819/mile in 1999 compared to 658/mile in 1998).

Species	Number Captured	Average Length	Number Per Mile
Brown trout	484	11.5	835
Rainbow trout	640	11.8	965
Snake River cutthroat	581	11.5	824
Yellowstone cutthroat	10	14.4	
All trout	1,715	11.5	2,625

In 1998, we stopped stocking catchable Snake River cutthroat, but continued stocking 20,000 sub-catchables. Even after stopping the catchable plant, the number of Snake River

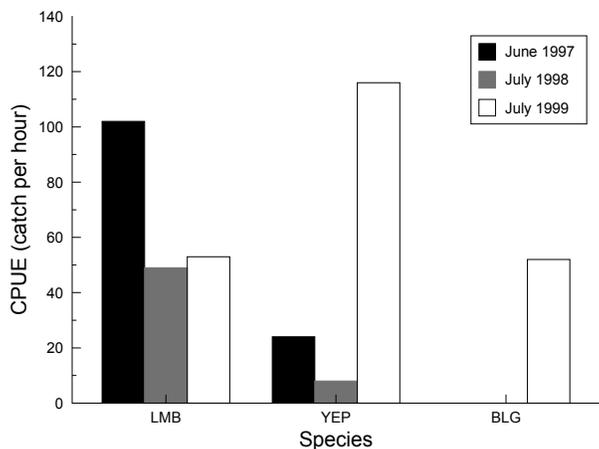
cutthroat increased more than 40% from 1997 to 1998 and remained stable in 1999. One of the factors affecting cutthroat abundance is aquatic vegetation, which provides resting and feeding cover. High flows during 1996 and 1997 reduced the amount of aquatic vegetation, but vegetation abundance is beginning to return to normal levels.

HARRINGTON RESERVOIR: INVASION OF THE BASS SNATCHERS?



Harrington Reservoir has become somewhat of a mess (fish manager's nightmare), thanks to the introduction (or invasion) of yellow perch. Our plan was to provide a bass-bluegill fishery with some "quality" or "trophy" bass (18+ inches) and harvestable-size bluegill (8-10 inches). However, the forces of nature (vigilante anglers) appear to have prevailed against us. Not only do we now have yellow perch, but we also have walleye. Apparently some angler has taken it upon himself to manage the reservoir. How they got there doesn't matter as much as the damage they have done.

Last spring, anglers were catching limits of big perch 8-12 inches. However, by summer big perch were hard to find and were nonexistent during the ice-fishing season. When we sampled with nets last spring we also found an abundance of adult perch, but by July all we could find were 4-5 inch perch. What we did not find from netting or electrofishing were any small bass or bluegill. We also noted that the fathead minnows, which were once abundant, had all but disappeared. Based upon these observations, we believe that the yellow perch have eaten themselves out of house and home. This invasion of the bass snatchers threatens to ruin what was once a promising new fishery.



Bass density declined substantially from 1997 to 1998, primarily because of angler harvest. Angler surveys found that harvest rate was 100% (i.e., no release of bass). Bass density increased slightly from 1998 to 1999; however, the increase was due to the fingerling plant, which occurred prior to sampling. The good news from sampling was we did catch some of the bluegill from the 1997 plant. The number captured (65) and size (mean length=5.8) indicated reasonable plant success and good growth.

It appears that yellow perch have negatively affected the fishery by eating other small fish (bass, bluegill, and fathead minnows) and competing with small fish for food. Harrington Reservoir could have been a great fishery and it is possible that we can still fix it. However, it will be an uphill battle. As so often happens, when yellow perch are introduced their numbers soon swell and they take over a fishery. The result is poor fishing for other sportfish and lots of tiny yellow perch. Right now our strategy is to swamp the fishery with bass and hope they can control the perch. We will also continue to remove yellow perch when we sample (put them in Wardell where they belong). The only other option is to drain the reservoir down, treat it with rotenone (fish toxin), and start over. That doesn't seem like a good option, given the cost and potential for another introduction of perch.

THINGS YOU SHOULD NEVER SAY WHEN VISITING A STRANGE WYOMING TACKLE SHOP.

- I'm from Colorado (or California) and was just...(abrupt end to conversation).
- All right, who is going to be a sport and show me their favorite fishing hole?"
- What! No helicopter lures or banjo minnows? How do you people ever catch any fish?"
- Are those frozen cheeseburgers any good to eat?
- You do take traveler's checks, don't you?"

- ❑ Anyone know who owns the Dodge diesel flatbed (with dog) out front that I just ran into?" Likely response: hey Bubba you'd better get in here!
- ❑ I need a new rod. Do you have anything in a teal blue to match my waders?"

UPDATE ON PROGRESS OF STURGEON REINTRODUCTION



Shovelnose sturgeon could once be found swimming in the turbid waters of the Big Horn River. However, they disappeared in the early 1900's after dams were built. Irrigation and reservoir dams blocked the river so that adult sturgeon could not swim up the Big Horn from the Yellowstone River in Montana. In 1995, the Game and Fish Department began an effort to reintroduce sturgeon to the river. We stocked 290,000 sturgeon from 1996-1998, which were mostly small fish. This year we did not stock, because of disease problems in the federal hatchery.

Electrofishing this year found only four sturgeon, even though we sampled quite extensively. An angler near Lovell caught another sturgeon. All five sturgeon averaged about 24 inches in fork length (measured from snout to fork in tail). The low numbers of sturgeon is discouraging, but might be because most of the sturgeon are still small. As the sturgeon grow they should be more vulnerable to our sampling gear and also more vulnerable to angling.

We plan to stock again next year and also plan more sampling to determine how well the reintroduction effort is doing. In the meantime, keep your fingers crossed and lets hope that the reintroduction effort is successful. Please report any sturgeon you catch to the Cody Regional Office (1-800-654-1178).

THE GRAND SLAM AT EAST NEWTON LAKE



If you haven't heard of East Newton Lake, then it is time to crawl out from under your rock and head to Cody. East Newton Lake may be the most impressive fishery in the entire Big Horn Basin. The lake offers a unique grand slam of trout fishing, including brown, rainbow, brook trout, and splake. Four species in one lake is impressive, but more impressive is the size of the fish. Sampling this year found that average length had increased for all species. Brown trout led the way with a whopping average length of 20.7 inches. Splake were second at 20.1 inches, followed by rainbow at 19.6 inches and brook trout at 17.3. The average weight for all trout was greater than 2 ¼ pounds. Wow! Maximum size was also worth noting. Brown, rainbow, and splake are all over 23 inches. Where else in the Big Horn Basin can you expect to find fish of this size and of this abundance? I can think of only one place and you will have to pay to fish it. So don't waste any more time. Get out there and fish! But remember this is a special regulation area (only one over 20 inches can be kept).

Species	Number Sampled	Average Length	Length Range	Average Weight	Weight Range
Brook	10	17.3	15.6-18.6	2.26	1.82-2.58
Brown	29	20.7	19.0-23.1	3.35	2.48-4.34
Rainbow	145	19.6	11.6-25.8	3.05	1.81-6.19
Splake	92	20.1	17.0-23.0	2.91	1.82-3.89



REEL FUNNY?

 Three men were fishing in a lake and they were really bringing them in. Before heading back to the dock they decided to mark the spot where they were fishing. Once back in, one of the guys asked, "Did someone remember to mark that spot?" "Yeah, I did," replied one fellow. Then he added, "I put a big X in the middle of the boat."

 Question: What do you get when 4 men go fishing and one comes back without catching anything?
Answer: Three men and a baby!

 There were two old boys from California who loved to fish, and they wanted to do some ice fishing. They'd heard about all the good fishing up in Wyoming and headed this way. The lake was frozen nicely. They stopped just before they got to the lake at a little bait shop and got all their tackle. One of them said, "We're going to need an ice pick." So they got that, and they took off. In about two hours, one of them was back at the shop and said, "We're going to need another dozen ice picks." Well, the fellow in the shop wanted to ask some questions, but he didn't. He sold him the picks, and the old boy left. In about an hour, he was back and said, "We're going to need all the ice picks you've got." The fellow couldn't stand it any longer. "By the way," he asked, "how are you fellows doing?" "Not very well at all," he said. "We don't even have the boat in the water yet."

FISHING NEWS FROM AROUND THE BIG HORN BASIN

 **Ruff Reservoir** (Badger Basin area) has an abundance of bass and rainbow trout. Although bass numbers are high, size is small (maximum of 12 inches). Rainbow trout average 12 inches with a maximum size of 14 inches.

 **The South Worland Pond (Airport Pond)** fishery appears to have declined in recent years. Sampling this year found fewer sportfish than previous years. Each year we stock 500 catchable size rainbow trout. In 1997 and 1998 we also stocked 5,750 hybrid sunfish. We did not find any sunfish, indicating that survival was poor. Although there are still perch, bass and trout to catch, we think the fishery may need help. The pond could use some habitat improvement, like increased depth and more habitat structures.

 **Lily Lake** (Big Horn Mountains) will be stocked this year with Yellowstone cutthroat. The lake suffered a winterkill in 1997 and was not restocked last year. Lily will be one of the lakes we look at during our stocking study.

 **New Cody Reservoir** fishing continues to be good, judging by the increase in trout catch rates in 1999. At **Markham Reservoir** trout catch rates declined slightly from 1998 to 1999.

 **Horseshoe Reservoir (Pond 5)** on the Yellowtail Habitat Unit was drained in December. Draining was necessary to screen the inlet (prevent carp from coming in), repair the outlet structure, and improve the habitat. The reservoir will be restocked in 2000 with largemouth bass, hybrid sunfish, and catchable size trout. Look for a new and improved fishery in years to come.

 **Yellowtail Reservoir** will no longer receive walleye from Ft. Peck Reservoir in Montana. Concerns about the potential for hybridization between walleye and native sauger have forced us to discontinue stocking Ft. Peck walleye. Although hybridization in nature is rare, introducing hybrids (saugeye) can lead to crossing with native sauger. Last year we stocked walleye from North Dakota, where the potential for brood stock contamination (hybrid sauger and walleye) is low.

 **Deaver Reservoir** continues to develop into one of the area's finer walleye fisheries. Sampling this year found lots of walleye, averaging just under 13 inches with a maximum size of 18 inches. Ice anglers reported good catches of walleye (some over 20 inches).

 **Mayland Stock Pond** may be the site of the next Fish Wyoming Project. We are currently working with the irrigation district to improve the fishery. Plans are sketchy now, but we would like to drain the pond to deepen it and place some

habitat structures. Repairs to the outlet are also badly needed, which may require rebuilding the dam. We would also like to put in a boat ramp and outhouse. Right now this is on the wish list, but we are working to make it a reality.

 **The Meadowlark Lake** stocking evaluation was completed in 1999. Over the past three years we marked (fin clip) all the hatchery trout and sampled by netting to determine survival of hatchery fish and numbers of wild and hatchery trout. Sampling found good survival of rainbow, but cutthroat did not fare as well. Right now the lake has a good population of wild brook trout and hatchery rainbow trout. We plan to stock 25,000 fingerling and 5,000 catchable rainbow trout each year. Let us know how our new strategy is working.

 **The Big Horn Mountain Lakes** will be the focus of study designed to develop new stocking guidelines. In a nutshell, the study will determine which species is best suited for each lake and what numbers of fish should be stocked for maximum growth and survival.

 **Deep Lake** in the Beartooth Mountains is truly deep. Mapping of the lake found the maximum depth was a whopping 505 feet. I wonder what lies on the bottom of that one.

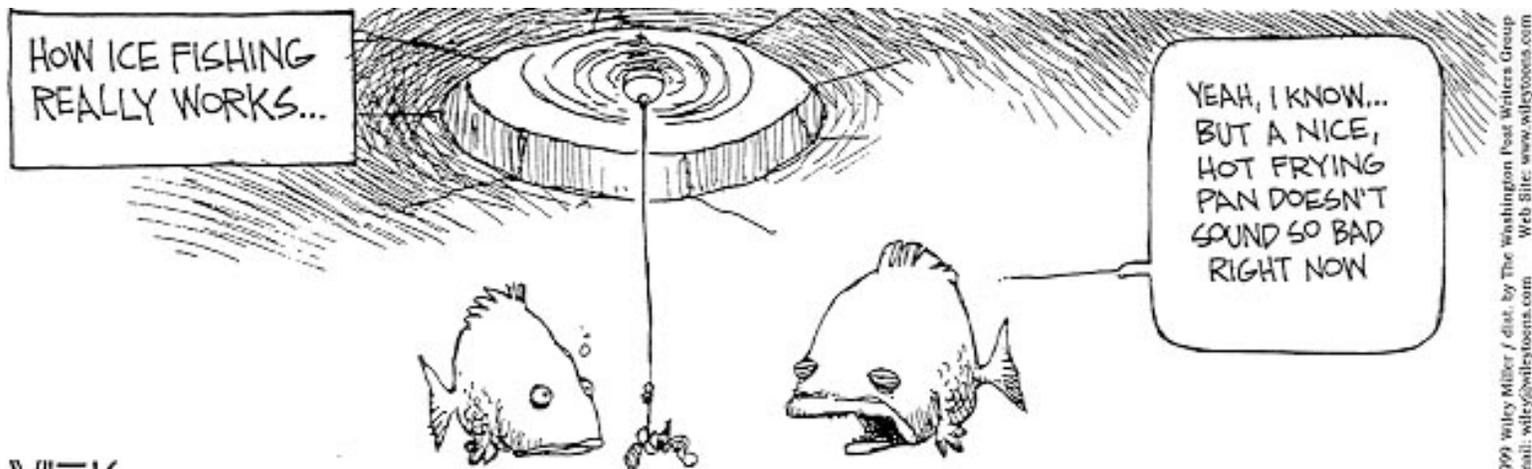
HARRINGTON RESERVOIR SCOUT PROJECT IMPROVES HABITAT



Harrington Reservoir is a 184 surface acre reservoir in Big Horn County. Since impoundment in 1993, cooperative efforts have resulted in an improved road, access signs, restrooms, gravel boat ramp, waterfowl nesting structures, and a largemouth bass-bluegill fishery. As with most reservoirs in Wyoming, some sagebrush and other shrubs were covered by water during filling. However, these shrubs begin to deteriorate and disappear over time leaving a smooth bottom reservoir with little hiding cover for small fish.

In 1998, Game & Fish (G&F) submitted a 404 permit application to the Army Corps of Engineers for permission to install man made fish habitat reefs. To complete the project, assistance was enlisted from Boy Scout Troop 41 in Otto. A design plan and materials were supplied by G&F, but Troop 41 did the real work. One Eagle Scout candidate coordinated the troop's efforts to collect the needed materials and construct the tire structures. A

second Eagle Scout candidate coordinated the efforts to provide the canoes, construct an A-frame type support system to carry the tire structures on the canoes, and place the habitat structures. Each habitat structure consisted of nine tires joined together to create a pyramid-shape structure. Individual pyramids were placed in groups to artificial reefs. The primary benefits of these structures are to provide cover, create surface area for attachment of aquatic insects, and increase spawning habitat. Another obvious feature is the ability to attract fish (hint: fish the structures!).



CATCH-AND-RELEASE ONLY ON TEN SLEEP CREEK?



During the regulation meetings, Worland area anglers asked us to consider a catch-and-release regulation with tackle restrictions (lures and flies only) on Ten Sleep Creek near the Wigwam Hatchery. You wouldn't think that a simple request would cause so much gut churning, but it does. Calls for special regulations present a quandary. In a nutshell, should fisheries biologists implement regulations based on social reasons, biological reasons, or a combination of both? If we have no biological reason to change a regulation, then it becomes a social issue. Sociology is an area that we biologists are ill-prepared to deal with (otherwise they would call us fisheries sociologists). We are biologists and ecologists by trade and tend to use scientific data, logic, and reason in our management plans.

OK, lets talk about regulations based on biology first. Here we suspect that there may be a problem. The questions we need to answer are 1) How many trout do we have now?; 2) How many trout can the stream support; and 3) Has the number of trout or size structure of the population changed? If we see that trout numbers are down, then we need to determine why. Was it caused by the environment or by angler harvest? If we eliminate Mother Nature as the cause, then we assume that angler harvest is the culprit. But to be sure, we would need a creel survey to determine angler use and harvest. Once all the data is collected and analyzed, we select the type of regulation that best suits the problem. Even after the regulation is implemented, we must still evaluate how the regulation is working. A typical evaluation would include 3 years of monitoring, often combined with more creel surveys. With all the time and effort involved, the use of regulations must be weighed carefully. If we have no reason to suspect there is a problem, then there is no reason to begin a costly, labor-intensive evaluation. Your dollars are better spent on other projects.

Ok, now regulations based on sociology. Here we wouldn't care if the regulation is necessary to protect the fishery, or even if it would have an effect on the fishery. The new regulation would be used solely to provide an angling group with a place to fish. So we can forget any biological studies. But we still have a problem. If we implement the regulation, will we exclude some types of anglers? To answer this question we must determine what types of anglers use the stream and what type of tackle they use. Is the stream used by children or senior citizens, who are unable to access other places to fish? How do we answer these questions? One way is by soliciting comments via the media (like this newsletter). Others include creel surveys and public meetings. Opinion: creel surveys are not the best use of your money. Fact: public meetings are usually not well attended.

The greatest dilemma we face is should we give one group the right to exclusive use? All types of anglers use Ten Sleep Creek now. If we use sociological arguments to set regulations then we will exclude some anglers. By now you have either quit reading, or really want to know how we plan to tackle the problem. Our plan is to sample two sites on Ten Sleep Creek to evaluate the fish population and habitat. Come May 2001, we will bring this proposal back to the anglers. We will present our fisheries and habitat information and do our best to explain the impacts (or lack thereof) that the regulation would have on the fishery. If the regulation would not hurt the fishery and is acceptable to anglers, then it could be implemented in January 2002.



SAUGER STUDY NEARING COMPLETION



From March-December we spent a lot of time on the Big Horn River, studying native sauger. Our objectives were to determine 1) how many sauger we have now, 2) how they are distributed in the river and tributaries (Nowood, Shoshone, Greybull), 3) what type of habitat they need, and 4) how much habitat is available. The goal of the study is to collect enough data to protect and enhance the Big Horn River sauger population.

I could dazzle you with a bunch of scientific jargon and statistical tests, but I know you anglers just want the bottom line. What do we know that will help you catch more sauger.

- ❑ During early-spring (March and April) target the middle section of the river (basically Manderson-Greybull). We found few sauger in the upper river (Worland-Manderson).
- ❑ During the spawning period (mid-April to mid-May) concentrate on the river section from Greybull to Sheep Canyon.
- ❑ If you are looking for walleye and lots of them, try the river section from Sheep Canyon upstream to about 2 miles above the stucco plant. We found large concentrations of walleye spawning here around late-April.
- ❑ During the summer and fall, you can catch sauger about anywhere, except the lowermost river section (near ML Ramp on the Yellowtail Habitat Unit). Sauger appeared to be scarce here during summer and fall.
- ❑ During the winter, try fishing Yellowtail Reservoir. Sauger in the river appear sluggish and don't move a lot (hard to catch). Many sauger are moving into Yellowtail Reservoir for the winter, so it may be the best place to target.
- ❑ Fish in areas where water velocity is slow, depth is 3-5 feet, and the bottom is predominately sand or silt. We found that sauger preferred habitat that fit the above description and avoided habitat that lacked these characteristics. Sauger especially avoided high velocity areas with gravel and cobble substrate (like riffles in mid channel).
- ❑ During the summer, if you know where there are large concentrations of shiners, fish there. Sauger seemed to be feeding primarily on shiners during the summer, but switched (possibly to stonecats) in the fall. Obviously, shiners would be your best bait during the summer.
- ❑ If you are looking for big sauger, target the sheep canyon area during spawning (mid-April to mid-May). We sampled numerous large sauger here that would easily qualify for an In-Fisherman master angler award (22+ inches).

Ok enough of the tips, back to the study. We plan to continue sampling up through the spawning period in June. The study will be complete after we look above diversions on the Nowood, Big Horn and Shoshone, to see if there is suitable habitat for sauger. If habitat is suitable we will look at fish passage through these diversion to help sauger get established. At minimum, the study will give us the information we need to better manage and protect this important native fish. Look for more information in next year's newsletter.

WEST NEWTON LAKE REHABILITATION COMPLETED IN 1999



With help from volunteers, the lake was chemically treated to eliminate yellow perch. Removal was necessary because perch had become stunted (most were 3-5 inches) and were competing for food with Yellowstone cutthroat. Cutthroat are the primary species that the lake is managed for. Prior to rehabilitation, perch were captured and transferred to other waters. A total of 6,452 perch were transplanted to Diamond Creek Dike Pond, Beck Lake, and Wardell Reservoir.

In November, 2,348 pounds of powdered rotenone and 30 gallons of liquid rotenone were applied, resulting in a complete kill. We plan to stock Yellowstone cutthroat and are still considering a sterile bluegill-green sunfish hybrid as a panfish to replace the yellow perch. However, given the cold water and low productivity, hybrid sunfish might not do well in West Newton.

BUFFALO BILL RESERVOIR: ALL NEWS IS NOT GOOD NEWS

In 1999 we used trap nets, purse seines, and hydro acoustics to sample the fishery. Results of trap net sampling are shown in the table below

Species	Number	Number/net night	Average Length	Length Range	Average Weight
Brown	29	0.85	11.0	4.2-18.3	0.69
Lake Trout	2	0.06	17.7	16.5-18.8	1.29
Rainbow	101	2.97	10.5	2.7-18.6	0.70
Y. Perch	37	1.09	4.8	2.5-8.1	0.05
Y. Cutthroat	37	1.09	13.1	4.4-17.0	0.99

Although there is still good fishing to be found at Buffalo Bill, annual sampling has shown that trout abundance has declined. The primary reason for the decline in trout abundance appears to be sustained, high inflows into the reservoir. Inflows have been higher than normal during three of the past four years (1996, 1997, and 1999). High inflows affect the fishery in two ways. First, high water velocity negatively affects reproductive success of trout, which leads to fewer small trout. Secondly, the few small trout that are produced will have less food. During high inflow years, zooplankton production declines. Since zooplankton is the primary food source for trout in the reservoir, growth and survival of young fish is poor. High snow pack levels in the surrounding mountains are always a welcome sight. However, if all that snow comes off in a short time period, the consequences may not be so good for fish. Lets hope for high snow pack levels this year, but a more protracted runoff. A few years of normal inflows should help the fishery to return to pre-1997 conditions.

WARDELL RESERVOIR WALLEYE FISHERY CONTINUES TO IMPROVE



Between 1994 & 1996 the walleye fishery declined because of poor reproductive success (2 weak year classes in a row). In 1997 we decided to stock the reservoir again. We stocked fingerling walleye in 1997 (3,500) and 1998 (2,752) and 1999 (2,750). The purpose of the stocking was to guard against weak or missing year classes. The good news? Stocking has led to a much improved walleye fishery. In 1998, gillnet catch rate was higher than 1994, the last of the walleye "glory years". Gillnet catch rate in 1999 was the same as 1998, indicating that the fishery has stabilized. In addition, size has increased to well over 20 inches.

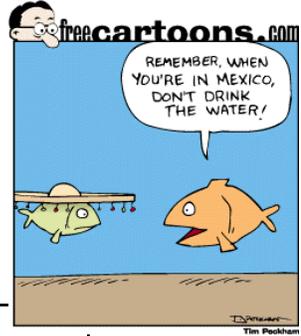
Date	Spp.	Gear Type	No.	CPUE	Mean Length	Length Range	Mean Weight	Weight Range
8/94	WAE	EG	51	0.96	13.3	5.1-23.0	1.04	0.04-3.60
9/98			37	1.28	11.9	5.2-20.0	0.68	0.04-2.44
5/99			44	1.28	11.8	6.9-24.0	0.65	0.10-3.77
8/94	YEP	EG	29	0.55	5.6	3.6- 8.5	0.10	0.02-0.37
9/98			13	0.45	5.7	3.6- 9.8	0.12	0.02-0.44
5/99			7	0.20	4.5	4.0- 5.9	0.05	0.02-0.09
5/99	WHC	EG	15	0.61	7.6	6.3- 9.9	0.27	0.10-0.50

While walleye numbers have increased, perch numbers remain low. Low perch abundance is likely a result of several years of poor reproduction. This year we transplanted 2,059 perch from West Newton to Wardell. Some good panfish news...the white crappie we planted in 1997 had good survival and growth. Crappie have now supplanted perch as the most abundant panfish. Given good survival of the 1997 crappie, we plan to stock them every year. Look for better crappie fishing in years to come.

YOU KNOW YOU ARE A FISHING GEEK IF ...



- you ever considered purchasing the helicopter lure
 - you've ever sworn by the flying lure
 - you own a Pocket Fisherman
 - you've spent more money on fishing apparel than on fishing tackle
 - you consider Powerbait a natural food source for trout
 - you've ever bragged about your Powerbait fishing skills
 - you ran out of Powerbait and used Lucky Charms as a substitute
 - it is 8 pm on a Friday night and you find yourself browsing the sporting good's aisles at Wal-Mart or Kmart
 - you've ever used 20 lb. test line to fish for trout
- you have a matching fishing outfit (I have seen some of you on the Shoshone!)
 - you move slowly past the bronze trout sculpture so as not to spook it
 - you still have respect for those bass fishing pros on Saturday TV shows



THE BIG

FISH BOARD

ATTENTION!

Pictures on the big fish board this year are scarce, because only a few of you sent any. Where are your egos? Aren't you interested in showing off your big fish in one of the premiere angling publications in the country (this newsletter)? Each year we display the Big Horn Basin's finest, mostly for bragging rights. So grab a little glory, display your egotistical side, and share your catch with us all by sending in some pictures!!!

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Photo Number 1: Danny Kurtilla displays a nice hybrid sunfish caught from Renner Reservoir. Danny entered the sunfish as a state record, but was denied. G&F will not recognize hybrids for the state record program.

Photo Number 2: Game and Fish's own Brian Hilbert displays a 22" sauger caught from Yellowtail Reservoir. According to Brian, fishing for walleye and sauger is good in the Wyoming section.

Photo Number 3: Game and Fish Construction Supervisor Steve Ronne models the latest line of Orvis fly-fishing apparel. Note the Gore-Tex thinsulate wading pants and rugged wading boots.

Photo Number 4: Bill Hansen, Greybull, poses with his 67 pound sturgeon speared from Lake Winnegabo, Wisconsin.

Photo Number 5: Allen Croft, Game and Fish Technician, shows off a true "monster" rainbow, caught from Monster Lake.

ODDS AND ENDS

-  The 4th annual Basin Kid's Fishing Day was again a huge success. Organizers plan to hold the event again in May 2000.
-  The 3rd annual Wyoming Game and Fish Hunting and Fishing Heritage Exposition will be held September 8th, 9th, and 10th. The exposition offers something for everyone including, exhibits, hands-on skills instruction (canoeing, fishing, rifle & shotgun shooting, archery, map & compass reading), practical seminars on turkey & elk calling, bird dog demonstrations, bear education, fish and wildlife management, and much more.
-  Scharen Subdivision Pond (east of Greybull) was stocked with rainbow trout last year. The new pond, another Fish Wyoming Project, is open to the public. Next year we plan to stock bass, hybrid sunfish, and more rainbow trout.
-  Casey's Pond, located on Shell Creek across from the Shell Creek Ranger station will be improved next year. In the past, the pond was too small to over winter trout. The plan is to build a new pond (deeper), complete with a water supply line from Shell Creek.
-  Kid's Fishing Days will be held in Cody on June 3rd (Beck Lake Recreation Area) and Powell (Homesteader Park Pond) in June. Contact the city recreation districts for more information.
-  Over 100 waters in the Cody area are scheduled for stocking this year. A complete list can be obtained at the Cody office.

THE FINAL WORD

I started fishing at age-5 and I can still remember the first time. The sights, sounds, and excitement of that fishing trip are so clear, as if it were only yesterday. Funny how you can vividly remember an event that occurred decades ago, but can't remember where you put your truck keys the night before. Standing on the edge of a tiny, cattail-choked pond, cane pole in hand (yes, this was back before the Zebco 202 was invented) I caught my first fish. I can still see that fish and I can still feel the excitement. What that fish was I don't know (I wasn't born a biologist, they turned me into one in college!), but my guess is a white sucker. Hard to believe that catching one scrawny sucker could hook a guy on fishing, but it did. From that day forward I was addicted to fishing, at least up until last year.

Last year I fished less than any other year of my life. My crime is inexcusable and I deserve whatever punishment our creator sees fit. I keep asking myself how could I let an entire summer slip away with so little fishing? Was I kidnapped by aliens? No, but I did watch too many episodes of the X-Files. Was it that Y2K thing? Probably not, although building that bunker and fortifying it with canned goods, water, weapons, ammunition, and fishing magazines did take up a lot of my spare time. Was it my new fishing partner? I don't think so. She turned out to be the best human trolling motor (rower) an angler could possibly find. No, it had to be something more.

So I went to the doctor and told him the story. I pleaded doctor, doctor give me the news I've got a bad case of the fishing blues (OK that was bad). Well the Doctor, an avid angler himself, got a serious look on his face (like right before they tell you that you have only two weeks left to live) and said "Mike, you are suffering from an acute case of post-traumatic, notenuffishingitis." There is only one known cure and it is derived from a rare dung beetle that lives on the bark of a tree that grows only in the remote reaches of the Amazonian Rain Forest and is heavily guarded by cannibalistic natives (who watch Regis Philbin on Who Wants To Be A Millionaire). All right, what he really said was all I needed was to go fishing more. But, he warned, if I failed to do so the consequences could be dramatic: loss of motor skills, memory lapses, weight gain, mental instability, occasional bouts of catatonic schizophrenia (sitting rigid and motionless in front of the TV), and possibly carpal tunnel syndrome (channel surfing with the remote can exact a heavy toll). Well, I left the doctors with a new lease on life and a new goal: fish more than ever this year. Now If I can just get this newsletter mailed out I can get out on the water. Looking forward to working with and fishing with you another year. Don't fall into the same trap that I did. GET OUT AND GO FISHING!





Wyoming Game and Fish Department

Mike Welker
WY Game & Fish
2820 State Hwy. 120
Cody, WY 82414