Bead Fishing
Controversial New Technique, Game and Fish to Study this Spring

The use of plastic beads resembling a trout egg, is becoming a popular fishing technique around Casper. How the beads are used, determines the legality of the technique. Using the bead as a lure, (fixed on a leader with a trailing bare hook) is one method to rig the bead. When using this technique, the fish takes the bead in its mouth, not the hook, and when the angler tightens the line, the hook is set outside the mouth, which according to existing state law is snagging and illegal.

It is unlawful to snag fish in Wyoming. Wyoming State Statute 23-3-201(e) defines “snag” as “attempting to take a fish in such a manner that the fish does not take the hook voluntarily in its mouth.” If a trailing bare hook is being used with a bead, the fish does not take the hook in its mouth voluntarily. Therefore, by definition, this practice is snagging and is illegal.

Due to growing interest in this fishing method, Game and Fish biologists will be collecting data and asking for public input to help determine if statutory/regulatory changes are warranted in order to clarify the snagging law and how it pertains to bead fishing. Based on data collected and public input, the Game and Fish Department will determine if using a bead as a lure (fixed on a leader with a trailing bare hook) should be legal or illegal, and in either case, will attempt to clarify the snagging law.

A bead used as an attractor for a fly is legal to use. When used as an attractor the bead should be fixed on the leader no more than two (2) inches above the fly to minimize injury to the fish.
The Fight Against the Invaders
AIS Program Update

As the 2014 boating season gets underway, we would like to give you an update on what has been happening with the aquatic invasive species (AIS) program. In the 2013 season there was a major shift from inspections taking place primarily at waters, to border port of entries. This change allowed us to focus on watercraft entering Wyoming from states where mussels and other AIS are currently present. Little will change with the program in 2014. As was the case last year, any watercraft entering the state is required by law to get an inspection before launching on Wyoming waters from March through November. Resident boaters who have not left the state do not need to get an inspection unless they encounter a check station on their route of travel. Any watercraft that has been on a mussel infested water is required to get an inspection prior to launching, regardless of the time of year. Check stations will continue to operate at most port of entries, and on a rotating basis at major waters during the peak boating season from April 26th through September 15th. In the Casper region, the check station at the Lusk port of entry will no longer be operated. Instead, a check station will be operated at Glendo Reservoir every Thursday through Sunday during the season. The check station at the Torrington port of entry will be operated seven days a week, and inspections will be conducted at Alcova, Pathfinder, and Guernsey reservoirs periodically. A list of certified inspection locations and times of operation can be found at http://wgfd.wyo.gov/AIS.

During the 2013 boating season, technicians performed over 40,000 inspections across the state. Of those, 1,515 were considered high risk and 578 required decontamination. Fourteen watercraft had confirmed zebra or quagga mussels attached and were completely decontaminated. The mussels were determined to be dead on all but one of those vessels. The owner of the watercraft with live mussels was aware of the problem and made arrangements to have the boat quarantined and decontaminated in Casper before attempting to use it on Wyoming waters.

Zebra and quagga mussels are not the only threats to our waters. New Zealand mudsnails, Asian clams, brook stickleback and curly pondweed are already present in some of our waters. It is important that everyone does their part to keep invasive species from spreading. Please remember to Drain, Clean and Dry your watercraft and fishing equipment: DRAIN water from live wells, ballast tanks and the bilge; CLEAN mud from wading boots and anchors, and plants from the trailer; allow your equipment to DRY before taking it to another water. Help us protect Wyoming water resources so that our children and grandchildren can enjoy them in the years to come.
Deer Creek Canyon
Recent Improvements to Public Access Area

The Deer Creek access area is located about eight miles south of I-25 at the Glenrock exit. Last summer several improvements were made to the access area. Cattle guards were installed on the access road, and the parking area was graveled. The road into the area was slightly improved but high clearance vehicles are advised. The area consists of a fishing easement which provides anglers access to nearly two miles of Deer Creek in the lower canyon. Brown and rainbow trout are the primary species anglers will encounter here, but a few brook trout are also present. If you travel to this area please be respectful of the private landowner at all times and follow the access area rules which include parking only in the designated area and stay within 100 feet of the centerline of the stream. In addition, no camping or fires are allowed. The area is for fishing only. If the road is muddy, please do not drive into the area.
Tiger Muskie
A New Fish in the Casper Region

Tiger muskie are a hybrid between northern pike and muskellunge. Wyoming Game and Fish historically imported tiger muskie from Pennsylvania, but due to increasing disease concerns, these fish became harder and harder for the state to obtain. With the completion of the new hatchery building and isolation unit at the Dan Speas Fish Hatchery outside of Casper, there was an opportunity to raise tiger muskie in Wyoming. Speas received 50,000 tiger muskie in May, 2013 from the Nebraska Game and Park’s Calamus Fish hatchery. The tigers were about 1.75 inches upon receipt. Speas was able to raise them up to 8.5 inches by October of 2013. Tiger Muskie are extremely fast growers, averaging 1.3 inches per month. Of the 50,573 that Wyoming received, Wyoming stocked out 2,501, the rest were provided to Oregon, Idaho and North Dakota in exchange for other fish or services.

The tiger muskie quickly showed how different they are to rear compared to trout. From the first day the Tiger’s were on station it was apparent how piscivorous (fish eating) these fish are as they were already actively feeding upon one another. Personnel had to keep feed in front of them 24 hours a day to reduce the amount of cannibalism. The tigers would attempt to jump out to the tanks as soon as the lights were turned off, so the lights in the isolation unit had to be kept on 24 hours a day. The Tigers would also drift with the water current in the rearing unit versus swimming with the current as with trout. With their tendency to drift in the rearing unit, their oxygen requirements were much less than that of trout. Water flows in the rearing units were kept low to help keep the oxygen levels at a lower level.

One Casper Region water that was stocked last fall was the Glendo Wetlands. Glendo Wetlands are a series of ponds just downstream of Glendo Dam. Six hundred tiger musky were scattered among the ponds. Some of these ponds are over-populated with carp and suckers and it is our hope that the tiger muskie will be able to thin those populations out, which should release resources for the largemouth bass and perch. Tiger muskie tend to become large and will provide a unique angling opportunity as well. Tiger muskie will be stocked again in 2014 after which, we will begin to evaluate their impacts on the fishery.
Flushing Flows
Annual Spring Cleaning on Gray Reef, Providing Quality Habitat Since 1995

Flushing flows began in 1995 on the North Platte River below Gray Reef Dam. The purpose of the flush is to remove fine sediments from the river which leads to more successful trout spawning and also increases production of the invertebrates (aquatic bugs) which are the main food source for the trout. Between 1995 and 2008, flushing flows were conducted twice a year; once in early spring between ice-out and the peak of rainbow trout spawning, and once in the fall prior to the onset of brown trout spawning. While the flushing flows have certainly improved spawning conditions for trout, we began to notice a gradual decline in trout numbers over an 8-year period.

We investigated the decline in trout numbers and quickly ruled out fishing as the culprit. Even though the river has continued to gain popularity and attracts more anglers each year, fish harvest is actually lower now than it was in 1995 due to more restrictive creel limits and a higher percentage of anglers practicing catch and release. We then directed our attention at spawning habitat quality and found what appears to be the smoking gun behind the decline in trout numbers. We found that the typical flushing flow cycle of 5 days results in some cleaning of the gravel, but in the absence of much higher flows there is a long term decline over many years. With the high flows experienced in 2010 and 2011, the spawning gravels were extensively cleaned. The result was trout reproduction that was off the charts. The population quickly rose from 1,500 trout per mile to more than 9,000 trout per mile! We conducted more sampling in 2012 and found that the cleaner the gravel is to begin with, the more benefit a single flushing flow cycle has. Based on these findings, we requested the Bureau of Reclamation discontinue the fall flush and add those 5 days to the spring flush. We think that doing 10 consecutive days of flushing flows will have more benefits than 5 days in the spring and 5 days in the fall. We are collecting quite a bit of data in conjunction with the 10-day flushing flow cycle to determine the benefits of a longer spring flush. Once the data has been processed and analyzed, we will be able to make recommendations on flushing flow duration that will maximize the benefits to this amazing fishery.
Glendo Walleye Regulation

Evaluating the 15-inch minimum length limit

It has been four years since the 15 inch minimum length limit on walleye was first implemented at Glendo Reservoir. Biologists have been monitoring the effects of this special regulation using annual net and creel surveys. These standardized surveys have been conducted since 2002, allowing us to compare the walleye population and angler success both before and after the regulation was in place.

The proportion of walleye in the population greater than or equal to 15 inches (or PSD) has not changed since the minimum length limit was implemented. However, population models indicated that it would take at least six years for changes in size structure to reach their maximum.

We use catch rates in annual netting surveys as indices of fish abundance. Abundance of age 2 and 3 year old walleye have not changed appreciably with the new regulation, but the abundance of age 4 walleye has gone up considerably. It appears that the special regulation is allowing more fish to reach age 4.

Wyoming Game and Fish biologists and technicians have interviewed thousands of Glendo Reservoir anglers over the years. Based on these interviews, it appears that walleye catch rates and mean length of harvested fish have increased slightly since the 15 inch minimum. Because of the minimum length limit, anglers are taking home fewer of the fish they catch. Now anglers take home about a quarter of the fish they catch as opposed to just over half before the special regulation.

It is too early to tell exactly what impact the length limit will have on the fishery. We will continue to look for these changes in our annual monitoring. Other studies of the effects of these kinds of regulations have suggested that it may take as many as ten years to be able to differentiate the effects of restrictive regulations from natural variability.
Walleye fishing at Seminoe should be slightly improved in 2014. Thanks to a strong 2010 yearclass, the number of 13-15 inch walleyes will be better than it’s been since 2009. There are also a lot of 8 and 9 year old walleye present which range from 18 inches to 26 inches, with most being 20-22 inches. Walleye in Seminoe can live to be 25 years old, which means that there are always some walleye over 10 pounds waiting to be caught. While walleye can be caught all over the lake, the highest catch rates are usually up in the Platte arm. If you are after a trophy, we see the highest concentrations of 10 + pound walleye between Saylor Bay and North Red Hills.

Trout fishing in 2014 should be similar to 2013. In November, we stocked 144,000 9-inch rainbows. Those fish will average around 12 inches this spring. In fall of 2012, we stocked 170,000 9-inch rainbows, those fish will average 16 inches this spring. The Snake River cutthroats we stocked in 2011 are still present and averaged 14.5 inches last fall. While the cutthroat grow slower than rainbows, survival so far has been better. We will continue to evaluate growth and survival of this species to determine the suitability for Seminoe Reservoir. Besides stocked rainbow and cutthroat trout, Seminoe also hosts a wild brown trout population. While browns are not nearly as common as rainbows or walleye, they are able to take advantage of abundant crayfish populations and can get considerably larger than rainbows. Thirty percent of the browns we captured last year were larger than 20-inches, with the largest being 23-inches and 4.1 pounds.
Although water levels averaged only 39% of capacity in 2013 at Pathfinder Reservoir, the fishery is still benefiting from the reservoir filling in 2010 and 2011. During our 2013 fall netting survey we observed a dramatic increase in walleye growth that can be attributed to the recent increase in productivity. We compared length at age of walleye in 2013 to walleye that we aged 6-8 years ago, before the reservoir filled. Four-year-old walleye were nearly 5 inches longer on average in 2013 than they were in the mid 2000s. The difference was even greater for 5-year-old fish, which averaged 21.2 inches in 2013, versus 14.9 inches in the mid 2000s. Interestingly, age 1 and 2 walleyes were 0.5 - 2.0 inches shorter on average in 2013 than they were in the mid 2000s. These young fish did not have the benefit of growing up in a full Pathfinder Reservoir. In addition 1- and 2- year old walleyes are very abundant and may be competing for a forage resource that has declined in the last two years.

The trout population is also still benefiting from the high water in 2011. When water levels are high at Pathfinder, there is an increase in forage and water clarity, both of which allow stocked rainbow trout to grow larger than 20 inches in three years. When water levels are low, 20 inch rainbows are rare. We saw numbers of 20 inch rainbows in our spring netting last year that were comparable to numbers from 2011 and 2012. Unfortunately, if water levels remain low in Pathfinder, it will become much harder to find large rainbows in coming years.
The reach of the North Platte River between Kortes Dam and the confluence of Sage Creek is commonly referred to as the Miracle Mile due to its dense population of large trout. After conducting a population estimate in 2012, biologists noticed that trout body condition was lower than average. We use what is called relative weight (Wr) as an index of body condition or plumpness. A Wr of 93 is considered average, but Miracle Mile trout typically exceed Wr of 105. Relative weight of rainbow trout dipped to 97 and brown trout to 95 in 2012. Although still better than an average fishery, a persistent reduction in body condition would be cause for concern.

The Miracle Mile trout population was sampled with raft electrofishing in 2013 to see if Wr was still down. What we found was that body condition has rebounded to levels more typical for the Miracle Mile. We cannot know for sure what caused the dip in body condition in 2012, but it is probably related to the drawdown of Seminoe and Pathfinder reservoirs. We will reevaluate trout condition in 2014 during our biannual population estimate.

North Platte River – Cardwell

Our September, 2013 population estimate put the Cardwell trout population at 1,200 trout per mile or around 2,000 pounds of trout per mile. The rapid growth in population seen between 2008 and 2012 appears to have leveled off as the population approached the carrying capacity of the reach. We have seen a steady decrease in the condition of fish since 2010 which further supports the notion that this reach has reached its maximum potential. Rainbow trout averaged 15.2 inches and 1.4 pounds in 2013. Browns averaged 13.7 inches and 1.3 pounds.
Alcova Reservoir

The biggest news in 2014 for Alcova Reservoir is the change in walleye regulations. As of January 1st, the creel limit was increased from 6 walleye per day to 12 walleye per day for Alcova. The regulation change is in response to growth in the walleye population. Before 2005, walleye were not at all common in Alcova. The walleye present were mostly drift from upstream Pathfinder Reservoir, we saw no evidence of reproduction from within Alcova itself. In 2005 and again in 2006, the walleye in Alcova Reservoir spawned very successfully, resulting in two large yearclasses. Since 2005, we have documented successful walleye reproduction every year, with 2009, 2011 and 2012 producing large yearclasses similar to 2005 and 2006.

So what’s the big deal?...you might ask. Walleye are doing well in Alcova, that’s a good thing right? Not necessarily. Our creel surveys have consistently shown that less than 5% of Alcova anglers are targeting walleye. With little angling pressure, the percent of the population that gets harvested in any given year is low. This means that the walleye in Alcova have higher survival rates than other walleye populations in the area, basically meaning the odds of a fish living to be 5 or 6 years old is much higher. With high survival, the number of big walleye increases. Having too many big walleye in a lake can pose some large problems. Alcova is a small reservoir and because of the rapid flow through of water during the summer, it is not as productive as other walleye fisheries. This means there is a lack of forage, especially for big walleyes. As the number of big walleyes grows, they have turned to the most readily available forage, stocked rainbow trout. Since the number of big walleyes has increased, we have measured significant declines in trout survival, and angler catch rate. This has forced us to increase stocking to try and meet our catch rate objectives. While we have been able to increase trout catch rates through stocking, we are still falling short of objectives. Our data show the cost of stockpiling large walleye in Alcova necessitates an increase in stocking of at least 70,000, 9-inch rainbow trout annually.

At this point it has become far too expensive to continue to increase trout stocking to overcome walleye predation. We hope that the increased limit will result in measurably higher walleye harvest. The ultimate goal is not to remove walleye altogether from this lake, but rather to decrease the number of large trout eating walleye which pose problems for trout management, but at the same time have enough “eater” size walleye present to provide good opportunity for that species as well.
North Platte River – Casper

We conducted a trout population estimate on the North Platte River between Robertson Road and Mills Bridge in October. We estimated 2,289 trout per mile. This estimate is significantly higher than the previous estimate of 957 trout per mile in 2011. Currently, the population is at the highest level ever measured on this reach. The reason for the high population is the high water we had in 2010 and 2011. The high flows scoured fine sediments and resulted in excellent spawning conditions between Gray Reef and Government Bridge. Since we no longer stock trout upstream of Edness Kimball Wilkins State Park, all of the fish through town are the result of natural reproduction in the upper 10 or so miles of river. “Excess” trout produced from upstream spawning drift down and populate the river through town.

The North Platte through Casper is truly a world class trout fishery. If you are short on time but have the insatiable itch to wet a line, excellent opportunity is as close as the nearest park. Good spots to fish through town include the Paradise Valley Public Access Area off Robertson Road, the Game and Fish Office, Morad Park, the whitewater park, Crossroads Park, Reshaw Bridge in Evansville and Edness Kimball Wilkins State Park.

North Platte River – Big Muddy

We conducted a population estimate on the North Platte River between Big Muddy Bridge and Rabbit Hill access areas near Glenrock in October. We estimated 716 trout per mile or around 1,000 pounds of trout per mile. This estimate is slightly above the 6-year average of 660 trout per mile. This reach is about 70 river miles downstream of the area where most trout spawn. Because of this, relatively few wild fish end up in this reach. We annually stock 20,000 fingerling rainbows between Casper and Glenrock in order to provide a trout fishery.

We just finished up an evaluation of the stocking program through this reach. We have determined that stocking is necessary for this reach to achieve our population objective of 600 trout per mile. Without stocking, the population would be around 400-500 trout per mile in years when reproduction upstream is excellent (like we saw 2010-2012). In years when upstream reproduction is average to below average (like we saw 2006-2009) the population would drop to less than 250 fish per mile. Based on the results of this study, we will continue to place a high priority on stocking the river between Casper and Glenrock.
Goldeneye Reservoir

Goldeneye Reservoir is experiencing some tough times. Drought conditions have resulted in little to no water flowing into the reservoir in 2012 or 2013. Water levels have steadily dropped to the point where the boat ramp was out of the water by fall 2012. Once the water level reaches this point, water quality issues such as salinity and temperature begin to negatively affect the trout. The reservoir experienced a partial summerkill in 2013. The conditions seemed to be harder on suckers than trout as we observed several hundred dead white suckers and only about a dozen trout. With the dense vegetation out there though it is difficult to tell the extent of the dieoff. We do know that at least some trout survived as ice-anglers reported seeing and catching trout during the early part of winter. Unfortunately, our spring netting showed the majority of trout perished late in the winter due to low dissolved oxygen levels. Heavy spring moisture has since filled the reservoir. We plan to re-stock trout, but it will take several years to grow the trophy-sized trout that Goldeneye is known for.

33-Mile Ponds

The 33-mile ponds are a group of small stock water reservoirs northwest of Casper, which lie on either side of Cloud Creek, a tributary to the South Fork Powder River. Drought conditions over the last two years have resulted in extremely low water levels. The bass fisheries in Antelope and Sheepherder Reservoirs have been lost, as have the trout fisheries in Big Muddy, Camel Hump, and Antelope Reservoirs. In 2013, only Greasewood and Saltbush Reservoirs had sufficient water to support trout fisheries over the summer. The big snows we had last October have created more favorable water conditions. We will be evaluating the ponds in April and will plan to stock trout in May in ponds with sufficient water levels.

J-U and Texaco Reservoirs

J bar U and Texaco Reservoirs are private ponds enrolled in the Department’s Walk-In fishing program. The ponds are located on the east side of I-25 just North of the Tisdale Mountain exit near Kaycee. Currently, the J bar U access is closed due to some issues with the integrity of the dam. The area should re-open once the necessary repairs have been made. In the meantime, Texaco Reservoir remains open to fishing.

Texaco Reservoir suffered a summerkill in 2012 due to extremely low water. We restocked with 5,000 black crappie in the fall of 2012. In 2013, we transplanted an additional 150 adult crappie from Keyhole Reservoir with the hopes that they would spawn and further jump start the population. In addition to crappie, several hundred adult largemouth bass were transplanted from Black Hills Power and Light Pond near Newcastle. We will be evaluating the success of the transplants this spring and will possibly conduct some further transplants this summer.
Glendo Reservoir

The Glendo Reservoir walleye population was dominated by 3 and 4 year old fish in 2013. This was good news for anglers as there were lots of fish between 15 and 19 inches for folks to catch and harvest. The bad news is that the age 2 year class appears to be weak, so there may be relatively few age 3 fish in the population in 2014.

The YEP population appears to be down for the third year in a row. Only three age-1 (5-7 inch) YEP were captured in 2013 indicating another poor year class.

We captured a fair number of channel catfish between 10 and 20 inches in our annual summer netting. The catfish population is starting to recover from a halt in stocking from 2001-2004. Catfish grow slow and live a long time in Glendo Reservoir, so it has taken several years for recently stocked fish to grow large enough to contribute to the fishery.