



# 2014

WYOMING GAME & FISH DEPARTMENT  
SHERIDAN REGION  
ANGLER NEWSLETTER



## Greetings

Welcome to the 2014 Sheridan Region Angler Newsletter. We hope you find it informative and useful and we'd like to hear from you if you have any questions or comments for us.

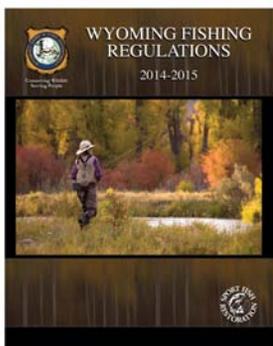
The Sheridan region is the largest region in the state covering over 18,000 square miles, eight counties, 3,000 miles of streams, and 19,000 acres of lakes.

The diversity of fish and fishing opportunities within the region is tremendous. From high mountain lakes in the Cloud Peak Wilderness, to the elusive brown trout in Sand Creek, to the ever popular walleye in Keyhole. The Sheridan Region literally has it all.

We try to highlight some of the more popular waters within the region, some of the projects we're working on, and some of Wyoming's lesser known fish species.

Enjoy!

## New Regulations for 2014-2015



New regulations have gone into effect for 2014-2015. The only change for the Sheridan Region (Area 3) is that in the Tongue River drainage, All walleye and sauger shall be kept whole (gills and entrails may be removed) until the angler is off the water and done fishing for the day. Once off the water and done fishing, walleye and sauger can be filleted for transportation and storage. (same applies for the Bighorn and Wind River drainage in Area 2).

Other regulation changes of note across the Cowboy State include: the use of corn is legal as bait (where bait is allowed), Boulder Lake, Lake Hattie, and Wheatland Reservoir #3 have been added to the Special Winter Ice Fishing Provision (allowing the use of 6 rods or tip-ups), the creel limit for walleye is twelve (12) fish

on Alcova Reservoir (the two (2) fish limit on walleye taken by spear gun does not apply), and the general daily creel and possession limit for brook trout (16 brook trout) shall not apply in Area 5 lakes (new limit on trout and brook trout in combination is six (6) fish in Area 5 lakes).

House Bill 0131 changed the definition of "game fish" to allow game fish to be classified as nongame fish in specific waters through regulation. In Buffalo Bill Reservoir (Area 2), walleye are classified as a nongame fish. In Area 4, burbot (ling), northern pike, walleye, and yellow perch have all been classified as nongame fish. For all of these game fish that have been reclassified as nongame fish, anglers must kill these fish immediately and there is no creel limit.

Remember to pick up a regulation booklet at any license selling agent or local Game and Fish office before fishing. And as always, happy fishing!!

## Special points of interest:

- NEW REGULATIONS FOR 2014-2015.
- TIGER MUSKIE; SO FAR SO GOOD
- AQUATIC HABITAT PROJECTS IN THE SHERIDAN REGION
- UNIQUE FISHING OPPORTUNITIES FOR NORTHEAST WYOMING
- LOWER CLEAR CREEK SAUGER

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A nice stringer of walleye from Keyhole.

### Keyhole Reservoir Update

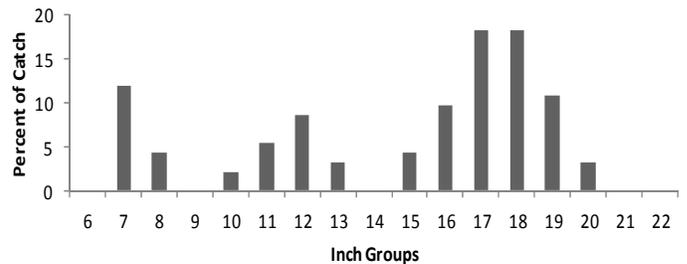
If you didn't get a chance to fish Keyhole in 2013, take a week of vacation and make your plans for 2014!! Full or nearly full water levels the last three years have led to a major increase in productivity, or what we call; "the new reservoir effect". This has resulted in some of the best walleye, pike, crappie, and smallmouth bass fishing in years! This year we found a lot of walleye, of which 65% were  $\geq 15$  inches. It also appears that a good class of age-1 (7 to 8 inches) and age-2 (10-13 inches) walleye are present as well.

In summer 2013 we ran spot-creel surveys to gather information on angler catch rates and harvest rates. A total of 665 anglers fished for 3,301 hours to catch 3,669 game fish for a catch rate of 1.11 fish/hour. The numbers of walleye were not only good in our sampling gear, anglers reported a great walleye year as well. Surveyed anglers caught a total of 2,148 walleye (0.65 walleye/hour), of which, 853 were harvested. A total of 341 walleye were measured during the creel surveys, of which, 81% were  $\geq 15$  inches.



One of many 21 to 29" northern pike in Keyhole Reservoir.

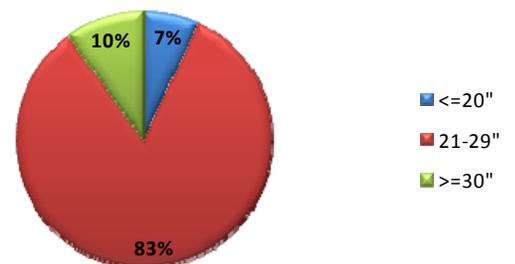
Walleye length frequency distribution  
Keyhole Reservoir, 2013



LOTS OF  
NORTHERN PIKE  
WERE CAPTURED  
IN 2013,  
HOWEVER,  
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OF HARVESTABLE  
SIZE

The increased productivity has not only helped the walleye, all other game fish in Keyhole have benefited as well, including smallmouth bass, yellow perch, black and white crappie, and northern pike. Northerns have done so well in fact, that we have cancelled their stocking for at least the next three years. This year we sampled more pike than ever. However, most of the fish were not of legal size ( $\geq 30$  inches). From the pie-chart below you can see that most pike are below legal size. We anticipate that more pike will be harvestable in summer 2014. So if you get a chance, sneak off to Keyhole, it'll be worth your time!

Size structure of northern pike  
Keyhole Reservoir, 2013



A couple of happy anglers with some nice Keyhole walleye.

## Reptile and Amphibian Surveys in the Sheridan Region

Though not often seen or noticed, at least six species of amphibians and 16 species of reptiles are native to northeast Wyoming. Over the past summer (2013), Charlotte Snoberger, a WGFD herpetologist, and technicians from the Fish Division's statewide aquatic assessment crew surveyed for reptiles and amphibians across sections of northeast Wyoming to learn more about their distribution, abundance, and habitats. This work is funded by a State Wildlife Grant from the United States Fish and Wildlife Service. Little is known about most reptiles and amphibians in Wyoming and many reptile and amphibian species are declining worldwide, so information is needed to monitor and conserve these important species. Though often underappreciated, reptiles and amphibians are an integral part of the ecosystem. They eat and help to control insects and small mammals and are an important source of food for many larger animals, including fish.



Smooth Greensnake

In 2013, 40 surveys were conducted for reptiles and amphibians in the Cheyenne River drainage and northeast corner of the state. During these surveys, one salamander species, two frog species, two toad species, two turtle species, one lizard species, and six snake species were observed. More commonly seen reptiles and amphibians included Bullsnares, Tiger Salamanders, Northern Leopard Frogs, and Rocky Mountain Toads.

But there are also secretive or rare species that many people may not know even exist in Wyoming. Three of these less commonly seen species are eastern spiny softshell turtles, smooth greensnakes, and plains spadefoot toads. Though not a reptile or amphibian, rarely seen invertebrates in the region include fairy shrimp, tadpole shrimp, and clam shrimp. The crew also collects data on these invertebrates, as they can be important food sources for amphibians and little is known about their ranges in Wyoming.

### Smooth Greensnake

Smooth greensnakes are beautiful snakes that live in higher elevation areas of eastern Wyoming, including the Black Hills. Despite their bright green color, they can be very difficult to see, especially in grassy fields. Smooth greensnakes are often very secretive, staying underneath logs and other types of cover. They are small in size (up to 16 inches in length), with a white belly, and eat primarily insects. During surveys in the Sheridan region in 2013, the crew found two adult smooth greensnakes in the Black Hills.



Smooth Greensnake



Eastern Spiny Softshell Turtle

### Eastern Spiny Softshell Turtle

Eastern spiny softshells are a unique type of turtle that looks very different from most turtles. They are named for their 'soft' shells that are flexible and very smooth to the touch, with small dark spots on a light tan background. Their shells have been described as looking like a pancake with leathery skin. The front end of their shell has small 'spines.'

If you see an Eastern Spiny Softshell in the water, their most notable feature is their long, thin, pointed nose that usually sticks out of the water. They also have very long necks and can bite – so be careful if you are close to one!

Eastern spiny softshells love water and are very fast swimmers. They live in rivers, lakes, and large streams and can be seen in the water or basking in the sun on sand bars. They sometimes bury themselves in the sand on the bottom of a lake or river and wait for prey to swim by. Eastern spiny softshells eat fish, frogs, tadpoles, crayfish, and aquatic insects.



Eastern Spiny Softshell Turtle

## Reptile and Amphibian Surveys (continued)



**Plains Spadefoot Toad**

The plains spadefoot is a type of toad that lives across eastern and central Wyoming. Though they may be plentiful in certain areas, they spend most of their lives underground and are rarely seen. However, after heavy rainfall, plains spadefoots may come out in large aggregations to breed for a few nights. They congregate in water puddles, marshes, stock ponds, playas, and along rivers. Male plains spadefoots call for hours, trying to attract females. Their call has been described as similar to a snore or a duck quack and may be heard up to a mile away. If you are lucky enough to see a spadefoot, note the vertical pupils, similar to a cat's eyes. Spadefoots get their name from the black keratinized 'spades' on the bottom of their hind feet; they use these spades to burrow underground, where they stay buried until conditions are just right. Though plains spadefoots

Plains Spadefoot Toad

are a type of toad, they are different from most toads in that their skin is more smooth and moist. Spadefoots lack warts that are typical of most toads, but they have small raised bumps that may be orange. During surveys in northeast Wyoming in 2013, the crew found over 52 plains spadefoot tadpoles and one small metamorph (newly morphed juvenile toad).



Plains Spadefoot tadpole

### Fairy and Tadpole Shrimp



Tadpole shrimp

Many invertebrates, including freshwater shrimp, live in the same seasonal wetlands (puddles, stock tanks, playas) as Plains Spadefoots and other amphibians. Freshwater shrimp eggs may remain dry for several months or up to a year, then hatch after heavy rainfall. These shrimp are important prey for a variety of organisms, including amphibians and birds, and may not survive in wetlands with fish. Though freshwater shrimp may be eaten by adult amphibians, they may feed on amphibian eggs and larvae. More information is needed about the distributions of freshwater crustaceans in the state. Freshwater shrimp in Wyoming include several species of fairy shrimp, tadpole shrimp, and clam shrimp. Fairy shrimp look similar to saltwater shrimp, but are much smaller; one type of fairy shrimp you may be familiar with is called a 'sea monkey'. They are usually under two inches long and light beige in coloration, though some may be bright green, orange, pink, or red. Tadpole shrimp look similar to tadpoles when swimming in the water, but when in hand, tadpole shrimp look like mini horseshoe crabs. Clam shrimp look like tiny clams, but are actually a crustacean body surrounded by a hard shell. They can be seen swimming through the water and may have algae growing on their shells.



Technician David Brady with a western tiger salamander.

So when you are out in the field this summer, remember that the region is home to many animals, big and small, some that you may not even see or know exist. Keep on the lookout for any of these unique critters and you may be surprised what you find! If you find any of these interesting species, WGFD is interested in hearing about your finds and their locations! Photos are especially helpful in making definite identifications. Report your finds to Charlotte Snoberger at 307-233-6402 or [charlotte.snoberger@wyo.gov](mailto:charlotte.snoberger@wyo.gov).



Technician Zack Lange with a bullsnake.

## ***Aquatic Invasive Species; Watercraft Inspections at Borders***

As the 2014 boating season draws near, we would like to give you an update on what has been happening in the Aquatic Invasive Species (AIS) program. As you may have noticed the AIS program made some major changes in 2013, the main one being the switch from lake side to border check stations. Our technicians and inspectors worked hard to inform the public of these changes and make the transition as painless as possible. The reason for this change is to focus our efforts on inspecting out of state boats entering Wyoming that may harbor zebra mussels or other AIS. Sheridan boaters can expect to see the same program operation in 2014. The Sundance and Sheridan Port of Entry check stations will be open 7 days a week from April 26<sup>th</sup> through September 15<sup>th</sup> and a roving technician will inspect boats on a rotating basis across the region's lakes. 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, and if coming from known infested water, year round.

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. Sheridan residents who boat at Tongue River Reservoir must get an inspection before launching their watercraft in Wyoming waters. A list of certified inspection locations and times of operation can be found at <http://wgfd.wyo.gov/AIS>

In 2013, over 40,000 boats were inspected, of which 1,515 were high risk; requiring a more thorough inspection. This led to 550 boats being decontaminated with hot water to kill and remove all potential AIS. A total of fourteen mussel-fouled boats were intercepted at the borders and decontaminated. The Sheridan crew inspected 4,463 watercraft across the region and performed over 85 decontaminations. Mussel boats were intercepted at the Sundance check station by our inspectors. One boat was from Lake Champlain, VT and the other was from Lake Winnebago, WI, both bound for Washington. Upon detection of the mussels, the boats received a full hot water decontamination to destroy all AIS on board the vessels. Another major aspect of the AIS Program is sampling and monitoring waters for the presence of AIS. Plankton tow sampling for larval mussels (veligers) at Keyhole Reservoir and Lake DeSmet were conducted by the Game and Fish in July and October of 2013. All samples from these waters were negative indicating no presence of mussels.



Watercraft inspection at the Sundance port of entry.

We would like to remind boaters in the Sheridan region that zebra and quagga mussels are not the only AIS of concern to our waters. Lake DeSmet has been confirmed to have curly pond weed, an invasive plant that has been spreading to downstream waters. Also, remember to Drain Clean & Dry all boats and equipment after every boating trip to avoid spreading this invasive plant around the region. If you see any suspicious plant or animal on your equipment or notice something while you are enjoying Wyoming's outdoors that you think may be invasive please let us know. You can report a sighting at 1-877-WGFD-AIS or [reportAIS@wyo.gov](mailto:reportAIS@wyo.gov). Boaters don't be shy, come say hello to our friendly inspectors at any of our locations, tell them about your day on the water and get a quick inspection! Thank you for your help in protecting Wyoming waters. From all of us in the AIS program, have a fun and safe 2014 boating season!

## ***Aquatic Habitat Projects in the Sheridan Area***

Several aquatic habitat projects are completed or ongoing in the Sheridan Region. These projects range from addressing fish passage and fish entrainment (loss of fish in irrigation ditches), to riparian and stream bank repair, to improving stream function. Project scope and costs range from simple and fairly inexpensive to larger scale and more expensive projects. WGFD often cost shares on projects. We are really fortunate to work with several great organizations, private landowners, and federal and state partners to fund most of these projects.

### **Fish Passage and Diversion Screening**

#### *Piney Creek Dunlap Diversion*

Assistance was provided through the Department's habitat trust fund to rehabilitate the Dunlap dam and diversion on Piney Creek in Sheridan County. The project was designed to improve the diversion infrastructure and provide upstream fish passage. The new ramped diversion dam will allow fish to seek seasonal habitats and cooler water temperatures during low flow conditions (Figures 1 and 2).

## Aquatic Habitat Projects (continued)

About 10 contiguous stream miles along Piney Creek were reconnected as a result of the effort. Screening to limit adult fish from entering the 11 to 18 cfs diversion ditch is planned during 2014. Additional fish passage and screening is being sought at the next diversion dam downstream of the Dunlap diversion. This project would reconnect a larger segment of Piney Creek with Clear Creek. Many thanks are extended to the ditch company and the landowners where the dam and diversion ditch occur for making the project possible, and the Wyoming Wildlife and Natural Resource Trust for cost-sharing.



Figures 1 and 2. The previous three and a half foot tall coffer dam at the Dunlap diversion on Piney Creek (left) was replaced with a fish-friendly ramped structure (right) in 2013.

### Passive Rehabilitation

Passive rehabilitation involves identifying major deficiencies that are reducing habitat values, and then improving management practices to trigger natural improvement processes. Applying improved management practices may then allow habitat conditions to improve over time.

#### *South Tongue River Watershed*

Streambank erosion and extensive channel widening, in-part due to declining woody riparian vegetation along streambanks, is a problem along some tributary and mainstem stream segments in the South Tongue River watershed. To begin addressing these problems, the Department and Bighorn National Forest are working to improve willow growth, increase streambank cover along the stream, and reduce eroding streambanks. In 2013, we collaborated to build an 18-acre fenced enclosure along the West Fork South Tongue River, and maintain another 13-acre big game and livestock enclosure complex on Sucker Creek (Figures 3 and 4). Conifers that were encroaching on the riparian areas were also removed inside the enclosures. A Wyoming Conservation Corps crew helped to build the enclosures and remove the conifers. During the fall, 1,200 willow plantings, which were started from cuttings in a nursery, were planted inside the West Fork South Tongue River enclosure.



Figures 3 and 4. Department, Bighorn National Forest, and Wyoming Conservation Corp workers constructed an 18 acre cantilever buck and pole enclosure on the West Fork of the South Tongue River (left) and maintained a 13 acre buck and pole enclosure on Sucker Creek (right).

## Unique Fishing Opportunities

Brood stocks are groups of adult fish kept specifically for the production of eggs, and the Story Fish Hatchery is the largest brood stock facility in Wyoming. We are home to five different species;- lake, brook, brown, Eagle Lake rainbow, and golden trout. The majority of the eggs collected each year at Story stay in Wyoming to provide fishing opportunities across the state. However, excess eggs are often traded to other states for warm water species such as walleye, tiger muskie and bass that do not normally reproduce well in Wyoming's cold water. Brood fish are typically kept for four to five years until the female's egg quality and production begins to decline but, due to their longevity, lake trout may be kept for up to 18 years!

Once the fish have reached the end of their productivity, they are culled out to make room for the next incoming year class. Anglers in northeast Wyoming are able to benefit from this culling program by having some unique fishing opportunities through Story Hatchery's brood cull stocking program. This program is geared towards providing a wide range of anglers the opportunity to catch fish that they normally might not have access to. When deciding stocking locations, preference is given to areas that have easy public access, handicap accessible fishing docks and opportunities for family participation.

These culls are a once in a lifetime opportunity for most anglers- brown trout typically weigh in at one pound and are 13.5 inches in length, brook trout are just over 1 lb and 14 inches, Eagle Lake rainbows average 2 lbs and 19 inches and the lake trout tip the scales at 5 lbs and are just over 24 inches in length. Golden trout, while not typically as large as our other species, normally inhabit high mountain alpine areas that are not easily accessed so it is a special treat to have the chance to catch one of these beauties!

In 2013, several water bodies in the Sheridan Region were stocked with brood culls:

- Gillette Fishing Lake in Dalby Park received 400 brown, 130 lake and 630 Eagle Lake rainbow trout.
- Ninety Eagle Lake rainbows were stocked in High Country Park Pond located just off of Force Road near Gillette
- Panther Pond at the WYDOT rest area in Wright was stocked with 360 Eagle Lake rainbow trout.
- Black Hills Power and Light Pond in Osage, between Moorcroft and Newcastle, 800 brook trout were released.
- Mavrakis Pond in Sheridan received 400 brown, 25 Eagle Lake rainbow and 273 golden trout.



Brown trout brood-culls stocked into Black Hills Power and Light Reservoir.

THE STORY  
HATCHERY'S  
BROOD STOCKING  
PROGRAM  
PROVIDES  
ANGLERS WITH A  
UNIQUE FISHING  
OPPORTUNITY



Lake trout



Brook trout



Golden trout



Brown trout being stocked into Gillette Fishing Lake.

## Tiger Muskie — So far so good

Tiger muskie, a hybrid cross between a northern pike and a muskellunge, have been introduced into the Sheridan Region. Tiger muskie are generally used as a biological control, often preying on undesirable species such as suckers, or stunted game fish such as perch or green sunfish. And because they are a sterile hybrid and cannot reproduce, we can control their population size by the number we stock.

In October of 2012, 1,000 6 to 8 inch tiger muskie were stocked into Healy Reservoir to prey upon white suckers and stunted yellow perch. Just a few short months later in April 2013, these muskie were already 11 to 14 inches! In December of 2013, anglers reported muskie in the 22 to 25 inch range. Impressive growth for such a short time period!

In 2013 we took advantage of tiger muskie supplies and stocked them in Kleenburn Ponds (aka Acme Ponds) and Buffalo Wetlands Pond to prey on smaller largemouth bass. We also stocked a few tiger muskie into Ranchester City Pond to prey on an overabundant population of green sunfish. Healy and LAK reservoirs were also stocked in 2013. Because these muskies grow so fast, they will also provide a “trophy component” to the above mentioned waters and improve these fisheries as a whole. One reminder to anglers; tiger muskie must be  $\geq 30$  inches in order to legally harvest.



A happy ice-fishing angler with a 22” tiger muskie from Healy Reservoir (December 2013).



Size of a Healy Reservoir tiger muskie at stocking (6-8”).



Size of a Healy Reservoir tiger muskie in April 2013 (11-14”).



A happy ice angler with a nice healthy Yellowstone cutthroat.

## Lake DeSmet Update

When you think of consistency in a fishery, in northeast Wyoming, you think of Lake DeSmet. This popular water is sampled twice a year (spring and fall) to monitor trends. Both samples are important to the management of DeSmet because we catch different species at different times of the year. For instance, in spring we catch a lot of Yellowstone cutthroat, while in the fall, we catch very few of them. For walleye, we see fewer in the spring while we catch several in the fall. Sampling twice a year at Lake DeSmet is necessary in order to get a good picture of what’s going on beneath the surface.

This year was similar to past years. Rainbow trout and Yellowstone cutthroat averaged 15” and up to 2 lbs while brown trout averaged 23” and up to 10 lbs. Walleye were found in several size classes and they ranged from 12 to 28” and up to 10 lbs. The most noticeable difference this fall was the number of yellow perch captured. Over 200 perch were captured which was very high compared to past years and they ranged from 5 to 12” and up to 1 lb! So if you’re looking for a consistently good fishery, give DeSmet a try, it’ll be well worth your time.



A 10 lb walleye from DeSmet.

## Cloud Peak Wilderness

As fisheries biologists we feel privileged and thankful that we live and work in such a beautiful state and in the Sheridan Region. July and August are two of our favorite months because that's when we get to work in the Bighorn Mountains, and more specifically, the Cloud Peak Wilderness. East of the hydrographic divide, we have 110 lakes in the Cloud Peak Wilderness, of which 64 have fish. Our goal is to sample 8 to 12 alpine lakes per year.

2013 was no different. We sampled lakes in the Kearny Creek, West Fork Big Goose Creek, and the Coney Creek drainages. Below is a list of the individual lakes and what we found.



A golden trout from Myrtle Lake.

Lake	Species	Mean Length (inches)	Max Length (inches)	Mean Weight (pounds)
<b><u>Coney Creek Drainage</u></b>				
Coney #1	Brook trout	10.7	12.3	0.50
Coney #2	Brook trout	11.2	12.4	0.60
<b><u>West Fork Big Goose Drainage</u></b>				
Buffalo	Brook trout	9.0	11.0	0.30
Geddes	Brook trout	8.8	10.2	0.30
Shamrock	Brown trout	13.6	15.0	0.80
<b><u>Kearny Creek Drainage</u></b>				
Elephanthead	Golden trout	14.0	16.5	1.2
Myrtle	Golden trout	14.0	15.8	1.3
Spear	Brook trout	9.6	12.4	0.30



A gorgeous golden trout from Elephanthead Lake.

Enjoy the Cloud Peak Wilderness!! For questions about wilderness regulations please contact the Bighorn National Forest at 307-674-2600. For questions about specific lakes, stocking, or management, please contact us here in the Sheridan Regional Office at 307-672-7418.



A nice Shamrock Lake brown trout.



Brook trout from Coney Lake.

## Bass Fishing in Northeast Wyoming

When most people think about fishing in northeast Wyoming, they generally think about fishing for trout somewhere in the Bighorn Mountains or perhaps Lake DeSmet. Over the last 15-20 years, walleye and perch fisheries across the state have increased in popularity. Certainly popular in other parts of the country, but perhaps largely overlooked in Wyoming are the smallmouth and largemouth bass.

Both species are in the family *Centrarchidae* or the sunfish family and native to North America, but are not native to Wyoming. Both smallmouth and largemouth were introduced to Wyoming as early as the 1890's, but didn't become well established until the 1960's. Generally, smallmouth thrive in cool, clear water, in both rivers and lakes while largemouth are almost exclusively a lake/reservoir fish. The easiest way to tell a largemouth from the smallmouth is their mouth. When closed, the largemouth's maxilla (upper jaw bone) extends past the eye where the smallmouth's does not. Also, the largemouth is typically a deeper richer green color while smallmouth typically are bronze to brown with or without green blotches.

Generally, Wyoming's waters are too cold and unproductive to see exceptional growth for largemouth bass but our state record is not too shabby coming in at 7.88 lbs in 1992 from a Sheridan County farm pond. Smallmouth bass growth also struggles with short growing seasons and often a lack of forage, but again, our state record is pretty good coming in at 5.94 lbs in 2003 from Flaming Gorge Reservoir.

While Wyoming doesn't boast the most impressive state records for bass, pound for pound, nothing fights harder than a bass at the end of your rod. In northeast Wyoming, numerous ponds contain large or smallmouth bass (although most are on private land). The public waters with largemouth bass in northeast Wyoming are producing some nice sized fish. Healy Reservoir and Buffalo Wetlands Pond (both near Buffalo) are quite impressive with largemouth sampled at or near 5 pounds! Both of these waters contain yellow perch, a good forage base for largemouth. It would not surprise us if a new state record largemouth eventually comes from one of these two waters. Other public waters in northeast Wyoming that contain largemouth include the Kleenburn Ponds north of Sheridan, with fish approaching 4 pounds. Newland Bass Pond, a private pond signed up with Walk-In-Fishing program, grows some nice largemouth as well with fish reaching 19 inches and 4 pounds. Black Hills Power and Light and Geier (newly created reservoir signed up in the Walk-In-Fishing Program) reservoirs, both near Osage, are also decent largemouth fisheries.



A nice Keyhole smallmouth.

Two public waters currently producing some excellent smallmouth bass fishing are Keyhole Reservoir (northeast of Gillette) and LAK Reservoir (east of Newcastle). Both reservoirs have a good forage base and good spawning habitat leading to strong populations of nice fish. It is difficult to get an accurate picture of their size structure in these reservoirs because smallmouth are generally difficult to sample with gill nets, these waters are much bigger in size, and there is only a short window to capture smallmouth in shallower water with electrofishing gear. Nonetheless, both waters are producing awesome fish. At LAK we've seen smallmouth from 8 to 18 inches and up to 2.5 pounds, while at Keyhole, we've seen smallmouth 10 to 19 inches and just shy of 4 pounds.

Fishing for bass is just like anything else, they can be caught “accidentally” while targeting other fish such as crappie or walleye (such as Keyhole), or you can get technical and target bass specifically. For both large and smallmouth, anglers generally prefer to fish in spring through early summer. The bass are generally more aggressive, having just spawned and requiring some “groceries”. Top-water baits work well at dawn and dusk while plugs, rapalas, swimbaits, or grubs work well through the middle of the day. For largemouth, concentrate your efforts on shoreline habitat with vegeta-

tion, a sunken log, or the like. Smallmouth will inhabit the same types of habitats, however they also love rocky points and boulders that are close to deeper water. So the next time you feel like going fishing in northeast Wyoming, give bass fishing a try.



Healy Reservoir largemouth.



Buffalo Wetlands largemouth.



An LAK Reservoir smallmouth.

## Sauger Migrating up Clear Creek

Kendrick Dam was built in 1901 and completely blocked upstream fish movement in Clear Creek for over 100 years. The Pee Gee Ranch owners generously allowed Game and Fish to build a bypass channel (bypass) around the dam in 2010. The bypass allows fish to move past Kendrick Dam and to travel 36 miles upstream almost to Clearmont where they encounter another irrigation diversion that blocks further movement.

In 2010 and 2011, most of the species we thought would use the bypass actually did, but we didn't see sauger or shovelnose sturgeon. We couldn't operate our traps safely at high flows so there was a good chance we didn't sample when sauger and sturgeon were migrating. In order to sample continuously, we used Passive Implant Transponder or "PIT" tag technology in 2012 and 2013.



Kendrick Dam (right), the bypass channel (center), and the top of the bypass (left).



A Clear Creek sauger being PIT tagged.

The small tags are inserted into a fish's body cavity (interperitoneal) where they can remain as long as the fish lives. A battery powered antenna placed in the bypass emits a low electrical charge which is excited whenever a tagged fish swims by. A recorder then logs and stores the unique tag number for later retrieval. With this technology, we could detect tagged fish using the bypass 24 hours a day over several months.

In 2012 and 2013 we tagged 38 sauger and 81 sturgeon from Clear Creek below Kendrick Dam, and the Powder River from as far away as the Yellowstone River in Montana (about 265 miles from the bypass). The PIT tag detectors were operated at both ends of the bypass during high flows of both years.

No sauger or sturgeon were detected using the bypass in 2012, but in 2013, 3 sauger passed the upper bypass detector (one traveled from the Yellowstone River). That's exciting news, because in this case, where there are three, there are certainly more! We don't know how many untagged sauger may have ascended the bypass, so in 2014, we plan sampling Clear Creek above Kendrick Dam, not only looking for sauger, but also for other species that have used the bypass.

Including sauger in 2013, we've now documented 17 fish species using the bypass. We still haven't seen shovelnose sturgeon so we'll operate the PIT tag readers in 2014 to watch for them and others.



A sauger (left) and shovelnose sturgeon (right) ready to be PIT tagged and released.



WYOMING GAME AND FISH DEPARTMENT— "CONSERVING WILDLIFE-SERVING PEOPLE"

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*We welcome your comments or suggestions on this newsletter. Please feel free to contact us or send an email to:*

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**Important Date to Remember**  
**June 7, 2014**  
Wyoming's Free Fishing Day. Check the Wyoming Game and Fish website or your fishing regulations for additional details.



Paul Mavrakis: Fisheries Mgmt.



Bill Bradshaw: Fisheries Mgmt.

### Upcoming Work for 2014

Thanks for taking time to view our newsletter! Please feel free to stop by our office, give us a call or catch us out in the field. Although we'll be very busy this summer with field work, we are always happy to answer questions about fishing and fishing opportunities in the Sheridan Region. Below is a list of projects upcoming for the 2014 field season. Stay tuned for updates on these waters in our next newsletter. Happy Fishing!!

- Sampling on Keyhole, DeSmet, Healy, Tie Hack, Willow Park, MW, LAK, Geier, Muddy Guard #1, Sawmill Res and Sawmill lakes.
- Sampling on lower Clear Creek, North Tongue, South Tongue, Bull Creek, Sucker Creek, West Fork South Tongue, Middle Fork Powder, and Little Bighorn.
- Cloud Peak Wilderness sampling at Florence chain lakes, Elk, Willow #1, and Romeo.



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