2008-2009 Fishing Regulation Changes

The fishing regulations for 2008-2009 feature numerous changes not only on a statewide basis, but also areawide and site-specific. These revisions were formulated to reduce the number of special regulations, standardize some of the language for the special regulations and clarify language that has confused anglers. The new regulations were approved by GF Commission order in July 2007.

In the Cody region, all special regulations except those for Luce Reservoir have been changed to some degree. This makes it imperative that anglers “Read regulations closely.” Regulation booklets are available wherever licenses are sold. Anglers can also go to the G&F website (Fish & Fishing tab) to see and download a regulation brochure (http://gf.state.wy.us).

Anglers should notice a change to statewide brook trout limits, areawide cutthroat limits, size restrictions on streams, increased lake trout limits and reduced harvest limits on other species at Buffalo Bill Reservoir and reduced walleye limits on Deaver Reservoir.

Fisheries Management in the Cody Region

The Cody fisheries crew consists of regional fisheries supervisor Steve Yekel, fisheries biologists Jason Burckhardt and Mark Smith and aquatic habitat biologist Lew Stahl. Since the region has so many great fisheries, we have divided management responsibilities with Jason covering most of the Absaroka Front drainages, while Mark manages the Bighorn River and Big Horn Mountain drainages.

Lew works throughout the basin and on fish passage projects for the Department.

We manage your resources for you and we encourage you to call or stop by if you have questions or concerns. Our contact information is on the back page of this newsletter.
“Some statewide and Area 2 regulations require anglers to identify their catch.”

Fish Identification

In order to better manage our aquatic resources and conserve native sportfish, the regulation changes for 2008-2009 require anglers to identify their catch. Some of these fish live in the same locations as their close relatives and look similar to the unsuspecting individual. Do you know the keys to identifying these species of fish?

Images courtesy: Michelle LaGory & LuRay Parker

**Wyoming Natives**

**Sauger**

Distinguished from Walleye by black spots on dorsal fin and irregular dark patches across their sides.

**Walleye**

Distinguished from Sauger by white markings on lower lobes of tail and anal fins and lack of black spots on the dorsal fin.

**Rainbow Cutthroat Hybrid (Cuttbow) Trout**

Have a combination of rainbow and cutthroat characteristics. They have more spots on the head than cutthroat, may or may not have red or orange slash on lower jaw and have white tips on anal and pelvic fins.

**Rainbow Trout**

Distinguished from cutthroat trout by more uniform black spots and more spots on the head, absence of red or orange slash on lower jaw and presence of white tips on fins.

**Brook Trout**

While neither of these species are native, the creel limits differ and anglers fishing areas where both are present need to be able to distinguish them. Both brook trout and splake have light spots on a dark background and some red or pink spots with blue halos concentrated on lower half of body. Lower fins and tail have striking white border offset by black. Angler can distinguish brook trout by their almost square tail, whereas splake have a forked tail.

**Splake**

**Cutthroat Trout**

Distinguished from rainbow trout and rainbow cutthroat hybrid (cuttbow) trout by black spotting that is generally concentrated towards the tail; few or no spots on head, red or orange slash under jaw; no white tips on fins.

NOT CONSIDERED A CUTTHROAT UNDER 2008-2009 REGULATION
Big Horn Lake Rebounds - Mark Smith

As most local residents are well aware, water has been scarce in our region for some time. One of the most heavily affected fisheries in the region due to the water scarcity has been Big Horn Lake (locally referred to as Yellowtail Reservoir).

In only two of the past five years has there been enough water to fish on the reservoir in Wyoming. In early summer 2005, rains augmented a dismal snowpack to fill the reservoir completely (3,640 feet elevation). This past year the U.S. Bureau of Reclamation, which controls reservoir releases reduced summer outflow and was able to hold the reservoir elevation above 3,630 feet through the summer.

The nearly full reservoir in 2007 produced an influx of food (primarily small fish for the larger fish to eat) and combined with a strong year-class of sauger from 2004, led to very good fishing opportunities.

Sauger are as abundant as they have ever been in the reservoir and unlike sauger from the past, these fish are very fat. Sauger in the reservoir in 2007 averaged 16 inches and 1.5 pounds.

Due to their ability to utilize many food sources and affinity for shallow water foraging, channel catfish in Big Horn Lake have done well even during drought conditions. Channel catfish captured with trot-line sampling during June between the causeway and the narrows averaged 20 inches and 3.5 pounds.

While the reservoir is providing very good catfish and sauger fishing, the reservoir's biggest secret might be smallmouth bass. Smallmouth bass like to be close to structure and in Big Horn Lake are often found near rubble slopes and other near-shore rock piles.

If you haven't fished Big Horn Lake recently give it a try. 2008 promises to be some of the best fishing the reservoir has ever had.

For more information check out these web sites.

www.bighornlake.com
www.nps.gov/bica

Summary of Recent Cloud Peak Wilderness Lakes Surveys - Mark Smith

Cliff Lake - Brook trout averaged 7.4 inches and ranged from 5-9 inches.

Sheepherder Lake - Brook trout averaged 9.8 inches and ranged from 6 to 12 inches. Lake Trout averaged 16.3 inches and ranged from 13 to 26 inches.

Pouch Lakes - Yellowstone cutthroat trout averaged 13 inches and ranged from 11 to 15 inches.

Fatwoman Lake - Lake trout averaged 12.7 inches and ranged from 10 to 18 inches.

Triangle Lake - Brook trout averaged 8.4 inches and ranged from 7 to 9 inches.

Lake Eunice - Brook trout averaged 8.4 inches.
Our crew continues to work on projects aimed at reducing the loss of fish into water diversions in the region. In the Cody region alone we have hundreds if not thousands of water diversions that have the potential to impact fisheries. While this isn’t a new problem, and certainly not one that can be fixed overnight, considerable technological advances in this field provide optimism for the future. One of the major advances has been fish screens. Fish screens are devices placed on water withdrawals that pass water while keeping fish in the river or lake and are often engineered to be self cleaning.

As faithful readers of this newsletter might recall, a rotating drum screen was installed on a North fork Shoshone River tributary (Trout Creek) in 2006 and a box screen was installed on Beck Lake in 2007. Screens have been engineered for almost every imaginable situation ranging from flat plate screens akin to a fine wire trash rack to large complex moving screens that filter huge volumes of water and clean themselves.

We are still in the exploration and prioritization phase of fish screening. Our goal is to determine where fish screens might be applicable and worth allocating considerable financial resources.

Additionally, it is important that we develop cooperative relationships with owners of water diversions so that they will want to consider fish screens in future upgrades of their structures. Undoubtedly more fish screens will appear in the Cody region in the future.

We are currently working on a project in the lower Bighorn River and Big Horn Lake to better understand fish movements between the river and reservoir and to determine how many of these fish are captured and harvested. It takes considerable effort to tag enough fish for this study and we eagerly await phone calls from anglers who catch a tagged fish. These tags get dirty over time but careful examination will reveal a four digit number and our phone number. Anglers who call can learn the history of their fish.

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Please Report Tagged Fish—Mark Smith

A Future in Fish Screens - Mark Smith

Tagged fish may be small or large like this Big Horn Lake Cat

All tags will be located near the dorsal fin such as the yellow tag on this cat.

Placing a sauger tag.

This self-cleaning screen on Trout Creek directs fish back to the creek instead of down the canal.

This screen installed on the Beck Lake outlet will keep fish in the lake and out of the canal.

Traveling screens require a power source but are very effective at removing debris and keeping fish in the stream.
A Report on Bighorn River Trout Fishing—Mark Smith

It has been a very good year for trout fishing on the Bighorn River. While we continue to suffer through low winter flows and fish populations that are less than the historical highs, a combination of flushing flows, larger stocked fish and relatively mild winter conditions have produced very good catches of large rainbow, cutthroat and brown trout.

If you have fished the river recently you have likely observed one of our volunteer creel boxes that were put out in 2006 to collect information from anglers.

The voluntary responses collected by those using these boxes can be difficult to interpret due to the nature of us as anglers. For example, anglers are much more likely to fill out a survey if they caught fish than those who did not. After all, it’s human nature to brag especially among anglers.

So the information collected isn’t completely accurate but it is the most up to date picture of angling on the river.

We collected 250 completed survey cards between June 2006 and October 2007 that were considered legitimate.

Anglers who fished the river came from 16 states including Wyoming. Nearly 40% of anglers were non residents. Wyoming residents from 13 counties fished the river. Residents of Hot Springs, Washakie, and Teton counties returned the most surveys.

The majority of respondents (67%) fished between Wedding of the Waters and 8th Street in Thermopolis. Fishing from a boat was more common (80%) than fishing from the bank or wading. Additionally, boat anglers reported a higher catch rate; catching 1.2 trout/hour while bank anglers captured 0.5 trout/hour.

Flyfishing was the most common type of angling (76% of anglers) followed by bait and lures.

Anglers reported catching 509 rainbow, 119 cutthroat and 104 brown trout. Respondents harvested 25 rainbow (5% of those captured), 7 brown and 4 cutthroat trout.

Overall, the survey indicates that fishing is largely done by anglers using flies from boats and they release the vast majority of fish. Local Hot Springs county anglers were considerably outnumbered by those from other parts of Wyoming and other states. Most fishing occurs in the spring and fall with rainbow trout captured most often. While harvest is limited, most is coming from Hot Springs County anglers fishing with bait or lures.

The outlook for 2008 is very good. While we didn’t conduct population estimates on the river in 2007, all indications are that we should have strong numbers of rainbows in the 15-20 inch range in 2008.

Dry Medicine Lodge Creek Now a Safe Home for Yellowstone Cutthroat Trout—Mark Smith

Yellowstone cutthroat trout are the only trout native to our region. The species is quite rare on the west side of the Big Horn Mountains occupying only about 4% of stream miles that contain fish.

As we reported in previous years, we are working on returning these native fish to a number of streams that provide the best opportunity for their long-term survival and protection. This work will provide anglers a more diverse fishing opportunity and the ability to catch native fish in their native environment.

The other bonus for anglers is that cutthroat generally grow larger than brook trout in these small streams.

After two years of chemical treatment, Dry Medicine Lodge Creek is now 100% Yellowstone cutthroat. The remnant upstream population of cutthroat is now protected from invading brook trout and the lower stream has been re-stocked with Yellowstone cutthroat from our Tensleep Fish Hatchery.

"The outlook for 2008 is very good"
During 2007 we concluded a project that surveyed warmwater streams throughout the Cody region to determine the status of fish and habitat. Surveys were conducted on 102 sites in the Greybull, Nowood, Shoshone, and Bighorn River watersheds.

A total of 33,180 fish were collected, representing 24 species. The most common fish caught were longnose dace (a small bottom oriented minnow) and fathead minnow. Most fish caught were nongame species but some game fish were also caught including trout (brown, rainbow, and cutthroat), mountain whitefish, channel catfish, stonecat, sauger, smallmouth bass, yellow perch, and hybrid sunfish.

Of all the fish species caught, eight are not native to Wyoming. Some of these nonnatives, such as brook stickleback and plains killifish, may be harmful to native minnows and suckers by out-competing them for food and other resources. Preventing the spread of these nonnative fish to other areas is very important for native game and nonnative fish. Anglers can help by not transporting these nonnatives as baitfish.

The fish found in the warmwater streams throughout the basin may be small, but they are very important. These small fish can be indicators of aquatic health in our streams, help maintain balance in the aquatic ecosystem, and are food for many larger game fish and other wildlife. So even though many anglers may not see these fish or catch one, you can rest assured that these fish are doing their part to keep fishing great.

Much of the area sampled in the basin is private land and we thank the many private landowners who allowed us to access streams on their property.

Warmwater Streams—Beth Bear

Habitat was assessed in warmwater streams throughout the region.

Fish were captured primarily by dragging seines through the water.

Fathead minnows are one of the most abundant fish in small warmwater streams in the Cody region.

Longnose dace is the most widespread species found in the Cody region. These fish are found from small trout streams to the murky waters of the lower Bighorn River.

Mayland Stock Pond Returns—Mark Smith

Average sized bass and sunfish from Mayland Stock Pond in 2007.

After a complete loss of this small fishery to drought conditions in 2003, Mayland Stock Pond between Cody and Greybull is starting to recover.

This small reservoir has a checkered history that includes the state record yellow perch caught in 1991.

We are currently trying to reestablish the fishery with largemouth bass and hybrid sunfish. During an early summer survey in 2007 we found good numbers of both. With bass averaging 11 inches and 0.8 pounds and sunfish averaging 6 inches.

We will continue to monitor the recovery of this fishery, but unless we experience extreme draw downs as in 2003 there should be good catches throughout the summer of 2008.

Both of these species are structure oriented so try the reeds and cattails in the southwest corner.
Vital Connections—Jason Burckhardt

Prior to European settlement of the west, our river and stream systems were an interconnected network of streams progressing from headwater tributaries to lower elevation rivers. Within the network of streams our native fishes developed different life history strategies that allowed them to cope with the harsh environmental conditions that exist within these waters. Some of our cutthroat trout, for example, moved from lower elevation rivers to headwater tributaries to spawn and back to the lower elevations where there was ample winter habitat. Likewise, our finned friends at lower elevations moved to find suitable locations to spawn, find food, and suitable habitat.

Our terrestrial critters receive a lot of press regarding their migration corridors and requirements of winter ranges, but our fishes also have requirements that require them to move about.

With “progress” our waterways became developed and with this development came the installation of barriers to fish movement, which effectively cut off these migration routes. These barriers include lowhead diversion dams, improperly placed or undersized culverts, or areas of degraded habitat.

In addition to the connection needed for various life history strategies, connection is necessary for the exchange of genetic material between populations to prevent inbreeding and promote genetic diversity of populations. This genetic diversity of our fish populations will help ensure the long-term adaptability of these populations.

Fish populations face other threats as well, including wildfires, dewatering due to drought, and debris flows (similar to those that occurred in the North and South forks of the Shoshone River last summer). Our native fishes have dealt with these types of situations for thousands of years. Streams in the northern Rockies can be an inhospitable place for fish. Through time those occurrences may have wiped out fisheries in particular drainages, but those populations could quickly be “refounded” or repopulated by nearby or adjacent connected streams. Without these vital connections those populations would be lost.

Our crew has been working to reduce barriers to fish movement and restore some of the connectivity to our aquatic systems.

“We are working to remove barriers to fish movement and restore some connectivity to our aquatic systems.”

Corbett Dam is a good example of a low head diversion dam that does not allow fish passage.

This “perched culvert” impedes upstream fish movement.

Strike Gold in the Beartooth Mountains—Jason Burckhardt

After a hiatus of more than a decade, golden trout were returned to a few lakes in the Beartooth Mountains of Wyoming. Daphnia, Cliff, Rainbow and Snyder lakes were stocked with golden trout in the summer 2005. Sampling last summer found those populations doing well in Daphnia, Rainbow and Snyder lakes, but very few goldens were found in Cliff Lake, likely due to the larger number of brook trout that were found in this lake.

Average lengths of goldens in Daphnia, Rainbow and Snyder lakes were 12.8 in, 11.6 in, and 9.9 in, respectively. We did catch one golden that was 16.7 in and 1.47 lbs, which is exceptional growth for just two years. I won’t tell where we caught that one, it is still out there to be found.

These lakes have very little natural reproductive potential so they are reliant upon stocking. Golden trout were not stocked in 2007 due to unavailability and some disease issues with one of our source populations, but we are planning on stocking these lakes again in 2009.

Golden trout, like this one can be found in a few Beartooth lakes.
Exotic Snails Invade Shoshone - Jason Burckhardt

New Zealand mud snails were found in the Shoshone River tailwater this fall, near the Cooper Lane access area. Unintentional transport of mud snails on fishing gear and equipment, notably wading gear, is likely one of the primary vectors spreading mud snails among water bodies. They are showing up in waters frequently visited by highly mobile anglers. Waters that contain New Zealand mud snails now include, the Yellowstone, the Bighorn River at Thermopolis, the Big Horn River at Fort Smith, the Snake River, the Madison River and many others.

These snails have the ability to reproduce asexually, essentially cloning themselves, so it only takes one snail to create a population. We are concerned about the presence of these snails because they have the potential to impact the food chain of our trout streams. These snails can reach such high densities that they can squeeze out almost all other invertebrates (trout food).

To avoid transporting Aquatic Invasive Species:

1) Remove all visible mud, plants, fish/animals from your fishing equipment /boats.
2) Eliminate water from all equipment before transporting anywhere.
3) Clean and dry anything that came in contact with the water.

For more information on New Zealand Mud snails visit:
http://www.esg.montana.edu/aim/mollusca/nzms/

The North Fork Shoshone/Buffalo Bill Reservoir Fishery is Booming - Jason Burckhardt

For those of you that fished either Buffalo Bill Reservoir or the North Fork Shoshone River in 2007, it may not be a surprise, that this fishery is booming. Using hydroacoustic (sonar), we estimated pelagic (open water) trout abundance at 16.2 fish/acre. The pelagic fish in the reservoir consist of brown trout, rainbow trout, Yellowstone cutthroat trout, and trout hybrids. This estimate of pelagic fish is the highest density recorded since these estimates began in 1995.

Lake trout numbers are also on the increase. While the trophy class lake trout are rare, they are out there (see Randy Merritt’s photo on the Big Fish Board section) and the number of 18-22 inch lake trout are very common and will keep an anglers interest while waiting for that one big bite.

Anglers are reminded that there are new regulations on Buffalo Bill Reservoir and the North Fork Shoshone River for 2008. The easiest way to think about these changes on Buffalo Bill are that there are two different regulations: one for lake trout and one for all other trout species. To standardize the trout regulation between the North Fork Shoshone and Buffalo Bill Reservoir the limit on trout in Buffalo Bill has been reduced from four trout to three trout (excluding lake trout), only two may be cutthroat trout and only one may be over 18 inches. This trout limit applies to rainbows, cutthroat, their hybrids and brown trout. In addition to the trout limit, anglers on Buffalo Bill may keep six lake trout only one of which may be over 24 inches. We liberalized the lake trout limit to encourage anglers to harvest the abundant 18-22 inch lake trout we are seeing in our sampling.

Our native Yellowstone cutthroat trout can be found in both Buffalo Bill Reservoir and the North Fork Shoshone River. These fish can be identified the by lack of white tips on anal and pelvic fins. Only two cutthroat can be kept from either of those waters.

“Anglers are encouraged to clean their equipment to ensure that they are not responsible for transporting aquatic invasive species.”

“There are a few changes to the fishing regulations for both the North Fork and Buffalo Bill Reservoir this year.”
Obtaining angler access continues to be a top priority for us, however it is a slow process. We have
are working on several projects along the Shoshone River that are beginning to take shape. While it
is too early to cite specifics—stay tuned.

Another important program that provides anglers access to private lands is our PLPW (Private Lands
Public Wildlife) program of walk-in fishing. If you have not taken advantage of this program be sure
to pick up the 2008 Fishing Access Atlas to find fishing sites enrolled in the Bighorn Basin or across
the state. We also encourage landowners to become involved with this program—if you know of a
willing landowner please contact us with his/her name and we will make contact with them.

"There are several new and improved access sites proposed across the region."

Clarks Fork Boat Ramp—Work began last fall to reconstruct a segment of Wyoming Highway 120 near Edelweiss. In coop-
eration with the WY Department of Transportation, a new boat ramp and parking area will be constructed. As the bridge work
is completed, you should start seeing the construction of the concrete ramp take shape. So keep your eyes open for this
new recreational facility and opportunity to enjoy a float on the beautiful Clarks Fork of the Yellowstone. Don’t forget to honor
private property rights while floating as only the water surface is public in Wyoming, and floaters can portage only to avoid
obstacles or hazards.

Rivers Rest—We are still working on plans for construction of a new ramp on a parcel of land
known as Rivers Rest located on the North Fork Shoshone River. The BLM decision notice should
be available soon. This ramp will be located 1/2 way between forest access and the new Gibbs
Bridge ramp constructed in 2007.

Belfry Bridge Trail—Trout Unlimited, together with Game and Fish and other volunteers, has taken on a new project to improve angler ac-
cess along the Shoshone River upstream from Belfry Bridge. This popular stretch of river connects to the Paul Stock Nature Trail and
gives anglers an opportunity to fish over two miles of prime blue rib-
bon trout waters. Work began in spring 2007 to clean and replace sections of old trail along the river, build small bridges over several
draws and remove Russian olive trees that prohibit easy access. About 1/4 mile was completed with about that much more to be
completed in 2008. This trail project will connect to the Paul Stock Nature Trail at the parking area located at the end of Spruce Drive in
the Canyon Meadows Subdivision. If you would like to help with this project in Spring 2008 please contact us or Trout Unlimited.
Wyoming Free Fishing Day
Saturday
June 7, 2008!

Fish Division Mission Statement
“As stewards of Wyoming’s aquatic resources, we are committed to conservation and enhancement of all aquatic wildlife and their habitats for future generations through scientific resource management and informed public participation. We will use an integrated program of protection, regulation, propagation, restoration and control to provide diverse, quality fisheries resources and angling opportunities. Our efforts will balance the productive capacity of habitats with public desires.”

FREE fishing day is June 7, 2008. No license is needed to fish on this day (all other regulations apply).

The Basin Kids Fishing Day will be held on May 10th at the Basin Water Plant Pond.

Cody Youth Fishing Day is on June 7th at the Beck Lake Recreation Area.

Our “Big Fish Board” at the office honors the best and worst catches from the region. Send us your big fish pictures and your weird fish pictures. If you can’t make it to the office send them electronically to: mark.smith@wgf.state.wy.us