



Pinedale Region Angler Newsletter

Greetings From The Fisheries Staff!

Inside this issue:

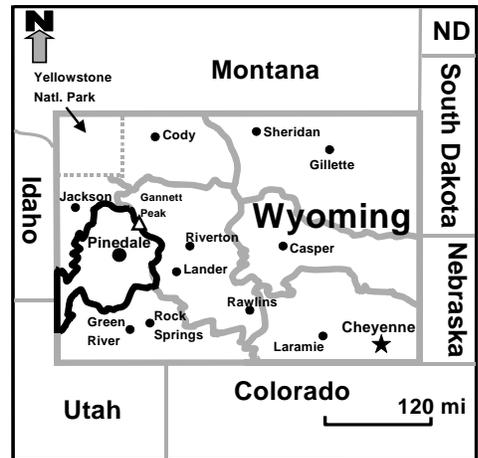
<i>Opportunities to Comment on Proposed Fishing Regulations</i>	1
<i>Burbot Found in the New Fork River</i>	2
<i>Know Your Natives: Mountain Whitefish</i>	3
<i>Meadow Lake Grayling Spawning</i>	4
<i>Lake Trout Management in Wyoming</i>	5
<i>Cutthroat Trout Return to La-Barge Creek</i>	6
<i>Green River Float Map</i>	6
<i>Soda/Little Soda Lakes Update</i>	7
<i>Important Dates</i>	8
<i>Game and Fish E-newsletter</i>	8

This free newsletter is designed to inform interested public on topics of interest and Wyoming Game and Fish Department activities within the Pinedale Region. The Pinedale region encompasses the Upper Green River Drainage (upstream of Fontenelle Reservoir) and parts of the Bear River drainage around Cokeville (see map).

It is our intent to produce up-to-date newsletters each year to keep you informed on findings, progress, and recommendations from the previous year. This newsletter is intended for everyone interested in the aquatic resources in the Pinedale area. The resources we manage belong to all of us.

We hope you find this newsletter useful and informative. Please direct any feedback that

you may have or suggestions for improvements to the contact listed on the back page.



WGFD Regional Map:
Pinedale Region outlined in black.

Opportunities to Comment on Proposed Fishing Regulation Changes!

Pinedale Region Fisheries Staff:

Fisheries Management

Hilda Sexauer Fisheries Supervisor
Pete Cavalli Fisheries Biologist
Darren Rhea Fisheries Biologist

Aquatic Habitat

Floyd Roadifer Habitat Biologist

Spawning

Brian King Spawning Coordinator
Pete Feck Spawning Specialist

Boulder Rearing Station

Chip Moller Superintendent
Alan Shaffer Asst. Superintendent
Joe Gillis Fish Culturist

Daniel Fish Hatchery

George Gunn Superintendent
Greg Anderson Asst. Superintendent
Brian Blutt Fish Culturist

The Wyoming Game and Fish Department will be accepting public comments regarding the proposed 2008-09 fishing and bait fish regulations during May and June.

Several proposed changes would be very different from the state-wide regulations currently in place. In Area 4 (Green River drainage), we are proposing separate creel limits for trout caught from rivers and streams versus lakes and reservoirs. The daily limit on lakes and reservoirs will remain at 6 trout. For the Green River drainage streams upstream from Fontenelle Reservoir we are pro-



Proposed regulations will help simplify cutthroat trout regulations.

posing a three (3) trout limit, only one (1) over 16 inches, and only one shall be a cutthroat trout. If the reduced limit is adopted it will eliminate numerous special regulations on individual rivers and streams, particularly the catch and release cutthroat trout regulation for most of the Wyoming Range tributaries. Tackle restrictions will remain on most of the cutthroat trout waters.

Implementation of the proposed fishing regulations would help "clean up" the regulations currently in place for the Green River and New

(Continued on page 2)

Fishing regulations (cont.)

(Continued from page 1)

Fork River. The creel limit for the entire Green and New Fork rivers would be three (3) trout, only one (1) over 16 inches, and only one shall be a cutthroat trout. The Green River from Warren Bridge (Hwy 191) downstream to Swain's Bridge would be the only section of the river with tackle restrictions. The tackle restrictions on the New Fork River starting at the Mesa Bridge road would extend downstream to the East Fork River confluence.

Streams in the Bear River drainage including the Smiths Fork and Salt Creek (also called Thomas Fork) would have a creel limit of six (6) trout daily but only three (3) shall be cutthroat trout and no more than one (1) cutthroat shall exceed sixteen (16) inches. This regulation would continue to provide protection to Bonneville cutthroat trout, particularly adult spawners, yet allow for additional harvest of brown trout. There would still be tackle restrictions on portions of the Smiths Fork and Salt Creek drainages.

We are proposing to decrease the trout limit at Soda Lake north of Pinedale to one (1) fish daily or in possession. Population estimates were calculated for brown trout and brook trout in 2006 after the fishing season was complete. Our estimates showed that the number of brown trout was 636 and brook trout was 389. We hope this proposed regulation will help protect our brown trout and brook trout brood sources in Soda Lake.

A complete description of the proposed regulations for Area 4 and all other areas can be obtained online or at any Game and Fish regional office. The formal commenting period will begin April 30 and comments will be accepted through 5 PM on June 14. Comments can be provided in two different ways.

Send written comments to:
Wyoming Game and Fish Department
Attn: Fishing Regulations
5400 Bishop Blvd.
Cheyenne, WY 82006.

-or-

Comments will be accepted online at <http://gf.state.wy.us>

-Hilda Sexauer

Burbot Found in the New Fork River

There is a species of fish in Wyoming known to some people as a burbot. Other people call it a ling, a freshwater cod, a lawyer, an eelpout, or one of several other names. Regardless of which name it goes by, this odd looking fish is most likely going to negatively affect the fisheries in the Green River and New Fork River drainages.

“Adult burbot are voracious predators that eat almost nothing but fish”

Burbot are native to the Big Horn River and Tongue River drainages, but they have been illegally introduced west of the continental divide. They were first documented in Big Sandy Reservoir, but they quickly spread to the Big Sandy River, the Green River, and Flaming Gorge Reservoir. Fontenelle Dam should have isolated the upper Green River drainage from these populations, but burbot were found in Fontenelle Reservoir in the fall of 2005. This finding is most likely due to a separate illegal introduction somewhere in the upper Green River drainage. Unfortunately, the Wyoming Game and Fish Department captured a burbot in the New Fork River in 2006. In addition, an angler has also provided an unconfirmed report of a burbot being caught in Fall Creek.



A 19.5-inch long burbot captured in the New Fork River

Burbot are easily distinguished from other Wyoming fishes by their eel-like body and a single barb below the chin. Young burbot tend to eat aquatic insects, but adult burbot are voracious predators that eat almost nothing but fish. Therefore, the existing fish community in the Green and New Fork River drainages will have to compete with juvenile burbot for food and space, and avoid being preyed upon by larger burbot. These factors will likely affect trout, whitefish, and all species of nongame fish if burbot become well established in habitats upstream from Fontenelle Dam.

(Continued on page 8)

Know Your Natives: Mountain Whitefish

Any angler who has spent a reasonable amount of time fishing area rivers and streams has surely encountered the native mountain whitefish. Notoriously known for interrupting those perfect drifts, continuously pulling the hackle off of your flies, and otherwise annoying behavior, this infamous member of the trout family is often an object of ridicule by many. Despite its poor reputation among some anglers, the mountain whitefish is a well-regarded game fish to many others, capable of producing action equal to that of any trout and offering fine table fare for the lucky angler.



Mountain whitefish are a well regarded game fish to many.

The mountain whitefish is a member of the family Salmonidae, the same family as trout, salmon, and char. Their slender, rounded body is similar in shape to most other trout, though they are easily distinguished by their larger scales, smaller mouth, and larger adipose fin. Though they lack the unique and attractive colors and patterns common to most trout, the mountain whitefish can appear quite striking with their bluish-green backs, silvery sides, and pale white bellies. Adults of this species usually average 10-12 inches in length and will weigh in at right around one pound. Individuals greater than 16 inches long are rare, though the current state record is an impressive 21 inches long and 4 lbs. 4 oz.

“Small nymphs or jigs fished near the bottom can easily produce a strike on almost every cast...”

The whitefish prefers large, clear, cold river habitats, but it can frequently be found in high numbers in area lakes with similar water quality. Dense schools of mountain whitefish can often be observed in deep, fast water where they gather to prey on aquatic insects and hide from predators. Spawning occurs in the fall, generally

mid to late October, and can be successful in flowing or standing water. Nuptial tubercles (rough, wormlike markings) develop along the sides of mature whitefish preparing to spawn. Eggs laid on the bottom in gravel and cobble substrates will usually hatch in March.

Mountain whitefish prey almost exclusively on small aquatic insects near the bottom, though they are known to become active near the surface during a heavy hatch. Although their

feeding habits can sometimes overlap the diet of other trout, multiple studies have shown that competition from mountain whitefish has little or no impact on other trout species. Their aggressive feeding behavior can make them easy targets for anglers. Small nymphs or jigs fished near the bottom can

easily produce a strike on almost every cast, providing nonstop action for the consummate whitefish angler.

The Wyoming Game & Fish Department allows for liberal harvest of mountain whitefish, and any angler seeking several meals worth of tasty, high quality fillets can easily accomplish such in a day. To obtain additional information on where to fish for mountain whitefish contact your regional office, and enjoy the opportunities provided by this native game fish.

- Darren Rhea

Deep Fried Whitefish Recipe

- Remove fillets from each side, remove skin, wash in cold water, and dry on paper towels.
- Coat fillets in batter:
 - 1 cup flour
 - 1/2 cup cornstarch
 - 1 egg
 - 1 tsp. baking powder
 - 1 1/2 cup water
- Heat oil in a deep fryer or frying pan.
- Cook fillets until golden brown, remove, and place on paper towels to absorb excess oil.
- Serve warm with lemon and tarter sauce.
- **Special Considerations:** fish 12-15 in. are best, colder water temperatures produce the best tasting fish, and quality decreases on fillets kept for long periods.

Meadow Lake Grayling Spawning - A Tradition for 50 Years

Arctic grayling are native to clear, cold, fresh water areas of the Northern Hemisphere. Within the past century grayling have been introduced into other areas including a few lakes in Wyoming. Grayling are distinguished from other trout species by their unusually long dorsal fin, large scales, small mouth, and a beautifully colored iridescent body.



Biologists use a weir on Meadow Creek to collect spawning grayling

When asked where a person can catch a grayling in the Pinedale Region, the lake that comes to mind for most is Meadow Lake. Meadow Lake is one of Wyoming's most important grayling fisheries, serving as the egg source for stocking other waters throughout the state and allowing us to provide eggs

“Meadow Lake is the egg source for grayling in Wyoming and many other states”

for other states as well. Meadow Lake, located about 13 miles southeast of Pinedale, can be accessed from the Burnt Lake Road near Boulder, Wyoming.

Meadow Lake, once devoid of fish, was initially stocked with 9,000 Arctic grayling from Grebe Lake in Yellowstone National Park in August of 1949. By the mid 1950's the transplant was deemed successful and grayling were observed spawning in Meadow Creek, an intermittent tributary to Meadow Lake. In following years, subsequent grayling plants were also conducted with success. Beginning in 1957 the Wyoming Game & Fish Department began collecting eggs and raising the progeny at Daniel Fish Hatchery. In 1974 a permanent trap was constructed in the inlet with cooperation from the landowner. This in-stream trap not only aids in the capture of the grayling, but also prevents fish passage upstream, which would allow the grayling to spawn naturally causing overpopulation in the lake. Today, 50 years after the

first spawning operation, Wyoming Game & Fish Department personnel continue the tradition of trapping and spawning the grayling at Meadow Lake.

Spawning operations typically begin about mid April (depending on spring thaw and snow pack) The Spawning Crew begins their operation at Meadow Lake by checking to see when the ice comes off. Once ice is clear the spawning urge of Meadow Lake grayling

seems to be triggered by an inlet water temperature of about 50 ° F. Each day as the sunlight raises the inlet water temperature, large schools of mature grayling enter the stream and then the trap. Personnel sort through the fish to determine ripeness or maturity of the eggs. When the majority of fish are determined ripe, personnel strip some of the females of their eggs and fertilize the eggs with the milt (sperm) from a male. A mature female grayling will contain an average of 7,000 eggs. The eggs are placed in coolers and allowed to water harden for four hours. Water hardening is the natural process of a fertilized egg absorbing water. This key step must occur prior to egg transport from the spawning site in order to protect fertilized eggs from the shock of transport. Once water hardened, the eggs are taken to the Dubois State Fish Hatchery where they are raised to appropriate sizes and stocked into Wyoming waters.

Note: Special regulations apply to Meadow Lake to protect spawning grayling. Please pick up the current fishing regulations at your local Game and Fish Office, license selling agent, or online at <http://gf.state.wy.us>.

- Pete Feck

“A mature female grayling will contain an average of 7,000 eggs.”



Fertilized grayling eggs are incubated and hatched at the Dubois State Fish Hatchery

Life in the Slow Lane: Lake Trout Management in Wyoming

Lake trout, also known as mackinaw to many anglers, are among the oldest and largest fish living in Wyoming. In fact, the largest fish of any species ever harvested by an angler in Wyoming is a lake trout (the current state record of 50 lbs. is held by two fish). Because lake trout can become so large, they are a highly prized game fish among anglers looking to land the trophy of a lifetime. However, few anglers realize how rare large lake trout are and how difficult it is for them to reach such impressive sizes. A lake trout must overcome many obstacles to become a “trophy” and this presents many challenges to biologists who manage these important game fish populations.

The largest hurdle facing fisheries biologists who manage lake trout populations is their extremely slow growth. A typical 16-18” lake trout found in the creel of many anglers averages about 7 years old, fish approaching 24” are often 10-12 years old, and lake trout greater than 30” long could easily be 20 to 30 years old. The slow growth exhibited by lake trout is an evolutionary trait they developed to withstand the extremely cold water and short growing seasons of their native range in Canada and the Great Lakes. Though these characteristics have suited them well for the lake environments of western Wyoming, they also create circumstances that can make managing them difficult.



Lake trout are among the largest and oldest fish living in Wyoming

“Lake trout greater than 30 inches long could easily be 20 to 30 years old”

lake environments of western Wyoming, they also create circumstances that can make managing them difficult.

A significant consequence of such slow growth is the time it takes for a lake trout to become sexually mature and reproduce. In most Wyoming lakes, female lake trout are not mature and able to spawn until they are about 10 years old, and larger

females capable of producing large numbers of healthy eggs may be 20 years old or older. In many Wyoming lakes mature adult lake trout must endure 10-20 years of angling pressure before they are capable of reproducing and contributing to the persistence of the wild lake trout population. Lake trout populations can suffer if angling pressure is too high and begins to impact the larger, mature lake trout population.

The other obvious concern among biologists who manage trophy lake trout populations is simply the time it takes to grow such highly prized fish. High levels of angler harvest can quickly reduce the number of large “trophy” lake trout in a population, and

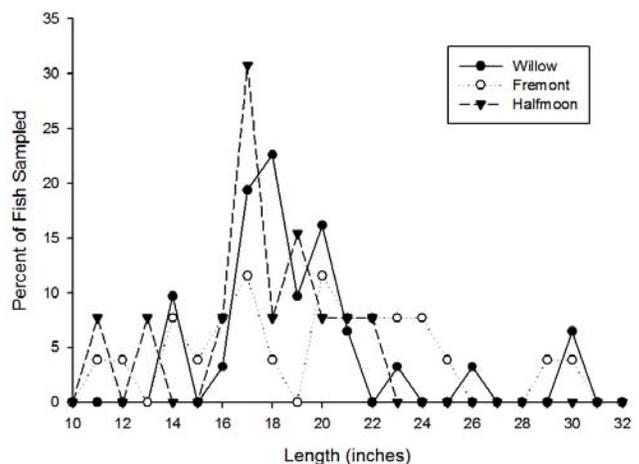
anglers wishing to see large numbers of these trophy fish return to the fishery may be waiting years or even decades for younger fish to replace them. Generally, less than five percent of a lake trout population is comprised of fish larger than five pounds, and lake trout greater than 20 lbs., trophies by many standards, generally represent < 1% of the adult population.

Fisheries biologists use a variety of methods to ensure that trophy lake trout continue to persist in area lakes. Restrictive harvest regulations are frequently used to offer large lake trout some protection. Almost every lake containing lake trout has a regulation that only allows anglers to harvest one fish over 20 inches. This helps to reduce over-harvest of the larger ‘trophy’ lake trout and encourages more harvest of the younger lake trout, which are far more abundant and are recruited to the fishery much quicker. Biologists will also

frequently stock fish to augment populations of prey fish important to lake trout. Species such as kokanee salmon are frequently stocked to help improve lake trout growth so that fish reach maturity and grow to trophy sizes sooner.

It is important for anglers to understand the delicate balance of lake trout populations and the difficulties presented to biologists managing those fisheries. Enjoy the trophy opportunities available in the many area lake trout fisheries, and appreciate how rare and unique those trophies really are.

– Darren Rhea



Data from area lakes shows how rare large lake trout are.

Colorado River Cutthroat Trout Return to LaBarge Creek

The summer of 2007 will mark the return of the Colorado River cutthroat trout to 58 miles of LaBarge Creek and its tributaries.

Crews from the Wyoming Game and Fish Department, along with personnel from numerous other cooperating agencies, completed the final chemical treatments to remove non-native fish species during the summer and fall of 2006. Isolated from the threats of competition and hybridization with non-natives by a barrier to upstream fish migration, this native icon will once again flourish in a portion of its historic range for the benefit and enjoyment of many generations to come.



Native Colorado River cutthroat trout will be returned to LaBarge Creek in 2007.

Members of the Wyoming Game and Fish Department's Daniel Fish Hatchery and Pinedale Regional Fish Management Crew will begin stocking LaBarge Creek in August, after peak flows from spring runoff begin to recede. Plans are to stock larger, catchable (> 8 inches) cutthroat trout to create immediate angling opportunities, along with several thousand fingerlings (< 3 inches) to help create a self-sustaining population with multiple age classes. Future plans are to continue stocking cutthroat trout until a viable population becomes established.

The cutthroat trout that will be stocked into LaBarge Creek are the progeny of genetically unaltered fish that were originally collected from North Piney Lake in the Wyoming Range (see 2005 Pinedale Region Newsletter, volume 1, issue 3). Fertilized eggs from the North Piney Lake stock have been collected since 2003 and reared at the Daniel Fish Hatchery where they have been used to create a captive brood source, and for stocking and reintroduction efforts throughout the range of Colorado River cutthroat trout in Western Wyoming.

The LaBarge Creek restoration project is a good example of the efforts made by the Wyoming Game and Fish Department, the U.S. Forest Service, Trout Unlimited, and many other partners to ensure the long-term persistence of our native aquatic resources. For additional information regarding the Colorado River cutthroat trout restoration project contact Hilda Sexauer, Regional Fisheries Supervisor, at 307-367-4352, or hilda.sexauer@wgf.state.wy.us.

Coming Soon!

New Float Map Highlights Access, Land Ownership

The Wyoming Game and Fish Department is in the final stages of developing a map of the Green River designed to help anglers and other river enthusiasts identify river access. The map will feature the Green River from Green River Lakes downstream to Fontenelle Reservoir.

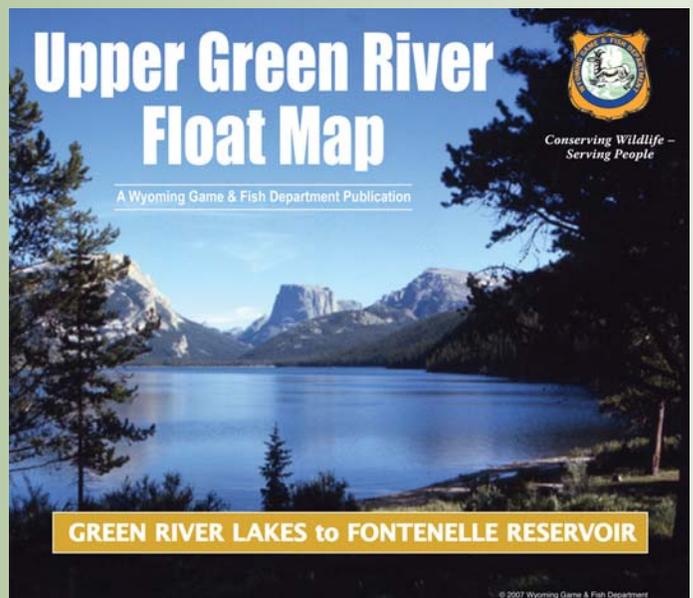
The new map will highlight:

- Access Points
- Public Facilities
- Land Ownership
- Campsites
- River Miles Between Access Points

The new maps will be printed on waterproof paper and should become a popular addition to any raft or drift boat. Printing is scheduled to begin this summer, and maps should be available to the public in fall 2007.

The project to develop the Green River Float Map was initially created by Ron Remmick, former Fisheries Biologist and 26 year veteran of the Wyoming Game and Fish Department. The effort and cooperation to complete this project is a tribute to his memory.

For additional information regarding the Upper Green River Float Map contact the Pinedale Regional Office at (307) 367-4352.



Drought Conditions Continue to Impact Soda and Little Soda Lakes

Two fisheries that have been among the most popular in the upper Green River drainage are still suffering from the long-term drought that has stricken the area. Low water levels in both Soda Lake and Little Soda Lake have caused water temperatures to rise in the summer and oxygen concentrations to plummet in the winter. Unfortunately, these conditions have caused numerous fish kills during the past several years, and will likely continue to affect the fish populations in these lakes until favorable water levels return to the region.



A pair of "average" brown trout caught in Soda Lake.

Little Soda Lake, a favorite among local anglers, experienced fish kills both in the fall of 2006 and in the winter of 2006-2007. All of the trout in the lake had died by the time the ice broke up in spring, as has been the case for the past six years. The lake was restocked with 1,000 rainbow trout in early May, so there will be fish available for anglers throughout the summer. These fish were approximately 8 inches long when stocked, but this productive lake should allow them to double their length by October.

Soda Lake fared a little better than Little Soda Lake during the winter of 2006-2007, but fishing is still going to be very slow this year. Population estimates calculated at the end of the 2006 fishing season showed that brown trout numbers were the lowest ever recorded since population estimates have been calculated at Soda Lake, and the number of adult brook trout was near the lowest ever recorded. Unfortunately, the number of trout in the lake is even lower now because some of the fish succumbed to the stressful conditions encountered during the winter.

Anglers who are lucky enough to land a trout at Soda Lake this year are likely to be pleased with the size of their catch. Nearly three quarters of the brown trout in the lake at the end of the 2006 fishing season were over 20 inches long, and nearly one fifth of them exceeded 24 inches in length. In addition, nearly one third of the adult brook trout exceeded 16 inches in length, so there will probably be a few anglers who will take a fish to

the taxidermist this year.

Many fishermen remember the "good old days" when a trip to Soda Lake or Little Soda Lake was likely to produce several big fish for a persistent angler. Unfortunately, this has not been the case for several years, and the outlook for the future is not bright. The Wyoming Game and Fish Department will continue to stock trout in both waters, but fish kills are likely to continue until water levels increase significantly. The snow pack in the area around these lakes was only 63% of average as of early May, so the water level of both lakes will probably continue to drop in the near future.

"Low water levels have caused water temperatures to rise in the summer and oxygen concentrations to plummet in winter"

Readers interested in learning more about how the drought has affected Soda Lake and its trout populations can find additional information in Volume 1, Issue 2 of the Pinedale Region Newsletter. This document is available on the Internet at the following address:

<http://gf.state.wy.us/downloads/pdf/Fish/Newsletters/Pinedale/PE05bAngler.pdf>

-Pete Cavalli



Low water levels in the Pinedale Region have caused some popular area fisheries like Little Soda Lake to experience winterkills for several consecutive years.

Wyoming Game and Fish Department

*Pinedale Region Fish Division
117 South Sublette Avenue
Pinedale, WY 82941*

Phone: 307-367-4353

Fax: 307-367-4403

Email: Darren.Rhea@wgf.state.wy.us

WE'RE ON THE WEB

<http://gf.state.wy.us>

SIGN UP FOR OUR FREE DEPARTMENT

NEWSLETTER:

<http://gf.state.wy.us/newsview/frmNewsDisplay.aspx>



"Conserving Wildlife – Serving People"

New Fork River Burbot (Cont.)

(Continued from page 2)

The Wyoming Game and Fish Department has established new fishing regulations in the Green River drainage (including the New Fork River drainage) in an effort to reduce the effects of illegally introduced burbot. There is no creel limit on burbot caught in this drainage, and anglers are encouraged to keep any burbot they catch. In addition, Game Wardens have increased their efforts to enforce laws related to illegal transportation of live fish.

The burbot population downstream from Fontenelle Reservoir expanded rapidly, so it is likely they will also spread quickly above the reservoir. Anglers can help with management of burbot by notifying your local Wyoming Game and Fish Department Regional Office (307-367-4353) when you catch this species (or any other species that you think may be new to the area) upstream from Fontenelle Reservoir. In addition, any illegal transportation or introduction of live fish should be reported to the Stop Poaching Hotline (1-877-WGFD-TIP). A \$2,500 reward is being offered for information leading to the arrest of persons illegally stocking live fish within Wyoming.

- Pete Cavalli

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.

Important Dates



- Pinedale Kid's Fishing Day is Saturday, June 2nd, 2007. Call 307-367-4353 for more information.
- Wyoming Free Fishing Day is Saturday, June 2nd.
- The 10th Annual Wyoming Heritage Hunting and Fishing Expo is September 7-9, 2007 at the Casper Events Center. The Expo is a great event for youngsters and adults to learn about the value and diversity of Wyoming's wildlife resources. For more information about the Expo, visit the Game and Fish's website at <http://gf.state.wy.us> or call 1-888-EXPO-WYO.

WY Game & Fish Department E-Newsletter

The Wyoming Game & Fish Department has a new monthly e-newsletter. The free e-newsletter arrives once a month in your email inbox to keep you informed of all the latest news related to hunting, fishing, recreation, and wildlife conservation efforts in Wyoming. There are two ways to subscribe to the e-newsletter: sign up online at: <http://gf.state.wy.us/newsview/frmNewsDisplay.aspx> or email: join-wgfnews@wyoming.gov