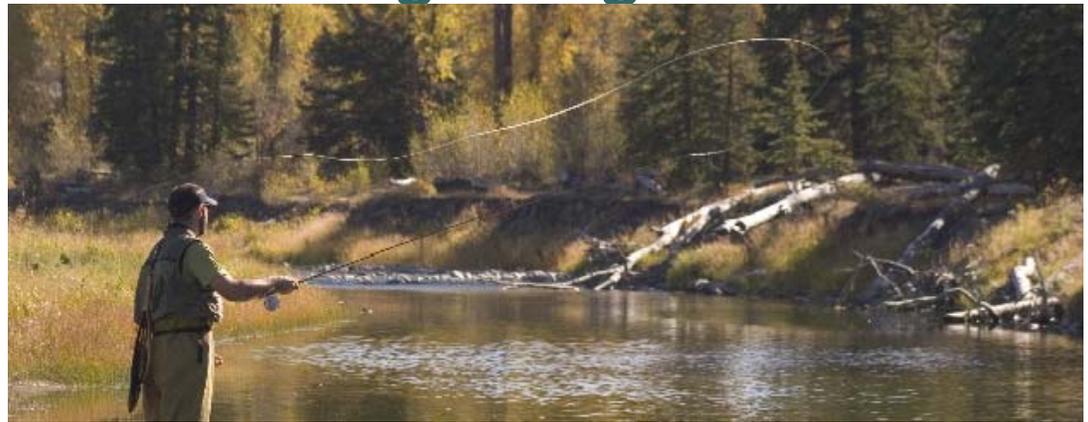


Pinedale Region Angler Newsletter

2009 Edition

Volume 5, Issue 1



Inside this issue:

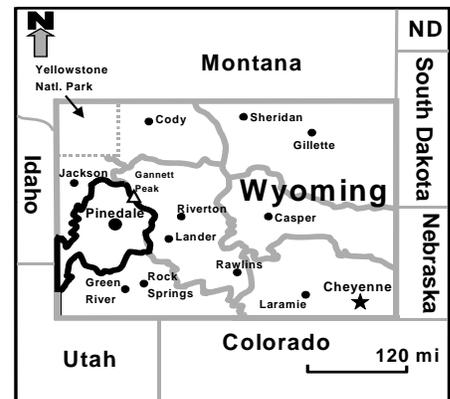
<i>Cutthroat trout return to LaBarge Creek</i>	1
<i>Species Petitioned for Listing Under ESA</i>	2
<i>Know Your Natives: Mottled Sculpin</i>	3
<i>2008 Crew Activities Update</i>	4
<i>Aquatic Invasive Species</i>	6
<i>Daniel Hatchery Update</i>	7
<i>2009 Calendar</i>	8
<i>Game and Fish E-newsletter</i>	8

Welcome to the 2009 version of Pinedale Region Angler Newsletter. This year's newsletter will feature stories and news regarding LaBarge Creek, native fish, annual activities and other interesting aspects of fisheries management. This newsletter is intended for everyone interested in the aquatic resources in the Pinedale area. The resources we manage belong to all of us.

The Pinedale Region encompasses the Upper Green River Drainage (upstream of Fontenelle Reservoir) and parts of the Bear River drainage near Cokeville (see map).

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.



Pinedale Region Map

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*
 Peter Feck *Spawning Specialist*

Boulder Rearing Station

Chip Moller *Superintendent*
 Bret Barngrover *Asst. Superintendent*
 Joe Gillis *Fish Culturist*

Daniel Fish Hatchery

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

Anglers Welcome the Return of Colorado River Cutthroat Trout to LaBarge Creek

The return of cutthroat trout to the LaBarge Creek watershed has provided a unique opportunity for anglers to catch one of Wyoming's true natives. Colorado River cutthroat trout (CRC), the only trout species native to the Green River drainage in Wyoming, were once abundant but are now concentrated in headwaters of tributary streams. A recent range-wide analysis estimated that this subspecies historically occupied over 21,000 miles of stream habitat in the west-



A healthy Colorado River cutthroat trout captured in LaBarge Creek in 2008

ern United States. However, Colorado River cutthroat are currently found in approximately 3,000 stream miles or 13 % of their historic range, which includes populations that are hybridized with other cutthroat trout subspecies and rainbow trout. In Wyoming, Colorado River Cutthroat occupy 552 miles of stream habitat (13% of their historical range in Wyoming).

(Continued on page 2)

LaBarge Creek

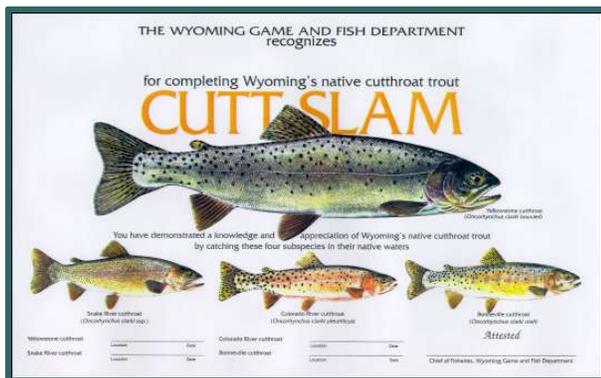
(Continued from page 1)

During 2004 to 2006, non-native and hybridized trout within the LaBarge Creek Drainage were removed and a barrier was built to protect the reintroduced trout. Starting in 2007, fingerling and catchable Colorado River cutthroat trout were stocked in the LaBarge watershed. In July and August 2008, 49,000 fingerlings (3 – 4 inches) and 4,900 catchables (>8 inches) were stocked in LaBarge Creek and several tributary streams. Trout populations were monitored in 2008 at eleven electrofishing stations from July through October. Surveys were completed from the fish migration barrier upstream to the meadows for a total of 11 stream miles. Over 900 CRC were found with a size ranging from 3 to 16 inches, and averaging 8 inches. Cutthroat trout stocked in 2007 were 9 to 11 inches by fall of 2008 and we anticipate fish will exceed 14 inches by late summer, 2009. Anglers also enjoyed success throughout the LaBarge Creek Drainage in 2008, with numerous reports of quality angling coming throughout the year.

Fish will be stocked for the next couple years with the goal of eventually establishing a naturally reproducing population of the species. Native nongame species that were found in the drainage prior to the restoration project, such as mottled sculpin, speckled dace, and mountains sucker will also be reintroduced. This restored watershed will not only help to bring a native trout back to its historical range within Wyoming, but will also provide a unique opportunity for anglers to pursue a true western gem.

For anglers wishing to pursue a native cutthroat trout within a portion of its historic range, the Labarge Creek restoration area is a short drive along designated Forest Service routes from the towns of LaBarge, Big Piney, Cokeville, Afton, or Alpine. The Tri-Basin Divide offers easy access to the headwaters of LaBarge Creek from the Greys River (USFS 10138) and Smiths Fork River (USFS 10072) roads, while anglers hailing from areas east of the Wyoming Range can access the drainage along the LaBarge Creek Road (USFS 10138), or the South Piney Creek Road (USFS 10128).

- Hilda Sexauer



Colorado River cutthroat and Bonneville cutthroat are two of four cutthroat trout subspecies that make up the Wyoming Cutt-Slam

Species in the Pinedale Region Petitioned for Listing Under the Endangered Species Act

Three species of fish found in the Pinedale Region have been petitioned for listing under the Endangered Species Act. One of these species, the Kendall Warm Springs dace, has been of concern for nearly four decades and is currently listed as endangered. Scrutiny of populations of the other two species, which are native to the Bear River drainage, has been more recent. One of these fishes, the Bonneville cutthroat trout, is well known among anglers in western Wyoming. However, few people have probably heard of the other species, known as the northern leatherside. Each of these species face unique challenges, and they are all at different stages in the listing process.

The only place in the world the Kendall Warm Springs dace can be found is in a small spring and a short section of stream in the upper Green River drainage. This subspecies of the speckled dace was listed as endangered in 1970 because of this limited distribution and the relatively low number of individuals that make up the population. The population appeared to have a relatively stable number of individuals for several years, but recent data suggest that the number of fish may now be declining. The U.S. Fish and Wildlife Service reviewed all available data in 2007, and determined that this subspecies has a low potential for recovery, and that no change to its classification as endangered was warranted.



Adult Northern Leatherside. Photo by Eric Wagner

Bonneville cutthroat trout were once found throughout the Bear River drainage and other portions of the Bonneville basin. However, this subspecies was affected by habitat loss and impacts associated with the stocking of nonnative species of trout. The Wyoming Game and Fish Department and other groups have worked diligently to overcome these problems, but the Biodiversity Legal Foundation felt these efforts were insufficient. They petitioned to have the Bonneville cutthroat trout listed under the Endangered Species Act in 1998. This action led to a long series of activities by the U.S. Fish and Wildlife

(Continued on page 8)

Know Your Natives: Mottled Sculpin

Ten native fish species inhabit the rivers and lakes of the Upper Green River drainage in Wyoming. Among them is a single native sculpin species, the mottled sculpin, which frequents the cold, clear waters of the Green River and its tributaries. Often referred to as “bullheads” by local anglers and outdoor enthusiasts, sculpin are actually only distant relatives of the true “bullheads” who reside in the family of bullhead catfishes known as *Ictaluridae*. Though sculpin lack the charisma of the many trout species that inhabit the region, they play an important role in the aquatic ecosystem of the Green River drainage and are often overlooked.

Sculpin are members of the family of fish known as *Cottidae*, recognized by their flattened heads and slender tapered bodies which allow them to inhabit the complex cracks and crevices along the bottom of streams and lakes. Other specialized adaptations such as enlarged pectoral fins and flexible fin spines give them the ability to maneuver and rest in swift water with high velocities. Unlike most other fishes in Wyoming, sculpin lack scales. Interestingly, most sculpin species live in the ocean, along the coastlines of Asia and North America; however, a handful of species have managed to make it in freshwater systems of western North America. Adults of most species are small, and sculpin in the Green River drainage will rarely exceed 4 inches. Body color and spotting patterns can be highly variable among sculpin. Common colors include variations of green, brown, gray, and blue.

Sculpin, commonly referred to as bullheads, are an important prey resource and are a favorite of local anglers as bait

Mottled sculpin tend to prefer cold, clear streams with rock and gravel substrates and high water velocities, although it is not uncommon to find them inhabiting the shorelines of lakes and ponds with similar bottom characteristics. They feed on small insects and fish, and will occasionally prey on the eggs of other fish. In fact, it was once believed that sculpin predation on trout eggs may negatively impact trout populations, however, it has since been discovered that the effects of sculpin predation on fish eggs is insignificant. Sculpin spawn in the spring by laying eggs in a “nest”, which the male will then guard until the young sculpin hatch. It is not uncommon for several mating pairs to share the same nest location. Sculpin are generally thought to be nocturnal, restricting the majority of their activity to night to reduce encounters with predators, while remaining concealed during the day.



Mottled sculpin can be easily observed along the bottom of most streams and lakes in the Green River Drainage.

Sculpin play an important role in the aquatic ecosystem of the Green River drainage in Wyoming. By occupying high gradient sections of rivers and streams that many other fish species cannot inhabit, they prey on insects and invertebrates that would otherwise be left unchecked. Sculpin also serve as an important food item for many local trout species. In fact, sculpin have been shown to be an important component of the diet of adult lake trout, brown trout, and cutthroat trout. Local anglers have long recognized the importance of sculpin in the diet of large trout. Sculpin imitations such as marabou muddlers, matukas, and double bunnies, are a staple among local fly anglers looking to coax a giant trout out of heavy cover. Anglers who frequent local lakes and reservoirs have also realized the importance of sculpin in the diet of large lake trout, and will regularly use dead sculpin as bait or jig or troll with bucktails, marabous, or flatfish, that resemble mottled sculpin.

Sculpin are easy to locate and will often remain motionless in the presence of humans. They can be easily observed by training an eye to the bottom of a stream or by turning over a few rocks. So the next time you find yourself along the banks of a stream or lake in the Green River drainage take a moment to look for areas sculpin are likely to inhabit and enjoy a moment with this native icon.

- Darren Rhea

2008 Update on Crew Activities and Regional Sport-Fisheries

Every year, members of the Pinedale fisheries staff spend countless hours in the field studying area fishery resources. During 2008, the Pinedale Fisheries Management Crew conducted a variety of assessments on area fisheries as part of our continuing efforts to understand and improve fishery resources and angling opportunities in the region. Many popular sport fisheries are the focus of intense sampling efforts as they provide hours of enjoyment and continue to draw the attention of local, regional, and even international angling enthusiasts. Here are just a few examples of the areas more popular sport fisheries we sampled in 2008.



Biologists electrofishing the Green River to capture fish.

Green River

Sampling was conducted on two separate stretches of the Green River in 2008, a 1.2-mile reach below Kendall Bridge, and a 4.5-mile reach below the Forty-Rod float access. The population of trout in the Kendall Bridge section was estimated to be over 1,400 per mile, comprised mostly of rainbow trout and brown trout. Most of the trout captured were between 10-15 inches, though 28% of the brown trout were greater than 16 inches. Farther downstream an estimated 500 trout per mile were found within the Forty Rod section of the Green River. Despite lower numbers, this section is inhabited by comparably larger sized trout, with several tipping the scales over six pounds. Anglers also reported good success in 2008 through this section of the river, on average, landing nearly one fish every hour. By local standards, this is one of the highest average catch rates for any section of flowing water.

New Fork River

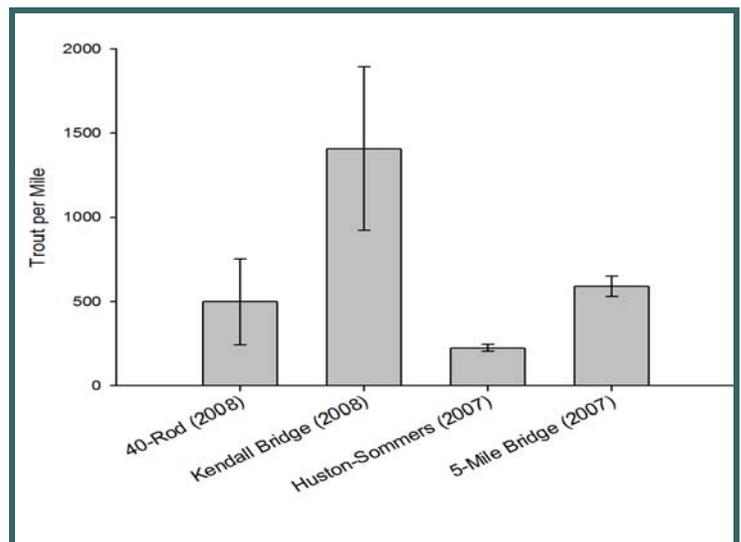
The popular New Fork River was sampled once in 2008, within a standard reach below the confluence of the East Fork River. A slightly lower trout population estimate of 345 trout per mile was found to inhabit this stretch of the river, the majority of which were brown trout. Incredibly, 59% of the brown trout population was comprised of fish greater than 16 inches long, owing primarily to strong year classes of smaller fish found inhabiting the river two years earlier.

Fifty-nine percent of the brown trout population in the New Fork River was greater than 16 inches in 2008

Finger Lakes

Many of the popular "Finger Lakes" of the Pinedale Region are routinely sampled on a two- or three-year basis to evaluate the status of sport fish populations and monitor trends in their size and condition. Burnt Lake, Willow Lake, and Lower Green River Lake were among the lakes sampled in 2008.

Burnt Lake is regarded as one of the most popular of the Finger Lakes for rainbow trout, and rightfully so. With a rainbow trout population that outnumbers any other sportfish in the lake by



Trout population estimates (Trout per mile) from four reaches of the Green River sampled during 2007-2008.

2008 Update (cont.)

(Continued from page 4)

more than 2:1, and an average size approaching 14 inches, it supports one of the healthiest, most abundant rainbow trout populations in the region.

The average size of rainbow trout in Green River Lake was found to be over 15 inches in 2008

Willow Lake, on the other hand, supports one of the largest populations of lake trout in the area. Lake trout in Willow Lake comprise 92% of the sport fish population, and catch rates indicate they are among the most abundant of any "Finger Lake". The presence of Mysis or opossum shrimp in Willow Lake limits the growth of large trout, and lake trout rarely exceed 24

inches. However, the opportunity to catch large numbers of edible size lake trout is as good in Willow Lake as anywhere.



One of many trophy lake trout captured during trend netting activities on area Finger Lakes

Lower Green River Lake supports modestly abundant populations of lake trout and rainbow trout at roughly equal numbers. Rainbow trout in Lower Green River Lake had an average size over 15 inches in 2008, with body conditions well above average. Lake trout numbers again appear high, however, the majority of the lake trout are small. Netting in 2008 revealed a large number of lake trout less than 20 inches, and a couple of extremely large individuals greater than 25 lbs., with very few in-between. This indicates an unfavorable shift in the size of lake trout, which may be due to competition among the many smaller fish.

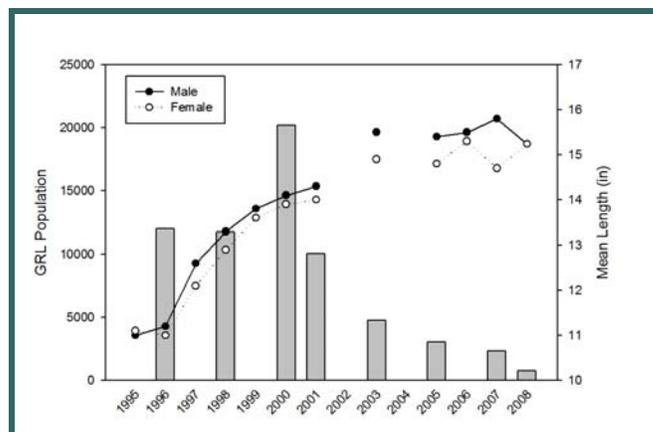
Soda Lake

Soda Lake continues to suffer the effects of persistent drought con-

ditions and subsequent low water levels. Population estimates have been calculated for trout in Soda Lake on an annual basis for the past eight years following significant reductions in trout numbers during the late 1990's. The population estimate for brown trout in 2008 marked the second consecutive increase in numbers since 2006, however, the population remains low at only 3,000 individuals. Despite low numbers, the remaining brown trout are extremely large, boasting an average length of over 19 inches.

Meadow Lake

Meadow Lake is another small, popular lake that supports one of the few grayling populations in the area. Unfortunately, Meadow Lake has also suffered the effects of persistent drought and low water levels. This, in turn, has impacted the grayling population. A population estimate in 2008 revealed the lowest number of grayling on record, just under 800 individuals. The only upside to this, is the remaining grayling are large, with an average length approaching 16 inches. Because natural reproduction has been limited in recent years, it is hoped that supplementing this population with hatchery fish will help numbers rebound to historic levels.



Meadow Lake grayling population estimates (bars) and average lengths (lines) 1996-2008

As is always the case, the work conducted during 2008 revealed some good and some not-so good circumstances facing our fish resources. However, the information collected on our area fisheries is invaluable in terms of how we manage these resources in the future. For additional information or questions regarding how we collect this information and apply it to managing these important resources, please feel free to contact the Fish Management staff anytime. We are always glad to share our information and gain your insight.

-Darren Rhea

Wyoming Game and Fish Department Launches Massive Campaign to Stop the Spread of Aquatic Invasive Species into Wyoming

The Wyoming Game and Fish Department has launched a massive effort to keep our lakes and rivers free of aquatic invasive species, primarily zebra and quagga mussels. The recent discovery of these organisms in our neighboring states of Colorado, Utah, and Nebraska has raised serious concerns over the potential for them to become introduced into Wyoming. Once these species become introduced into a waterbody they can never be eradicated and their impacts are widespread and devastating.

To combat the spread of zebra and quagga mussels into Wyoming, the Department will increase our efforts to understand these organisms and inform the public of their impacts. We will work with other state and federal agencies,

and partner organizations to ensure that no mussels are introduced. And, we will closely monitor their spread and address any new threats as they develop.

The cost of combating invasive species amounts to more than \$100 billion annually in the United States. Because these species are incapable of moving great distances on their own, their spread across the United States has been entirely due to human activities. This also means that their introduction into Wyoming is totally preventable. By taking a few simple precautions while recreating on the water we can all work together to prevent their spread. Listed below are a few simple steps everyone should follow to prevent the transport of invasive species.

Aquatic invasive species like **quagga mussels** and **zebra mussels** are small organisms that could have huge impacts for Wyoming's waters, boaters and anglers. They can ruin fisheries, clog cooling systems in motorboats, foul hulls and ruin equipment. These organisms have **not** been found in Wyoming **yet**, but are present in several bordering states, like Colorado and Utah. **Help protect Wyoming's waters by making sure you don't move a mussel.**

What are these mussels?
Both are closely related, invasive, freshwater bivalve (mollusk) species that encrust hard surfaces.

Where do they come from?
These species came to North America from the Black and Caspian Sea Drainages in Eurasia.

What size are they?
Larvae are microscopic and adults may be up to two inches long. They are usually found in clusters.

Why are they called "zebra and quagga" mussels?
Both species are sometimes referred to as "zebra" mussels because they both have light and dark alternating stripes. Quagga mussels are actually a distinct (but similar) species named after an extinct animal related to zebras.

ZEBRA QUAGGA

INSPECT & CLEAN boats & equipment thoroughly!

Labels in diagram: Deck Lines, Storage Compartments, Anchor, Live Wells, Bilge, Prop, Through-Hull Fittings, Trailer, Hull, Axle, Rollers/Bunks, Grumble Area, Motor Intakes.

Follow These Simple Steps:

Only you can stop the spread of these mussels. Before launching and before leaving please help us by following these simple steps:

- ✓ DRAIN** Eliminate all water before leaving the area, including wells, ballast and engine cooling water.
- ✓ CLEAN** Remove all plants, animals & mud from equipment and boats. Thoroughly wash everything, including all crevices and other hidden areas.
- ✓ DRY** Allow time for your boat and gear to completely dry before launching or recreating in other waters.

Please contact the Wyoming Game and Fish Department if you observe quagga or zebra mussels on your equipment or in Wyoming waters. We can provide more information and assistance in removal.

Daniel Fish Hatchery Update

Three dedicated department personnel, Superintendent George Gunn, Assistant Superintendent Greg Anderson and Fish Culturist Brian Blutt are stationed at the Daniel Hatchery. Their primary responsibilities include egg care, incubation, fish rearing, and stocking of 500,00-750,000 fish per year, in addition to the general facilities maintenance and operation.

The Daniel facility performs the important function of incubating and rearing various species of trout, which include brook, brown, and lake trout, splake, grayling, kokanee salmon, and several strains of rainbow trout. In addition to incubation and rearing, the Daniel Fish hatchery maintains and spawns two of Wyoming's native brood populations of cutthroat trout, the Bonneville (Bear River) and Colorado River cutthroat. Offspring from these broods are used for restoration efforts as well as for stocking in fishing waters throughout the state.



The construction of a new separation room in 2008 will keep native cutthroat from mixing with other trout

Another function of the hatchery is the ability to “hold back”, or slow the growth of fish due to Daniel's cold water. Hatchery personnel are able to provide small fish for helicopter, horse packing, backpacking, or ATV stocking, and provide fish transfers to the States other nine hatcheries and rearing stations. These facilities will finish raising these fish for stocking into Wyoming waters.

The Daniel hatchery provides fish to several management regions around the state. Regional Fish Management Crews request specific numbers, sizes and species to be stocked based on their evaluations of available habitat, fishing pressure, and management objectives for each water. Most waters are stocked with small fish that grow and provide fishing over several years.

The hatchery is open to the public and welcomes scheduled group and walk-in tours of the facility. Visiting hours are from 8 am to 5 pm daily. The hatchery is located 15 miles northwest of Pinedale on U.S. Highway 191, and 2.4 miles west on Sublette County Road 23-150 (Pape Road).

Daniel Hatchery Fish Stocking Summary for 2008

Species Name	Number Stocked	Pounds Stocked
Brook Trout	24,795	279
Bear River Cutthroat	93,567	7,092
Colorado River Cutthroat	63,966	3,233
Kokanee Salmon	69,216	280
Splake	38,747	523
Total	290,291	11,406

Daniel Hatchery Spawning Summary for 2008

Species	Number Green eggs	Number Eyed eggs	Percent Eyed
Bear River Cutthroat	1,975,916	1,141,124	80.5
Colorado River Cutthroat	862,524	400,530	46.4

What is a Brood cull?

The Daniel Fish hatchery raises two brood stocks of native cutthroat. Bonneville (Bear River) and Colorado River. The hatchery holds 5 age classes of each. Fish mature at 3 years old and the best eggs producers are at ages 4 and 5. Each year after the spawning season all 5-year olds are culled (removed) from the brood stock. These fish are referred to as “brood culls”.

These fish have spent their entire lives at the hatchery and have produced eggs twice at 4 and 5 years old. After their final spawning season the hatchery stocks these fish out into high use public waters with emphasis on urban and local fisheries.

As you can imagine, after spawning these fish can look a little rough. Fish, especially males will battle each other, and nip and tear at each other’s fins. Our handling, although gentle, can wipe off skin mucous and leave the fish vulnerable to bacterial infections, so hatchery personnel treat brood culls with salt to promote mucous production prior to stocking them out.

Older mature males go through a hormonal change that leaves them with wrinkled skin. This occurs with other species of trout and occurs in the wild and during spawning seasons. One thought is that the brood stock at Daniel lives in an unnatural, man-made environment that may exaggerate this wrinkled skin effect. Although spawning colors fade away after the spawning season, the wrinkled skin will stay. This is a natural physical condition that occurs and is no way harmful to fisherman that harvest and eat these fish.

-Greg Anderson

Wyoming Game and Fish Department

Pinedale Regional Office
432 East Mill
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>

Species Petitioned Under ESA

(Continued from page 2)

Service and the court system (see "Are Bonneville Cutthroat trout endangered?" in the 2008 Edition of the Pinedale Region Angler Newsletter). Fortunately, this process culminated in September 2008 when the Service decided the subspecies does not warrant listing under the Endangered Species Act.

The species in the Pinedale Region that was most recently petitioned for listing under the Endangered Species Act was only recognized as a distinct species within the last five years. Historically, biologists referred to a group of minnows as "leatherside chubs." However, research on genetics, body shape, and behavior showed that this "species" was actually two distinct species. One of these species, the northern leatherside can be found in a number of waters in the Bear and Snake River drainages in western Wyoming, along with waters in other western states. In 2007, the organization Forest Guardians petitioned to have 206 species (including the northern leatherside) found in the U.S. Fish and Wildlife Service's Mountain-Prairie Region listed under the Endangered Species Act. The Service has not yet acted on this petition, but they will likely make a decision later this year.

The Wyoming Game and Fish Department is charged with providing management and protection of all wildlife in Wyoming. To fulfill this directive, we have been working to secure populations of native species, regardless of whether or not they are considered a sport fish. In addition, we will continue to work to improve conditions for Kendall Warm Springs dace, Bonneville cutthroat trout, and northern leatherside, regardless of the decisions that are made on the petitions for listing under the Endangered Species Act.

-Pete Cavalli

2009 Calendar of Events

April 28: Aquatic Invasive Species Public Forums
2:00-4:00 pm and 6:00-8:00 pm Pinedale Game and Fish Office

The Pinedale Fisheries Staff will hold two meetings to inform stakeholders of ongoing and planned efforts to stop the spread of Aquatic Invasive Species in Wyoming. Anglers, boaters, and anyone who uses water in Wyoming should plan to attend these important discussions.

May 25 - July 9: Formal Commenting Period for Fishing Regulation Proposals

June 6: Kids Fishing Day
10:00 am - 3:00 pm, CCC Ponds, Pinedale

All kids ages 13 and under are encouraged to attend the annual "Get Hooked on Fishing" event hosted by the Wyoming Game and Fish Department, U.S. Forest Service, and Trout Unlimited. There will be a series of short educational activities, free lunch, and the opportunity to catch a variety of freshly stocked trout in CCC Ponds. Youngsters will have the opportunity to learn basic ecology and fish I.D., fishing skills, and gear applications. Some fishing gear and bait is provided, and the event is free to the public.



Plan to bring a child to the annual "Get Hooked on Fishing" event June 6th, at CCC Ponds in Pinedale

June 6: Wyoming Free Fishing Day

No license or conservation stamp is required to fish during Wyoming's Free Fishing Day. All other rules and regulations apply.

June 9: Fishing Regulation Public Meeting
6:00-9:00 pm, Pinedale Game and Fish Office

Sept 10-12: Annual Wyoming Hunting and Fishing Heritage Expo
Casper Events Center, Casper, Wyoming