



“Conserving Wildlife –
Serving People”

Wyoming Game and Fish Department Green River Region Angler Newsletter

Spring
2006



Greetings Sportsmen!

Welcome to the third annual issue of the Green River Region Angler Newsletter. This newsletter is released each spring and is intended to inform anglers about aquatic resource issues in the Wyoming Game and Fish Department’s Green River Fisheries Region which covers all the rivers, lakes, and reservoirs in the lower Green River drainage downstream from (and including) Fontenelle Reservoir, the Little Snake River drainage, and the upper portion of the Bear River drainage. We have three fisheries biologists and one aquatic habitat biologist responsible for managing the fish communities and their habitats in the Green River Region. Many of you may not know that the Game and Fish Department is responsible for the management of over 600 different wildlife species in the great state of Wyoming. Therefore, the Fish Division is not only responsible for sport fish, but also native non-game species and the most important element, their habitats. Our mission statement (opposite column), mandated by state statute, reflects that philosophy.

Fisheries management personnel are responsible for inventorying and monitoring fish populations, providing input for the protection and conservation of all aquatic species and habitat, and specific management of fish populations through fish stocking recommendations, fishing regulation proposals, and

fish population and habitat restoration. The aquatic habitat biologist mission is to restore and manage habitat to enhance and sustain wildlife populations in the future. We do our best to conserve and monitor fish populations and habitat, but only get to a fraction of the fisheries each year. Therefore in addition to our scientific sampling data, we rely on information obtained from anglers and landowners to manage the fisheries resources in southwest Wyoming. We manage aquatic resources for you, the people of Wyoming, so your input is very important. We would appreciate any comments about the contents of this newsletter or any other fisheries concerns you may have. Please contact us using the information provided on the last page of the newsletter.

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.”

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The Green River Trout Fishery

Craig Amadio, Regional Fisheries Biologist

The Green River trout fishery has been showing the impacts of drought in recent years. Prior to last winter, low flows significantly reduced winter habitat for trout. The main channel habitat in the Green River lacks diversity and suitable winter habitat. Side channel and backwater habitats are important to trout during the winter, particularly juveniles, because these areas provide low-velocity refuges and protection from large predators that are confined to the main channel. The low winter flows between 2001 and 2003 reduced side channel and backwater habitat availability and caused increased winter mortality, especially for juvenile trout.

The low flows also resulted in significant sediment deposition in the river. Silt accumulated over much of the stream bottom and while this makes wading challenging, it is even more harmful to the survival of trout. Silt negatively affects the reproduction of wild brown trout and kokanee salmon populations. If provided adequate flows and spawning substrate these fish are capable of maintaining strong numbers through natural reproduction. When silt blankets spawning gravels, eggs suffocate before they hatch and trout don't reproduce successfully. Silt also fills the spaces between rocks and gravel, decreasing the available surface area for macro-invertebrates (the bugs trout eat) and leading to declines in bug production.

The Green River basin finally began emerging from the drought with substantial winter precipitation in 2004-2005. As a result, the Green River downstream of Fontenelle Dam received a much needed flushing flow last spring (first since 1999) and fish habitat improved in 2005. The basin's water forecast for 2006 is also encouraging, with above normal snowpack this winter. We expect the Green River trout fishery to continue improving in 2006, but

recovery to pre-drought levels will be slow and may take a number of good water years.

We manage the Green River trout fishery for wild brown trout, stocked rainbow trout, and stocked Snake River and Bear River cutthroat trout. The fish population is sampled using electrofishing gear in April each year. This allows us to determine the population structure and abundance of trout as well as the survival of our hatchery stocks. The

Seedskaelee section of the Green River was sampled in April 2005.

Total trout abundance in this section was similar to 2003. The estimated abundance of all trout was 198 fish/mile, compared to 208 fish/mile in 2003. The 2005 trout population consisted of 46% brown trout, 39% rainbow trout, and 14% Snake River cutthroat. The estimated abundance of brown trout was 89 fish/mile, a 25% decline since 2003. Rainbow trout estimated abundance was 76, a

20% increase compared to 2003. Snake River cutthroat abundance was 28 fish/mile, the highest abundance estimate for SRC since 1999. Bear River cutthroat trout represented only 1% of all trout sampled and abundance estimates could not be calculated due to the low numbers captured.

Aquatic Habitat Biologist Kevin Spence with an 8 lb Green River brown trout.

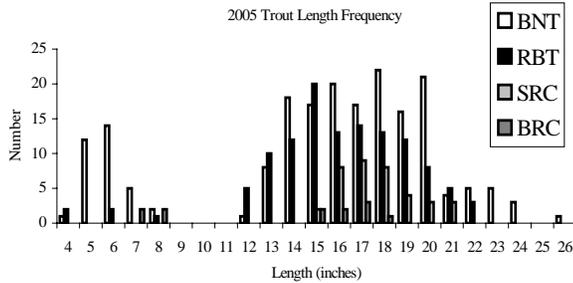


Table 1. 2005 trout population data from the Seedskaelee section of the Green River.

Species	Number caught	Estimated number / mile	Average length (inches)	Length range (inches)	Average weight (lbs)
Brown trout	192	89	15.8	4.6 – 26.3	2.06
Rainbow trout	120	76	16.5	4.5 – 22.7	2.08
Snake River cutthroat	37	28	18.0	15.8 – 21.5	2.62
Bear River cutthroat	12	No Estimate	13.9	7.2 – 18.1	1.36
Lake trout	1	No Estimate	19.4	NA	1.75

Anglers will also be happy to hear that the average size and body condition of browns, rainbows, and cutthroats increased in 2005 as well. Trout length frequency indicated that four age classes were represented in the sample. Brown trout dominated but the abundance of all trout between 8 and 12 inches (representing large juveniles) was very low.

The low abundance of this group may reflect a poor year class or insufficient habitat for this size class.



Fisheries Biologist Craig Amadio with a 9lb Green River rainbow trout.

Although the overall abundance of trout remained similar to 2003 and habitat conditions improved in 2005, the Green River trout fishery has not yet recovered from the drought and juvenile trout abundance continues to be a major concern.

Past studies have concluded that winter flow patterns may be a major factor limiting trout populations in

the Green River and flows less than 800 cfs likely have a negative affect on trout populations and enhance the production of non-trout species. Between 1995 and 2001, mean winter discharge from Fontenelle Dam was approximately 1,200 cubic feet/second (cfs). During the 2001-2002 winter, discharge from Fontenelle Dam was only 450 cfs. Mean winter flow slightly improved in 2002-2003 to 650 cfs, but was still below normal. Fortunately, winter flows have exceeded 800 cfs since 2004 and if this trend continues, survival of juvenile trout and the quality of the Green River trout fishery should improve.

Anglers are alerted that the seasonal closure on the Green River from Fontenelle Dam downstream approximately one mile to the U.S. Geological Survey gauge station (cable crossing) at the Weeping Rock Campground in Sweetwater County was extended and this area is now closed to fishing from October 1 through December 31. The closure was extended to protect spawning kokanee that gather in the reach downstream from Fontenelle Dam to spawn each fall. The previous closure protected the spawning fish but did not protect the eggs deposited in the gravel. A salmon egg is very fragile and will die if disturbed during early stages of development. Anglers fishing below Fontenelle Dam after November 7 unintentionally trampled and killed the eggs. This was a bad situation by itself, but especially troublesome with the low numbers of kokanee in Flaming Gorge Reservoir. In order to enhance the kokanee fishery in Flaming Gorge Reservoir we need to protect all sources of recruitment including the fish produced by late run kokanee below Fontenelle Reservoir.

Flaming Gorge Update

Bill Wengert, Regional Fisheries Biologist

Anglers should take notice of the new fishing regulations, which went into effect on the reservoir January 1, 2006. The regulation overhaul was needed to place more angling pressure on lake trout and reduce angling pressure on adult kokanee at a vulnerable stage of their life history. Lake trout have been taken out of the general creel limit on trout and salmon. And the general creel limit on trout and salmon (excluding lake trout) has been reduced to 4 fish. The regulation now states: “The creel limit on

trout and salmon (excluding lake trout) shall be four (4) per day or in possession. No more than three (3) shall be kokanee salmon. The creel limit on lake trout shall be eight (8) per day or in possession. Only one (1) lake trout may exceed twenty-eight (28) inches. The creel limit on bass shall be ten (10) per day or in possession. All kokanee salmon caught from September 10 through November 30 shall be released to the water immediately. The possession or use of gaffs for landing fish is prohibited.” The new

regulation can be found on Page 20 of the 2006 – 2007 Wyoming Fishing Regulations. Look for section 19-Flaming Gorge Reservoir in Sweetwater County. In addition, read section 22-Green River Drainage in Lincoln, Sublette and Sweetwater Counties. The ling (burbot) and walleye regulations found here address the fact the Department is going to manage against any illegal introductions of these two voracious predators in the Green River Region, including Flaming Gorge Reservoir.

Anglers should note the Utah Division of Wildlife Resources has adopted exactly the same regulations for the Utah side of the reservoir. Reciprocal stamps can be purchased so residents and nonresident license holders from Utah or Wyoming can fish either side of the reservoir without buying a nonresident license in the other state. The yearly reciprocal stamp costs \$10.00. Wyoming license holders should be aware that Utah requires a “Second Pole Permit” to fish with two (2) rods on the Utah side of the reservoir.

Even though the number of rainbow trout that can be harvested decreased, the new regulations actually increases the total number of fish an angler can take per day or have in possession from 6 to 12 fish. Data from the 2003 creel survey found only 2% of the parties stating they were specifically targeting rainbow trout harvested more than 4 rainbow trout per angler. Based upon this data, the 4 fish limit will not affect a very high percentage of Flaming Gorge anglers.

The new regulation will help preserve the quality of the rainbow fishery. Flaming Gorge has received 450,000 catchable rainbow trout per year from Jones Hole National Fish Hatchery near Vernal, UT. The numbers will be reduced by 50,000 rainbow in order to make room for raising 400,000 kokanee salmon to supplement kokanee stocks in the reservoir.

The closure to the harvest of kokanee salmon was lengthened to decrease the harvest of adult kokanee prior to spawning. The prespawning adults stage in schools in predictable locations in the reservoir and are being increasingly targeted by anglers. The 2003 creel data found 10% of the total annual harvest occurred between September 10 and October 1 annually. Extending the closure to the harvest of kokanee (based upon this data and previous research) will allow more kokanee to spawn in the reservoir

and its tributaries, thus increasing natural recruitment. September 10 will always fall after the important Labor Day weekend. Kokanee spawning is nearly complete by November 30, so the new regulation will afford nearly full protection for the species during the prespawn and spawning season.



Morgan Carey with a beautiful Flaming Gorge kokanee salmon.

The 2005 population estimate for age-0, age-1 and age-2 kokanee (1.4 to 13.8 inches) from the annual hydroacoustic sampling is not yet available. However, all indicators point to a small increase in the abundance of kokanee less than age-2, which could signal the start of a higher abundance cycle. Kokanee abundance estimates for the three prior years have been low, therefore expect kokanee fishing to be slow or about the same as anglers experienced last year.

Lake trout fishing should be outstanding in 2006. Netting data not only shows increased abundance of small lake trout (smaller than 25 inches), but an increased abundance of trophy size lake trout (larger than 35 inches). The 2005 catch of lake trout (smaller than 25 inches) in the experimental nets was the highest since this netting program was initiated in 1983 and 70 % of all the lake trout netted were caught at the net sites north of Big Bend. Lake trout data collected by the experimental nets (set on the bottom, near shore) have been a good indicator of the abundance of small lake trout. Hopefully anglers will take full advantage of the liberalized lake trout regulation (8 fish – 1 over 28 inches) and harvest as many of these fish as legally possible.



Fisheries Biologist Bill Wengert with a trophy Flaming Gorge lake trout.

A separate netting program, designed to sample trophy lake trout was initiated in 1990. Prior to 2005 the numbers of trophy lake trout (larger than 35 inches) caught has fluctuated between 14 and 32 fish. In 2005, 37 lake trout greater than 35 inches were netted and 7 of those fish were over 40 inches, which is the most caught in these nets since this netting program began.

The first ling (burbot) was caught in a gill net in May 2005. The fish was caught on the east side of the

reservoir about 1 mile south of the confluence. The fish was 20.5 inches long and weighed 2.1 pounds. Several crayfish were found in the stomach of this fish. A number of ling were also caught through the ice this past winter, most above the confluence in the Blacks Fork Arm. Ling have been reported as far south as Buckboard and appear to be reproducing in the northern portion of the reservoir. Ling are more easily caught during the winter when they are most active. Fisheries biologists will specifically be netting for ling in November 2006 to learn more about their population dynamics and feeding habits in Flaming Gorge Reservoir.

Although we've had reports of anglers catching walleye from Flaming Gorge Reservoir, none of the reports have been substantiated and no walleye have been netted. Walleye would decimate the remaining forage fish (Utah chubs and kokanee salmon) utilized by lake trout. Rainbow trout and smallmouth bass populations would also be hurt. Introductions of new forage fishes would be nearly impossible because of potential impacts to the four endangered native fishes found downstream in the Green and Colorado Rivers.

Fontenelle Reservoir Update and Burbot Discovery

Craig Amadio, Regional Fisheries Biologist

Fontenelle Reservoir fishing should be good again in 2006. The most exciting news for anglers is that kokanee are back. Fontenelle produces kokanee of above average size, but a number of years ago the Department quit stocking kokanee due to whirling disease concerns. Those concerns are no longer considered serious and kokanee made their return to the reservoir in 2003. We've stocked 20,000-30,000 kokanee each year since their reintroduction and the fish stocked in 2003 have grown large enough that they will be available to anglers in 2006.

Kokanee as large as 16 inches were sampled last spring, but the big news was the 2005 fall netting results. Over 100 kokanee, ranging from 12 to 20 inches, were captured last fall. Most kokanee were adults (≥ 15 inches) that were staging to spawn near the dam, but younger age classes were also captured in other areas of the reservoir. The fall netting results were very encouraging and anglers can once again look forward to quality kokanee fishing. An added

bonus of the Fontenelle kokanee fishery is the creel limit. Unlike Flaming Gorge, anglers can still harvest 6 kokanee (only 1 over 20 inches) at Fontenelle. Therefore we are encouraging kokanee anglers to focus their efforts on Fontenelle in the future. More kokanee can be harvested at Fontenelle and this fishery may alleviate some of the exploitation of the Flaming Gorge kokanee population.

Our 2005 sampling results also indicated that brown trout are still the dominant sport fish in the reservoir. The number of browns has increased each year since 2003 and the average size of brown trout in 2005 was an exceptional 19 inches. Needless to say, fishing for browns should be good again in 2006.

Rainbow trout will also be available to anglers, but our rainbow catch rates have been low in recent years. This trend is a likely indication that stocked rainbows have not survived well lately, probably due

to high levels of predation by brown trout. In efforts to increase rainbow numbers in the reservoir, we will change our stocking strategy in 2007. Rainbows have been stocked at small sizes in the fall since 2001, but beginning next year they will be stocked at a larger size (8 inches) in the spring. We hope that spring stocking, combined with the larger size will allow these fish to avoid predators and survive better. Sampling in 2007 should tell us whether the new stocking strategy is successful.

There are not a lot of Snake River cutthroat trout in the reservoir, but the few that are swimming around are big. That's because brood stock Snake River cuts have been stocked in Fontenelle the past couple years. Brood stock fish are large adults that have been used for spawning in the hatchery. Once these fish are no longer needed they are often stocked for anglers to catch. Late last fall, Snake River cutthroat broods (ranging from 3 to 5 pounds) were stocked and should be readily available to anglers this spring.

One serious concern about the Fontenelle fishery is the discovery of burbot (ling) in the reservoir. Most anglers are aware that burbot have been illegally introduced to the Green River drainage. Burbot expanded rapidly after their introduction and populations are now established in Flaming Gorge Reservoir and the Green River. Fontenelle Dam was creating a barrier and preventing burbot from moving into the upper Green River system, but in October 2006 two burbot were captured in Fontenelle Reservoir. This discovery marked the first time burbot have been documented upstream of Fontenelle Dam and their presence is likely the result of another illegal introduction.

Burbot are very aggressive predators and will likely feed on wild juvenile brown trout, stocked rainbow trout, and kokanee in Fontenelle Reservoir. They also compete with large trout for food and habitat, and negatively impact native non-game fish and forage fish populations. Burbot may also move upstream from Fontenelle Reservoir and establish populations in the upper Green River and Finger lakes near Pinedale. Unfortunately this means burbot are now present in the entire Green River watershed.



Green River Fisheries Supervisor Robb Keith displays a large burbot harvested in the Green River Drainage.

Managing illegally introduced species like burbot is very costly and much of the money must come from license fees paid by anglers and hunters. Mechanical and chemical removal of undesirable fish species is labor intensive and expensive. Even monitoring fish populations becomes more costly when prolific species are introduced into new waters. Often times the only way to maintain a sport fishery in the face of introduced species is to stock larger trout. The cost of stocked trout increases significantly as the size at stocking increases so that means that more money (your license dollars) must be used to manage the fishery.

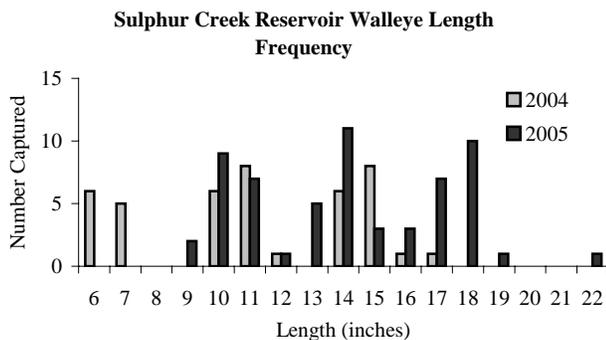
The Wyoming Game & Fish Department aggressively manages against illegally introduced fish populations and will continue to do so. For example, the creel limit for burbot and walleye will be 25 fish per day in the Green River and Bear River drainages beginning January 1, 2006. It will also be illegal for anglers who catch these species to return them to the water. This liberal, proactive regulation is intended to encourage anglers to harvest as many as legally possible and help suppress illegally introduced fish populations.

Due to the significant threat illegal fish introductions pose to your fisheries, the Game & Fish is increasing enforcement of the laws concerning transportation and introduction of fish to new waters. We all have a responsibility to help conserve our fisheries so please report any suspicious fish transportation or introduction activity to the Game and Fish Stop Poaching Hotline (800) 442-4331 or the Green River office at (307) 875-3223.

Walleye in Sulphur Creek Reservoir

Craig Amadio, Regional Fisheries Biologist

Walleye were discovered in Sulphur Creek Reservoir (south of Evanston) in June 2004. This population resulted from an illegal introduction likely during the late 1990's. Green River fisheries management personnel returned to the reservoir in 2005 to assess the status of the population and confirmed that walleye are thriving and reproducing. A total of 60 walleye were captured and the catch rate for walleye tripled compared to 2004. The walleye ranged in length from 9 to 22 inches with an average of 15 inches. In 2004 average length was only 12 inches and the largest walleye captured was 17 inches.



All walleye exhibited outstanding body condition, and length structure (see histogram) indicated that the population currently consists of at least five different age classes including juveniles. Therefore, walleye have likely been present in the reservoir for a number of years and it appears that successful natural reproduction has already occurred.



Walleye captured from Sulphur Creek Reservoir in 2005.

This is really bad news. The presence of walleye will undoubtedly have a negative impact on the trout fishery in Sulphur Creek Reservoir. Walleye are aggressive predators and will not have enough food in the reservoir to support a reproducing population. As a result they will prey on rainbow and Bear River cutthroat trout. The trout fishery is currently maintained through stocking, but stocking rates will be insufficient to support the fishery in the face of walleye predation. Fisheries biologists have already documented declining catch rates for rainbow trout in recent years. Ultimately the abundance of trout will decline and anglers will suffer thanks to the selfish individual who introduced walleye to the reservoir without understanding the consequences.

In addition to the creating local fishery problems, the introduction of walleye to the Bear River system may also have disastrous consequences for downstream fish communities. If walleye are not removed from the reservoir they will likely escape and establish populations in other waters within the drainage like Woodruff Reservoir or Bear Lake.

Fisheries biologists are currently assessing chemical restoration opportunities for the reservoir, but a new regulation was created this year to aggressively manage against the walleye population and minimize impacts to the trout fishery. Beginning in 2006 the creel limit on walleye shall be 25 per day or in possession. This liberal limit is intended to encourage anglers to harvest and remove as many walleye from the reservoir as legally possible. Walleye are susceptible to overexploitation and populations can be controlled through angler harvest. Therefore we need assistance from our anglers to help manage their fishery and control the walleye population. An added bonus is that walleye are excellent table fare and many anglers will enjoy the opportunity to stock their freezers with fresh fillets.

Sulphur Creek is a small reservoir with limited walleye habitat. Most walleye are congregated around the large points along the northern shoreline between the dam and the inlet of the reservoir. Walleye typically occupy shallow areas (<15 feet) during dusk and dawn periods and tend to move to

deeper water (20-40 feet) during mid-day. Anglers will need a boat to access these areas but the fishing

should be very good. Anglers can try jigging or slow trolling spinner harnesses with bottom-bouncers.

Restoring Colorado River Cutthroat Trout to the Little Snake River Drainage

Bill Wengert, Regional Fisheries Biologist

Colorado River cutthroat trout historically occupied portions of the Colorado River drainage in Wyoming, Colorado, Utah, Arizona and New Mexico. The Little Snake River is a tributary of the Yampa River, which in turn flows into the Colorado River.

The Colorado River cutthroat trout (CRC) was the only species of trout found in the Little Snake River prior to settlement of the area by early 19th century Argonauts. Numerous historical accounts of “mountain trout” and “speckled trout” are found in diaries and letters written by these early settlers as they traveled through the Little Snake River drainage in the 1850’s.

By 1883, the West’s cutthroat populations had already been decimated. In its biennial report, the Wyoming Game and Fish Commission (WGFC) admitted “a majority of our streams are sterile of good food fish, whilst a remainder in many places are nearly exhausted of a once bountiful supply.”

The response by the WGFC to the decline of native cutthroat trout was well meaning and, given the knowledge at the time, sensible. It was also disastrous! Rather than develop hatchery strains of native cutthroat, the WGFC set about importing exotic trouts via the newly completed transcontinental railroad. As early as 1880 rainbow and brook trout fry were brought in from Wisconsin. Rainbow trout were also received from hatcheries in California by the mid-1880’s. These imports found Wyoming waters to their liking. The brook trout ate fry and competed with the native cutthroat for food, cover and space. The rainbows, cousins of the cutthroat, interbred with the native fish and

hybridized the species. Impacts on native cutthroat habitat by water and land development, as well as mining over time, decreased the distribution of cutthroat throughout its native range. Biologists believe that CRC currently occupy about 14% of their historical range.

Declines of CRC within the Little Snake River enclave also occurred. Biologists estimated there were 335 miles of historic CRC habitat in the Little Snake River drainage in Wyoming. In 1954 it is estimated only 78 miles of streams containing CRC remained in the drainage. By 1993 the number

dropped to 51 stream miles. Efforts to manage the native cutthroat trout by the Wyoming Game and Fish Department (WGFD), the Medicine Bow National Forest (MBNF) and the Bureau of Land Management (BLM)

began in the 1970’s with closure to angling of headwater streams throughout the Little Snake River drainage containing populations of genetically pure CRC. Over time additional strategies to protect CRC were implemented: cessation of stocking of exotic trouts, the construction of fish barriers to protect remnant populations from the invasion of brook trout, chemical treatments of streams to remove exotic fish, restocking of renovated streams with pure CRC and the protection and enhancement of CRC habitat by the MBNF and BLM. By 2005 the number of stream miles containing CRC in the Little Snake River drainage increased to 111 miles. The WGFD, MBNF and BLM are working together through several “Conservation Plans, Agreements and Restoration Strategies” to improve and protect existing habitat, as well as expand the range of CRC in the Little Snake River drainage.

Colorado River Cutthroat Trout

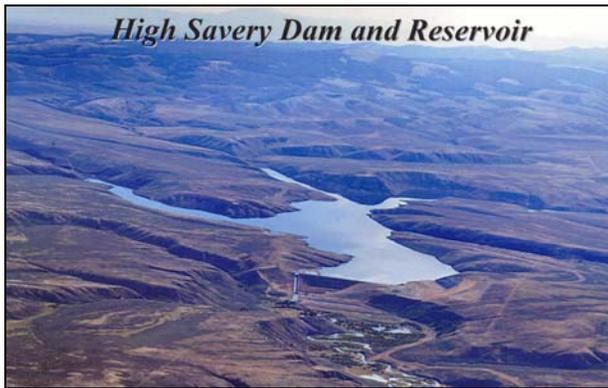


Colorado River cutthroat trout were petitioned for listing under the Endangered Species Act (1973) in December 1999. In April 2004 the U.S. Fish and Wildlife Service issued their finding that the requested listing action was not warranted. Further litigation is expected on this petition. One of the primary reasons given by the USFWS for their finding was the past and ongoing efforts by state

agencies to conserve and enhance populations of Colorado River cutthroat trout. By keeping CRC off the endangered species list the State of Wyoming maintains jurisdiction over the management of not only this species but the other species occupying historic CRC habitat. The CRC is designated as a special status species by the WGFD and as a sensitive species by the MBNF and BLM.

High Savery Reservoir

Bill Wengert, Regional Fisheries Biologist



A new reservoir fishery is surfacing in south central Wyoming. Premiering in the new High Savery Dam and Reservoir will be three species of trout and/or salmon, two of which cannot be caught in this area of the State and one of which cannot be caught anywhere in the State of Wyoming. The three being the native Colorado River cutthroat trout, kokanee salmon and tiger trout. The reservoir is being primarily managed as a brood reservoir for the native Colorado River cutthroat trout (CRC) and you say, "No Big Deal." But the new reservoir is the only reservoir in the southern portion of the State where the native CRC can be found. The reservoir may not grow a new state record cutthroat (current record is 32 inches, 15 pounds), but it certainly is capable of producing CRC in the 3 to 4 pound class.

Kokanee salmon were stocked in the new reservoir to compete with white suckers for the reservoirs zooplankton forage base and provide a fishery until CRC were available from WGFD hatcheries. Nearly 30,000 early run kokanee (KOE) were stocked in the partially filled reservoir in 2004 and 27,000 in 2005, the year the reservoir filled for the first time. KOE are stocked at a small size, usually one to two inches. The first run of spawning adult fish appeared last

year (2005) in the three tributary streams. Just over 4,000 KOE or about 15% of all the KOE stocked in 2004 matured at two years of age. The fish averaged about 12 inches in length, a good sized KOE for a 22,433 surface acre reservoir.

Then there is the tiger trout. And this is the only reservoir where this hybrid trout can be caught in the State of Wyoming. A predatory trout was needed to utilize white suckers, creek chubs and other nongame fishes, which are colonizing the reservoir. The specific reason tiger trout (TGT) were selected by the WGFD was because they are a completely sterile hybrid (between a brown and brook trout), so their numbers can be strictly controlled by stocking. TGT have been used by the Utah Division of Wildlife Resources (UDWR) in association with their CRC recovery efforts with good success. The first 20,000 Tigers were stocked in early May 2005 at an average size of 2.9 inches. By September 2005 these fish were averaging 8 to 9 inches. The WGFD does not raise TGT in their hatcheries, but trades other species of trout with the UDWR for the Tigers.



Tiger Trout

The Tigers should stay along the shorelines and prey more specifically on white suckers and creek chubs than the stocked CRC or kokanee. Undoubtedly a new State record TGT will be established from the new reservoir because no record currently exists.

To date, 6,417 CRC of varying sizes were stocked in the new reservoir in 2005. The bulk of the CRC (75 %) were stocked at an average size of 5.5 inches. The rest of the CRC were catchable plants ranging in size from 8 to 17 inches. The reservoir will receive 30,000 CRC at an average length of 5.5 inches during June 2006.

Drift of brook trout from tributary streams upstream of the reservoir will be an added bonus to the reservoir fishery. Three brook trout (BKT) were caught in the June gill netting. The fish ranged in length from 11 to 16 inches. Several large BKT in the 2 to 3 pound class were seen in September 2005 mixed in with the spawning KOE. There probably are not a great number of these fish to catch, but the reservoir may provide an opportunity to catch a trophy sized BKT.

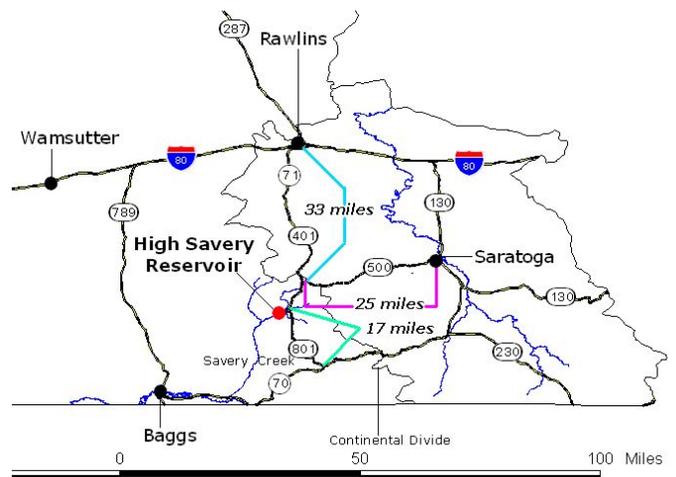
The 2006 fishing season on the new High Savery Reservoir could provide some excellent fishing, especially for KOE. It is difficult to say how fast kokanee will grow in the new reservoir, but the three year old fish from the 2004 plant should easily average 14 to 16 inches by late summer. Some of the CRC should be pushing 20 inches in 2006, but most will probably be in the 12 to 14 inch size class. The tigers should be at least 15 to 17 inches by the fall 2006.

The tailwater fishery in Savery Creek below the dam was first stocked with 5,500 rainbow trout (approximately 5 inches in length) in June 2004. Sampling during September 2004 did not find any of the stocked rainbow trout, except directly below the dam. Outflows from the dam during the summers of 2004 and 2005 were limited to warm surface waters from the reservoir. In 2004 the reservoir partially filled and in 2005 the selective water withdrawal system malfunctioned. The surface water releases were extremely warm during the late summer, exceeding 70 F degrees in some instances. Water temperatures in Savery Creek at the McCary Ranch WIA area were in the high 70's and low 80's during August. Trout could not tolerate these high temperatures and most likely perished during the heat of the summer. No trout were stocked in the Savery Creek tailwater fishery in 2005, because of the warm water temperatures. The Wyoming Water Development Commission solved the problems with the reservoirs selective water withdrawal in

September 2005 and cool waters from deeper in the reservoir will be released in 2006. CRC will be stocked in June 2006 to provide a trout fishery in Savery Creek tailwaters below the dam. The CRC will provide a unique fishery for the native cutthroat of the Little Snake River drainage.

The fishing regulations for High Savery Reservoir (effective January 1, 2006) will be a creel limit on trout and salmon shall be six (6) day or in possession. No more than two (2) shall be cutthroat trout; and, only one (1) trout or salmon shall exceed 20 inches (Page 21, Section 32; 2006 – 2007 Wyoming Fishing Regulations). The fishing regulations for Savery Creek will be the creel limit on trout shall be six (6) per day or in possession. Only one (1) shall be a cutthroat trout (Page 22, Section 64; 2006 – 2007 Wyoming Fishing Regulations).

Access and recreational facilities at new High Savery Reservoir are the responsibility of the Wyoming Water Development Commission. The reservoir has a cement boat ramp, parking area and bathroom facilities. No overnight camping is allowed at the boat ramp or around the reservoir. Camping facilities can be found to the south in the Medicine Bow National Forest.



To access the new High Savery Reservoir from Rawlins, take HWYs 71/401 south (approximately 38.5 miles) from the I-80 exit to the boat ramp access road. From Saratoga, take Highway 500 to the junction of 401 (approximately 25 miles), turn left (south) on HWY 401. Take Hwy 401 about 5.2 miles to the boat ramp access road. From Hwy 70 (Baggs to Encampment) take FS Road 801/401 north 16.8

miles to the boat ramp access road. The reservoir is on the west side of Hwy 401 and it is approximately 1.4 miles from Hwy 401 turn off to the boat ramp.

The access road to the boat ramp is not marked, but you can see the reservoir from HWY 401 at this point and should be able to find the boat ramp access road.

Jim Bridger Pond Rehabilitation

Robb Keith, Regional Fisheries Supervisor

Jim Bridger pond is once again alive with fish. The Wyoming Game and Fish Department chemically treated the pond in 2004 to remove undesirable fish species. Following the treatment the pond was restocked during 2005 with rainbow trout, Snake River cutthroat trout, Splake and smallmouth bass. Green River Fisheries Supervisor Robb Keith says the outlook for the pond is very good.

Netting conducted at the pond in late September 2005 produced interesting and somewhat surprising results. We expected the newly stocked rainbow trout to grow fast, but not six inches in four months. The rainbow trout stocked during May averaged 8 inches long. By late September, the same rainbow trout were averaging 14 inches and ranging from 12 to 15 inches. The exceptional growth resulted from the abundance of forage available in the newly renovated reservoir and the lack of competition with suckers and carp for food.

Stocked Snake River cutthroat trout were abundant and healthy, having grown slightly during their time in the reservoir. The Snake River cutthroat trout were stocked as brood culls, ranging in size between 1 and 3 pounds.



A nice Snake River cutthroat from Jim Bridger.

The Splake stocked in early June nearly doubled in size by late September and were averaging 7.5 inches in length. While the growth is exceptional, the Splake will likely not reach a catchable size until the summer of 2006. Although the smallmouth bass had

only been in the reservoir for about a month when it was netted, the fish looked good, were fat and well distributed throughout the reservoir. Department biologists expect the mature bass to spawn during the spring of 2006 and develop a self-sustaining population.

Jim Bridger Pond is being managed as a family fishery for rainbow trout and Snake River cutthroat trout. The splake and smallmouth bass are being stocked to diversify the fishery and to help control white suckers as they regain access to the pond. Jim Bridger Pond is filled via a pipeline with water from the Green River. The pipeline not only transports water, but also fish. This is how the white suckers gained access to the pond in the past. Both splake and smallmouth bass will prey upon the juvenile white suckers, thereby helping to keep the numbers of white sucker in check. In addition, Department biologist with assistance from volunteers will continue to net and remove spawning white suckers to further suppress the population and benefit the trout fishery.

Anglers are encouraged to utilize this fishery adjacent to Jim Bridger Power Plant. Before freeze up last fall, the Department was receiving numerous positive reports from anglers enjoying the newly restored fishery. A large area of open water formed along the north shore near the inflow and the boat ramp as of the end of March. The remaining ice should be off the pond by mid April. Rainbow trout should have put another inch of growth on over the winter. Anglers can expect to catch rainbow trout ranging from 13 to 16 inches this spring, with fish putting additional growth on this summer. The future fishing opportunities on Jim Bridger Pond will continue to improve as additional fish are stocked this spring. The stocking schedule for 2006 is similar to 2005: 4,000 rainbow trout (averaging 8 inches), 750 Snake River cutthroat trout (ranging from 1 to 3 pounds), 2,500 Splake (averaging 3.5 inches) and 1,000 smallmouth bass (ranging from 1 to 15 inches).

Viva Naughton Fishery and Boat Ramp Improvements

Craig Amadio, Regional Fisheries Biologist

Viva Naughton Reservoir is managed for rainbow trout, which are annually stocked in late summer. The reservoir is sampled each year in June and rainbow trout catch rates have increased every year since 2000. In fact, 30% of all rainbow trout sampled in 2005 were ≥ 16 inches and a few 24-25 inch fish were captured.



Anglers can look forward to the opportunity to catch big rainbow trout in 2005.

Reports from anglers in 2005 were also outstanding. Angler catch rates are high and they are catching a lot of 16-20 inch rainbows. Some anglers have even tied into rainbows that are 20-25 inches. Based on this information, we are optimistic that rainbow survival

and growth has been good and that should be reflected in fishing success this summer.

In addition to rainbows, splake were annually stocked between 1999 and 2002. Reports from anglers suggest these fish are still being caught and some have grown quite large (>25 inches). Splake are a cross between lake trout and brook trout and are known to be an aggressive predator. Splake are fun to catch and because they grow relatively fast, they are a popular sport fish. Angler wishing to catch splake can start by trolling rapalas or spoons in deep water.

Anglers may also notice that the Viva Naughton boat ramp and parking area have been improved. The Wyoming Game and Fish Department, in cooperation with the Naughton Power Plant, constructed a new boat ramp in 2005. The parking lot was also expanded and new restroom facilities were constructed. These improvements will provide immediate benefits to boat anglers.

Native Non-Game Fish

Robert Keith, Regional Fisheries Supervisor

I want to take some space in your newsletter to talk about a group of fish you are likely not accustomed to hearing us talk about. For years, you have been reading and hearing about the Wyoming Game & Fish Departments (WGFD) efforts to conserve and restore cutthroat trout, especially Colorado River cutthroat trout in the Green River Region. In fact, this newsletter highlights efforts in the Little Snake drainage that represent nearly 20 years of effort to stabilize and expand that strong hold of Colorado River cutthroat trout. In recent years, the Fisheries Division of the WGFD has taken more seriously our charge as stewards of all of Wyoming's aquatic resources. Our stewardship responsibilities embrace the sport fish we all enjoy pursuing but also the little known non-game aquatic wildlife that for years have been ignored. The non-game fish such as flannelmouth suckers, bluehead suckers and roundtail chubs are just as much a part of Wyoming's heritage as are our native cutthroat trout. These fish face

similar threats to their continued existence in the State of Wyoming as the cutthroat trout. These threats include habitat loss and fragmentation, hybridization and competition with introduced species and succumbing to predation by introduced species.

In the Green River Region, the WGFD is undertaking basin wide surveys in the Green River, Little Snake and Bear River drainages to better understand the abundance and distribution of our native fish communities, especially flannelmouth suckers, bluehead suckers and roundtail chubs. Surveys in the Green River drainage started in 2003 when a crew was hired with the exclusive charge to complete detailed surveys of all waterways in the Green River drainage upstream of Flaming Gorge Reservoir. Since 2003, the native fish crew has surveyed 236 sites in the Green River drainage. These surveys have identified a few key strong holds of our native

fish species, especially flannelmouth suckers, bluehead suckers and roundtail chubs. This year (2006) the native fish crew will be dedicated to completing surveys in the Little Snake River drainage. Funding for the native fish surveys was provided by the Bureau of Reclamation and the U.S. Fish and Wildlife Service's State Wildlife Grant Program. Native fish surveys were also initiated in 2005 in the Bear River drainage at a much slower pace. The Green River fisheries management crew will be working the next several years to complete the Bear River surveys as time permits.



Bluehead Sucker



Flannelmouth Sucker



Roundtail Chub

Native non-game fish targeted by the Green River native fish surveys.

The goal of the survey work is to identify populations that have potential for conservation measures that will reduce the threats to their continued existence. Conservation measures will take many forms. In coming years, you will hear more about the Department implementing strategies that are a main stay in conserving and expanding cutthroat trout population. We envision implementing projects to isolate watersheds with fish migration barriers to protect our native fish assemblages from invasion by introduced species. Once a watershed is isolate we

further envision using piscicides to eliminate introduced species that threaten the continued existence of native fish. By eliminating the introduced species, we eliminate the risks of hybridizing, competition and predation.

In the Green River Region, white suckers, an invasive species introduced from the Platte River drainage, years ago, is the biggest threat to our native sucker populations. White suckers readily spawn with the native suckers creating offspring that are a mix of the parental stocks. Over time sucker populations in waters with both native and introduced individuals will hybridize to the point that nearly all the individuals in the population are a mix of the two or more species with few if any individuals representing the pure genetics of the original parental stocks. This is what biologists call a hybrid swarm. When this happens, the genetically pure native suckers are lost.

One native fish assemblage identified by the native fish crew as having high conservation potential is the flannelmouth sucker population in Bitter Creek. Flannelmouth suckers are the keystone species of the Bitter Creek native fish assemblage that includes speckled dace and mountain suckers. We are currently evaluating the best strategies to protect this native fish assemblage. We are considering a large project to eliminate the non-native species inhabiting the watershed upstream of Rock Springs thereby eliminating hybridization threats and freeing habitat for expansion of native fish populations. This project is currently just on the drawing board, but we will keep you informed of our progress as we move forward developing this project in cooperation with land managers and private landowners.

Wyoming Game & Fish Department E-Newsletter

The Wyoming Game and Fish Department has a new monthly e-newsletter. The e-newsletter arrives once a month in your e-mail inbox to keep you informed of all the latest news related to hunting, fishing, recreation, and wildlife conservation efforts in Wyoming.

Two ways to subscribe to the e-newsletter:

<http://gf.state.wy.us/newsview/frmSubscribe.aspx>
or e-mail: join-wgfnews@ewyoming.gov



Loose Ends



- Anglers are alerted that the bonus brook trout regulation was reinstated in 2006 for Lincoln, Sweetwater, and Sublette counties. This means anglers may harvest 10 brook trout (≤ 8 inches) in addition to their general trout creel limit.
- Wyoming free fishing day is June 3, 2005.
- Families and young anglers can look forward to fishing the urban ponds in our local communities this spring. These ponds will be stocked with catchable trout beginning in late April and stocking will continue through the end of June.
- Take a kid fishing. June 17 is the annual kids fishing day at the Rock Springs County Fair Grounds. This popular event is sponsored by Trout Unlimited, Seedskahee National Wildlife Refuge, Wal-Mart, and Wyoming Game and Fish Department.
- June 24 is the annual kids fishing day in Evanston sponsored by the local Lyon's Club.



Mrs. Wyoming stopped by in 2005 to visit Evanston kids fishing day participants.

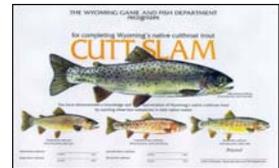
- Anglers should look for the 2006 Walk-in Area Fishing Atlas. This guide features fishing areas on private land enrolled in the Game and Fish's Private Lands/Public Wildlife Access Program.
- The 2006 Green River Region fishing forecast will be in the May-June issue of Wyoming Wildlife News.

WYOMING HUNTING & FISHING HERITAGE '06 EXPO

CASPER EVENTS CENTER ♦ SEPTEMBER 8 - 10, 2006
1-888-EXPO-WYO

- The 8th annual Wyoming Hunting and Fishing Heritage Expo will be held September 8-10, 2006 at the Casper Events Center. The Expo is a great event to take youngsters to and educate them 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.

- Take a swing at the Cutt-Slam! This Game and Fish program is designed to encourage anglers to learn more about



Wyoming's cutthroat sub-species and develop an understanding and appreciation of the Department's cutthroat management program. The Cutt-Slam has become very popular and is a wonderful way to educate young anglers about our native cutthroat trout. Visit our web site for more information.

Visit us on the internet!
[HTTP://GF.STATE.WY.US/](http://GF.STATE.WY.US/)

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