



Wyoming Game and Fish Department



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Fish Management in the Jackson Region

Welcome to the 2017 Jackson Region Angler Newsletter! We had another great year with new projects and new faces. We said a fond farewell to Tracy Stephens after she accepted a fish coordinator position with the Arizona Game and Fish Department and welcomed her replacement Clark Johnson as a new member of the crew. Inside you'll find updates from our work in 2017.

As always, please feel free to contact us with any comments or questions about the aquatic resources in western Wyoming. Your input is important to us as we manage these resources for *you*, the people of Wyoming. You'll find all of our contact info on the last page of this newsletter. Thanks for a great 2017 and happy fishing in 2018!



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Tracy Stephens Migrates South



The Jackson Game and Fish office was sad to say farewell to long-time Jackson Fish Biologist Tracy Stephens, as she recently accepted a fish coordinator position with the Arizona Game and Fish Department. Tracy’s smiling face has been a fixture within the Jackson Fish Management crew for the past 15 years.

Stephens was primarily in charge of the waters north of Jackson to Yellowstone National Park, including the Snake River and Flat Creek, both renowned by anglers well beyond Jackson Hole for their trophy Snake River Cutthroat Trout. Other accomplishments for Stephens included an extensive survey of high alpine lakes in the Teton Range and the recent successful treatment of Mystery Lake in the Absaroka Range, just to name a couple.

Despite all her accomplishments as a biologist, Tracy may have been even better known for her talents as an educator. Stephens organized the hugely popular “Kids Fishing Day” event in Jackson every year and taught countless kids about fish ecology and management at many events including the Game & Fish Conservation camps, the Jackson Hole Trout Unlimited Adopt-a-Trout program and many, many more. Tracy will be missed here in Jackson, but we wish her all the best in Arizona!



Jackson Lake Ice Fishing

The ice fishing can be good right after ice forms, and generally tends to pick up as the winter turns to spring. On average, we like to see a catch rate of 0.5 fish per hour for ice anglers.

Ice anglers are encouraged to be cautious and pay attention to the ice conditions. If you have questions about current ice conditions, please call our regional office (307-733-2321) or Grand Teton National Park (307-739-3300). It is highly recommended to always check ice before venturing too far from shore and fish with a buddy in case someone breaks through and needs help.



Flat Creek Work Continues

Jackson Region Aquatic Habitat Biologist, Anna Senecal, continued her multi-faceted fish habitat improvement project for Flat Creek on the National Elk Refuge. In addition to more than three stream miles of channel improvements completed during the fall, Game and Fish has constructed a six-foot high enclosure fence to protect 1600 feet of stream channel from elk browsing. Riparian browsing and grazing can limit the potential for streamside vegetation to regenerate and grow to maturity. The fence was initially constructed in the fall of 2016 and modified early spring 2017, utilizing reclaimed drill stem pipe paid for with a grant from the Wyoming Wildlife and Natural Resource Trust Fund. Wading anglers should have no trouble getting through the fence, which is intended to keep elk out, but not people.

Senecal has also enlisted the help of local Trout Unlimited staff and volunteers, to help jumpstart the regrowth of the riparian plant community within the enclosure along Flat Creek. This spring, volunteers assisted Game & Fish by harvesting willow saplings that were held dormant in cold storage until June, when they were planted within the enclosure fence.

Outside edges of river bends were targeted for planting as the woody roots of willows help to hold the bank together and reduce stream erosion. Without this protection, the creek would become increasingly wide and shallow and could eventually cut off whole meander bends, losing valuable stream miles and fish habitat. While the plantings may not look like much this summer, in a couple years the area should once again support a thriving riparian zone, including many songbirds. Volunteers included members of Teton Conservation District, the Snake River Fund and the general public.



Volunteers from the Snake River Fund, Teton Conservation District, Trout Unlimited and others assist Game & Fish with harvesting and planting of willow saplings along the banks of Flat Creek on the National Elk Refuge.



One of the outside meander banks after willow planting.



Jackson Region personnel (L-R) Derek Lemon, Clark Johnson, Sam Campbell (volunteer), Diana Miller, and Chris Wight help to fit and weld the metal pipe rails to complete the elk enclosure fence on the National Elk Refuge.

Early Spring Fishing

Early Spring can provide unique opportunities in the Jackson Region for some great fishing. South Jackson Game Warden Kyle Lash decided to get a little exercise by biking (right) into Jenny Lake in Grand Teton National Park while the road was still closed to motorized vehicles in April. Lash found these two youngsters

(left) having a good day through the ice. Lash also reports good fishing by anglers trying their luck on the Snake River (lower right).



Successful Jenny Lake Anglers



Good angling opportunities on the Snake River

Checking for Aquatic Invasives

Wyoming state law requires all watercraft entering the state by land from March 1st through November 30th to be inspected for AIS before launching in a water of the state.

Check station locations in Star Valley include the Salt Pass check station on Highway 89 south of Afton/Smoot, which will run 8am – 6pm Thursday through Sunday. The check station located at the Port of Entry on Highway 26 in Alpine will run 7 am – 5 pm Monday through Wednesday and 7 am – 7 pm Thursday through Sunday.

Check stations at the Moose and Moran entrances of Grand Teton National Park are operated seven days a week by the National Park Service.

Boaters can also stop by the Game & Fish regional office in Jackson (420 North Cache St. Monday-Friday 8AM-5PM) to receive an inspection. A check station on Highway 22 at the top of Teton Pass will also begin operation as the summer gets under way.

Boaters are reminded that all watercraft must have a valid AIS decal before launching on Wyoming waters.



Above: Jackson Aquatic Invasive Species Coordinator Chris Wight inspects a drift boat

Kids Fishing Day



The 26th annual Jackson Kids Fishing Day was the largest to date with 375 kids registered for the event. The previous high was 250 from 2016. The kids and their families experienced learning stations, enjoyed a free lunch and then an afternoon of fishing and other fun activities. Game & Fish employees from the Jackson office, along with several volunteers and partner organizations team up to make this an annual favorite community event each year. Due to a generous grant from Jackson Hole One Fly Foundation, kids were able to keep their rod and reel.



Snake River Spawners

Each year since 1965, a fish trap is installed on a spring creek tributary to the Snake River. This year, 625 mature Snake River Cutthroat Trout were captured in the trap, the highest number ever recorded. We are unsure as to why we say large number of fish, and although we can't derive a population estimate from the number, it does reflect well on the current status and future of the population. With a large number of fish laying eggs this year, we expect another banner fishing year about four years from now, when they become mature .



Photos: Jackson Fisheries Technician Chance Roberts measures and re-releases a colorful spawning male Snake River Cutthroat Trout after it was captured in a tributary of the Snake River.

Fish For Murphy

Jay Foland and Hailey Hunt from the Auburn Fish Hatchery treated anglers at Murphy Lake to a whole mess of Snake River Cutthroats in late June. In addition to stocking several area lakes and streams, the Auburn Hatchery hosted well over 100 visitors including groups from Afton Schools, Boy Scouts and the Rotary Club.



Auburn Hatchery Fish Culturist Jay Foland releases fish at the scenic Murphy Lake in the Salt Range in late June.



One of the retired brood fish before heading for deeper water.

Dime Lake Gets Restored

After more than five years of planning, Dime Lake and Dime Creek were chemically treated with rotenone to remove a non-native Brook Trout population. The sizeable project took place the week of August 28th and appears to have been a success. There were a total 28 people helping with the treatment project.

Dime Lake is two acres in size with a maximum depth of seven feet. It is located on the Bridger-Teton National Forest within the Teton Wilderness, approximately 3/4 of a mile east of Hwy 191 and roughly six miles south of Yellowstone National Park. The lake is fed by a series of springs and the outlet, Dime Creek, flows approximately three miles before it enters the Snake River above Jackson Lake. There is a steep cascade on the outlet that appears to be a complete barrier to upstream fish movement.

Dime Lake and Dime Creek above the cascade, held a large population of Brook Trout ranging in size from 1-7 inches. This Brook Trout population was a source of Brook Trout to the mainstem Snake River and its other tributaries above Jackson Lake. The fish were stocked by the Game and Fish Department some 40-plus years ago, but the problems associated with Brook Trout in Cutthroat Trout waters has since been well documented, mostly displacing Cutthroat Trout due to competition. In addition, Dime Creek and Dime Lake are home to a healthy population of Columbia Spotted Frogs. Trout are known predators to amphibians during several life stages. By removing the Brook Trout population, the lake will be restored to it's natural state and the Columbia Spotted Frog population will be able to increase its numbers.



Calibrated drip jugs applying chemical



Suiting up for handling the chemical



Employees pack in supplies for the treatment on their back

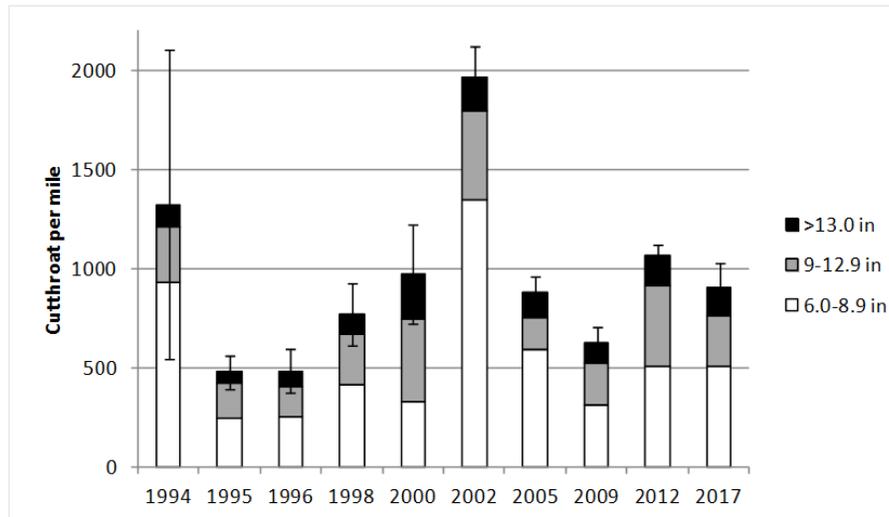


Employees on a small cataraft applying chemical to Dime Lake

Snake River Cutthroats Surveyed



The Jackson fish crew conducted their annual fish survey of the Snake River on a five-mile reach south of Wilson in October. Results from this year's estimates compared to previous years are below. This year flows from Jackson Lake Dam were noticeably higher (880 cfs) than projected for timing of our population estimates (500 cfs). Due to these higher flows, a longer reach (5.0 miles) was sampled this year compared to 2012 (2.8 miles). Numbers in 2017 were similar to the previous estimate in 2012 and still above our management objective for this stretch of the Snake River.



Population estimates for cutthroat per mile from a 5.0-mi section of the Snake River below Wilson bridge.

Jackson Hole Adopt-a-Trout



The local Trout Unlimited Chapter, Teton Conservation District, Grand Teton National Park, and our fish management crew teamed up to continue the Jackson Hole Adopt-a-Trout Program this fall. Approximately 200 Jackson Hole Middle School students attended an outdoor day in Wilson that included six field stations: electrofishing, radio telemetry, fish surgery/tagging, macroinvertebrates, water quality, and journaling.

Adopt-a-Trout is a nation-wide Trout Unlimited program that educates students about their local watershed and fisheries while also providing important data to resource managers by tracking the seasonal movements of radio-tagged fish. Fish managers radio-tagged 30 fish and returned them to Fish Creek and the Granite Supplemental Ditch-north of Wilson to study winter habitat use and spring spawning movement as well as identify areas of conservation need. Local fish managers also participate in additional classroom visits throughout the year with another field day in June where the kids will assist with a conservation “service” project.



Jackson Lake Trophy Tagging

Since 1987, the Jackson Fish Management Crew has tagged Lake Trout caught in the fall to track growth on trophy sized fish. The Lake Trout are caught in nets set at night when the fish are coming into the shallows to spawn. Lake Trout 20 inches or larger are tagged so that when caught at a later date we can learn about growth rates, movements and survival of fish.

To encourage tag returns, anglers have been offered a cash reward of \$25 for tags or tag numbers along with the length, weight and location of the fish. Each year Jackson fish managers get a number of tag returns from anglers, as well as our own surveys. This year, 92 new fish were tagged and 31 previously tagged fish were recaptured, ranging in size from 21 inches to 40 inches; 12 of which were caught by anglers.

In general, we like to see a growth rate of approximately one inch and one pound per year. Those in Jackson Lake can be a bit under that rate, likely due to the relatively cold water. This year, fish that were re-caught were tagged from 2-10 years ago. Lake Trout are one of the longest lived salmonid species and individuals up to 54 years old have been documented in Wyoming.



Jackson Fisheries Technicians Chance Roberts (left) and Riley Young (right) hold a couple of the larger Lake Trout netted in this year's sampling effort. The fish left weighed 26 pounds and is likely over 20 years old.

Saving Star Valley Trout



Each fall, we electrofish about 1500 feet of the eastside canal near Thayne in order to salvage fish that would likely perish when the irrigation water dries up for the year. We rely on the help of volunteers in the area to complete the fish salvage, and this year had the help of 13 members of the Star Valley Trout Unlimited chapter and Trout Unlimited Snake River Headwaters Project Manager Leslie Steen. In total, we returned 616 fish back to the Salt River including 187 Brown Trout, 67 Mountain Whitefish, 225 Snake River Cutthroat Trout, 54 Utah Suckers, 78 sculpin, two Redside Shiners, and three Longnose Dace.



Down at Auburn

The Auburn Fish Hatchery in Star Valley receives approximately 1.5 million Kokanee salmon eggs from Flaming Gorge spawning operations, which are reared overwinter and stocked out the next summer.





Wyoming Game and Fish Department

Conserving Wildlife-
Serving People

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Important Dates to Remember in 2018

- June 2, 2018— **Kids Fishing Day (Afton and Jackson) and Wyoming's Free Fishing Day**
The Wyoming Game and Fish Commission has declared June 2, 2018 Free Fishing Day to coincide with the beginning of the National Fishing and Boating week. Residents and nonresidents may fish Wyoming waters (excluding Wind River Indian Reservation and Yellowstone National Park) without a fishing license or conservation stamp. Free Fishing Day will also coincide with Kids Fishing Day in Afton (Afton golf course) and Jackson (R-Park).
- June 5, 12, 19, & 26— **Trout Tuesdays** *This bilingual event is open to all ages and is designed to provide one on one interaction for those that need a little extra help learning to fish. The event will be held at R Park from 5-8 PM*
- August 1— **Flat Creek on National Elk Refuge opens to fishing** *The National Elk Refuge is closed to fishing from November 1 to July 31. Fishing is permitted by the use of artificial flies only, and fishing is restricted to daylight hours.*
- September 6 **Jackson Hole One Fly** *The Jackson Hole One Fly Foundation hosts an annual fishing event to generate, manage and grant funding for projects and education which environmentally benefit the future of trout and fly fishing.*
- October 1-31— **Jackson Lake closes to fishing** *Jackson Lake is closed to all fishing for the month of October in order to limit disturbance to spawning Lake Trout.*

We welcome all questions and comments on this newsletter or about the fisheries resources within the Jackson Region. Please feel free to contact us or send an email to:

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