WYOMING GAME AND FISH DEPARTMENT



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Laramie Region Angler Newsletter

2021

Laramie Region Aquatics Team



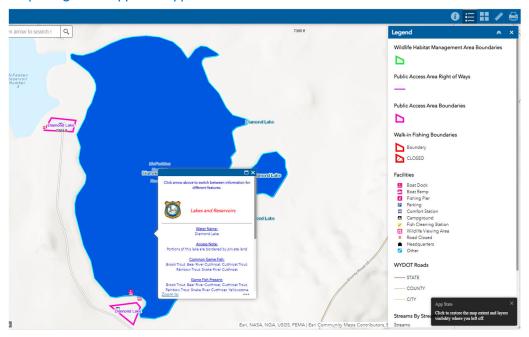
The days are longer and the snow is melting, it's time to tuck the ice auger away and spool new line on the reel. Spring is a great time to fish in the Laramie Region and we hope you enjoy the aquatic resources. This newsletter highlights the Diamond and Wheatland #3 fisheries, our master angler program, invasive rusty crayfish, and river restoration work on the Laramie, please enjoy!

Interactive Fishing Guide



This web-based fishing map can be found on the Wyoming Game and Fish Department website and is a tremendous resource for researching all public waters in Wyoming. You simply click on the lake or river from the map to learn about its access, common game fish, and facilities (boat ramps, restrooms, campgrounds). To navigate there, go to wgfd.wyo.gov and click on the blue "Fishing & Boating" tab on the top of the main page, then click on the green "Places to fish and boat in Wyoming" box. You'll find the Interactive Fishing Guide link here. The direct link is:

https://wgfd.maps.arcgis.com/apps/webappviewer/index.html?id=61d1fb66ead443e2af51aa2ada1f1eaa



Screenshot of Diamond Lake from the online fishing guide

Fish Stocking Reports

This web-based tool on the Wyo-ming Game & Fish Department website allows you to examine up to date stocking information to see what species have been stocked in your favorite waters recently or even historically. Go to wgfd.wyo.gov and click on the blue "Fishing & Boating" tab on the top of the main page, then click on the "Fish Stocking Reports" box near the center of the page. Or use this direct link:

https://wgfapps.wyo.gov/FishStock/ FishStock



Mullen Fire

In 2020, this 176,000 acre fire burned large portions of the Medicine Bow National Forest west of Laramie, WY and will impact fisheries. Increased soil erosion, accelerated water run-off, and debris flows in areas that burned very hot could negatively impact the aquatic resources. The Douglas Creek watershed and the North Platte River from Six Mile Gap to Saratoga are two areas of concern, because of how hot the fire burned in these drainages. The Laramie Region Aquatic Resources Team will monitor the fish populations in those rivers in 2021. We will also work with partner agencies to study other impacts of the fire to aquatic resources, including assisting the US Forest Service with monitoring Wood Frogs. Past research has shown that fisheries are resilient and can rebound after ash or sediment flow events. In fact, woody debris (trees and logs) are washed into rivers after fires and create new fish habitat. The aquatic insects that fish eat usually increase in density several years after a fire. While the fisheries may be negatively impacted in short-term, we hope there will be long-term benefits.

Creel Limit vs. Possession Limit

Creel Limit is the total number of game fish an angler can harvest and possess during any one day. Possession Limit is the total number of game fish an angler can possess at any time. This includes the fish you have in your freezer at home. Generally, the creel and possession limits are the same. Example - If you

harvested six walleye from Grayrocks Reservoir last Saturday (creel limit) and filleted and froze all six walleye in your home freezer (possession limit), you cannot harvest any more walleye until those at home are consumed.



Live Baitfish use in the Laramie Region

Live baitfish can only be used at Bump Sullivan, Festo, Grayrocks, Guernsey, Hawk Springs, Packers, Rock, Springer, Wheatland #I, and the North Platte River from Glendo dam to the Nebraska state line. Game Wardens have noticed increased use of live minnows at Lake Hattie and Wheatland Reservoir #3. While it is legal to use or possess **DEAD** baitfish, it is illegal to use or possess **LIVE** baitfish at Lake Hattie and Wheatland #3. These regulations are being enforced by our Game Wardens.

Standup Paddleboard Inspections

Standup paddleboarding (SUP) has become quite the summer watersport hobby in the Laramie Region, and for good reason. With beautiful places such as Curt Gowdy State Park and alpine lakes of the Snowy Range, it is a great way to get out and enjoy being on the water. Although SUPs are seemingly low tech, the Wyoming Game and Fish Department would like to remind you that paddle boards require Aquatic Invasive Species inspections, only if you enter Wyoming or encounter an operating check station. SUPs, have the potential to transport invasive species through water, plants, and mud attached to the board. Just like any other watercraft, SUPs transported into Wyoming from March Ist through November 30th must undergo a mandatory inspection by an authorized inspector prior to launching. SUPs do not require an AIS decal. For a complete list of places to get inspected in the Laramie Region please visit the Wyoming Game and Fish Department website at https://wgfd.wyo.gov/Fishing-and-Boating/Aquatic-Invasive-Species-Prevention/AIS-Inspection-Locations or stop by any regional office. We look forward to seeing you at the inspection station and remember to transport your

watercraft Clean, Drained, and Dry.

Motorized Boating Use at Wheatland Reservoir #3

the first time, evaluation of motorized fishing boat use at Wheatland Reservoir occurred in 2020. A trail camera counted boats launching into Wheatland Reservoir #3 from April 21 to October 4. The total number of motorized boats counted was 906, with June (n = 227), July (n = 241), and August (n = 206) having the most motorized boating use The higher 1).



boating use corresponded with good Walleye fishing. Walleye boat anglers experienced high catch rates in June (2.10 fish/hour) and July (2.33 fish/hour). The Walleye fishing at Wheatland Reservoir #3 is exceeding expectations when compared to other Walleye fisheries in the Laramie Region. As expected, boating use was higher on weekend days than on weekdays. More boaters are using Wheatland Reservoir #3 than expected and this survey will help guide future decisions on improvements to facilities at the reservoir.

The opportunity for anglers to achieve their daily limit of Walleye, especially around 14 inches, is right now at Wheatland Reservoir #3. The best time to go for Walleye is June and July. Therefore, if catching your daily limit of tasty Walleye sounds appealing, check out Wheatland Reservoir #3 this summer.

One improvement to the facilities at Wheatland Reservoir #3 anglers should expect to see within the next year is an informational kiosk. This kiosk will consolidate many of the informational signs currently present at the reservoir. In addition, the kiosk will display information on reservoir conditions as it pertains to harmful cyanobacteria blooms or boating and fishing conditions. For more information on harmful cyanobacteria blooms please visit:



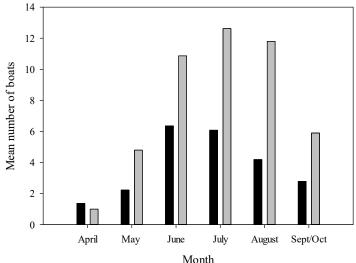


Figure 1. Mean number of motorized fishing boats launched into Wheatland Reservoir #3 on weekdays (black bars) and weekend days (gray bars) from April to October 2020.

A Tale of two Tails



Diamond Lake is located on the Laramie Plains about 40 miles west of Laramie. Popularity peaked in the 80's and 90's. A special regulation intended to increase "trophy-sized" fish started in 1990. However, the drought of the early 2000's ended this great era of fishing. Lake levels dropped too low to sustain a fishery and fish stocking stopped by 2002. Fourteen years later, water and hope returned and the reestablishment of the fishery began. The Wyoming Game and Fish Department improved water delivery infrastructure and purchased water for five consecutive years (2016-2020), filling the reservoir completely.

Since 2016, Brook, Cutthroat, and Rainbow trout have been stocked. In the next few years scheduled stocking includes Brook and Cutthroat trout. Rainbow Trout were stocked during the first couple years to provide a catchable species until the Brook and Cutthroat trout grew to large sizes and occurred at high abundances. This fishery has been closely monitored and data indicates Cutthroat and Rainbow trout statuses shifted significantly over the past five years, directly impacting angler experience.

Rainbow Trout abundances declined steadily after 2017 when stocking ceased. Accordingly, angler catch rates slowed in response to Rainbow Trout decreased abundance. For example, anglers caught nearly two rainbows per hour of angling in 2017 and only one rainbow per four hours of angling in 2020 (Figure 1). Additionally, Rainbow Trout accounted for about 70% of fish caught by anglers at Diamond Lake since 2017,

amplifying the impact of this change to anglers. All in all, the initial stockings of Rainbow Trout contributed significantly to the quantity of fish caught by anglers at Diamond Lake recently.

On the other hand, Cutthroat Trout abundance remained relatively steady with continued stocking, accounting for over 60% of all sport fish captured in the spring netting survey conducted in 2020. The transition to a Cutthroat Trout dominant fishery was not experienced similarly by anglers. For example, cutthroats accounted for < 30% of all trout caught by anglers in 2020. The large size of cutthroats tends to excite anglers as they accounted for 60% of the Master Angler Program entries by March 1, 2021.

Anglers at Diamond Lake experienced high catch rates and catch of memorable fish during the past five years. Those two experiences were largely influenced by the species caught. A more intensive creel survey effort will occur over the next couple years to see if anglers start catching Cutthroat Trout at higher rates. If not, it may be necessary for future management to include stocking Rainbow Trout to maintain good quantities of fish to catch and Cutthroat Trout to maintain good quality of fish to catch.

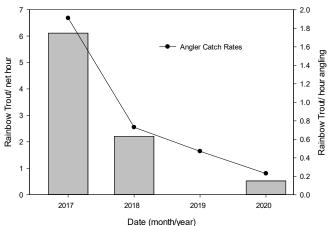


Figure 1. Rainbow Trout abundance (bars and left vertical axis) measured during spring netting surveys and angler catch rates (line and right vertical axis) measured during spot creel interviews conducted during the open water fishing season. The lake was not sampled for abundance in 2019. Rainbow Trout abundance and catch rates were exceptionally high in 2017, but these levels were not sustainable as fish weights and growth suffered.

Grayrocks Reservoir: 2012 vs 2018

The ultimate goal on popular standing waters in Wyoming is to provide quality recreational opportunities for anglers. It is logical, therefore, that any assessment of fisheries management programs should incorporate some measure of angler success or satisfaction. Programmed creel surveys periodically conducted on popular standing waters calculate many aspects of fishing use and success, a multitude of catch statistics, angler residency information, etc. Bank and boat anglers are counted, anglers are interviewed, and harvested fish are measured. Angler counts and on-the-ground interviews are performed during eight days or more per month. Programmed creel surveys were conducted in June of 2012 and 2018; the most popular month to fish Grayrocks Reservoir. These surveys helped us to evaluate Walleye management objectives and Smallmouth Bass catch and harvest rates.

Grayrocks Reservoir is an extremely popular destination for Walleye anglers, especially back in the late 1980s and 1990s. Due to improved water levels, angler use and pressure have steadily Increased since 2004. For example, An estimated 3,434 anglers spent 18,098 hours fishing Grayrocks Reservoir in June 2012. This increased to 6,185 anglers fishing 33,953 hours in June 2018. While Grayrocks Reservoir is seeing an increase in use from out-of-state anglers and recreational boaters, a majority of anglers in June 2018 were from Wyoming, with most from Platte and Laramie counties.



Walleye were the primary target fish for a majority of interviewed anglers in June 2018. Walleye were the most frequently caught game fish species, comprising 55% of the total catch and Smallmouth Bass were the second most caught game fish, comprising 32% of the total catch. Walleye catch rate in June 2018 (0.46 fish/hour) decreased from 2012 (0.70 fish/hour). Walleye caught by anglers in June between 12-14 inches are typically Age-2 fish. There were very few Age-2 Walleye caught in June 2018, when compared to past creel surveys. The lack of harvest of Age-2 fish during the June 2018 creel survey may indicate a week year-class due to poor natural recruitment or poor post-stocking survival. Walleye numbers have rebounded since 2018, along with angler catch rates.

The number of Smallmouth Bass harvested in June 2018 increased by 266%, compared to the number harvested in June 2012. No change is recommended to the current Smallmouth Bass regulation at this time. The restrictive limit on bass >12 inches continues to provide an angler with an opportunity to harvest a nice sized bass, while also providing protection to spawning sized bass. In addition, bank angling catch rates since 2004 have increased due to the abundance of bass in the reservoir.

Boat anglers still experienced higher catch rates than bank anglers in June. The 2018 bank angling catch rate decreased, compared to 2012, mostly due to the lack of Black Crappie caught. In fact, there was a 92% reduction in the total number of Black Crappie caught by all anglers, when compared to June 2012. Improving the game fish catch rate at Grayrocks Reservoir is important to maintain angler satisfaction. The catchability of Black Crappie in the spring makes them an ideal species to improve their abundance in the reservoir, with the hopes of improving game fish catch rates. Black Crappie stocking will occur annually, beginning in 2021. The evaluation of Black Crappie stocking along with other management objectives will occur with another programmed creel survey in June 2024.

Rusty Crayfish Invasion

Fisheries biologists discovered Rusty Crayfish, an Aquatic Invasive Species in Wyoming, in 2020. Native to the Ohio River basin, the aggressive Rusty Crayfish invade ponds, lakes, and streams and outcompete native crayfish by eating 2-3 times more food. The invaders will affect Wyoming's aquatic resources for years to come. They force native crayfish out of their preferred hiding places and increase predation by fish and birds. Rusty Crayfish also destroy aquatic plant beds that fish and other aquatic organisms require for habitat, and they eat fish eggs and small fish.

A private fish hatchery illegally introduced Rusty Crayfish about 15 years ago into private fishing ponds. Rusty Crayfish from those ponds have now moved into the Laramie River and Bluegrass Creek in the Laramie Range. Additional illegal introductions may have occurred in



other waters throughout Wyoming during that same time frame. Biologists will determine the extent of these introductions in 2021, but ask that anglers, crayfish trappers, and recreationalists to look out for these troublemakers. Rusty-red spots on their sides identify these creatures (see pictures below), so please contact the Game and Fish at (307) 745-4046 if you find one. Don't move these Aquatic Invasive Species, because it is illegal to possess or transport them. Take a photo of the crayfish that highlights the rusty spot of its side and send the photo to reportais@wyo.gov within 48 hours. We all must prevent their spread to other lakes or rivers. We can't allow these nasty critters to overrun Wyoming's top-notch fisheries and aquatic environments.



Notice the rusty patches along the sides of the carapace.



Update on Master Angler Program in Southeast Wyoming

The popularity of the Master Angler Program grew quickly since beginning in June 2019. The program recognizes the catch of trophy sized fish from our phenomenal Wyoming waters. For the Master Angler Program, qualifying fish must meet or exceed the minimum length established for that species. Adults and youth can participate in this program. For more information on the Master Angler Program visit: https://wgfd.wyo.gov/Fishing-and-Boating/Master-Angler.

Over 2,000 fish caught in Wyoming received Master Angler status as of February 2021. Of those fish, anglers caught over 400 in the Laramie Region. Diverse fishing opportunities exist at Laramie Region waters for many species like bass, trout, crappie, and Walleye. Some of the most popular waters include the Laramie Plains Lakes (Alsop, Diamond, Gelatt, Hattie, Leazenby, Twin Buttes, and Wheatland #3). Master Angler submissions from the Laramie Plains Lakes accounting for almost 200 of the trophy-sized fish. Popular warmwater fisheries, like Grayrocks, Hawk Springs, and Wheatland #1, accounted for nearly 30% of the awards.

The top five waters in the Laramie Region for Master Angler awards were #I – Twin Buttes, #2 – Wheatland #3, #3 – Hawk Springs, #4 – Hattie, and #5 – Grayrocks. Rainbow Trout submitted from Wheatland #3 averaged 22.5 inches, the largest in the Laramie Region. In the Laramie Region, Hawk Springs offers the best chance for a trophy-sized crappie. Crappie represent the majority of Master Angler awards at Hawk Springs and averaged 12.5 inches. Look no further than Lake Hattie for an opportunity to catch a Master Angler qualifying perch. Anglers can catch trophy-sized trout at Hattie, but perch accounted for over half of the Master Angler awards. The largest Master Angler perch from Hattie measured 14.5 inches.

Twin Buttes produced the most Master Angler awards for trout of any Laramie Region water. All three trout species present in the reservoir grew to qualifying lengths for the program. Anglers received Master Angler awards for Brown Trout consistently throughout the fishing season, whereas awards for rainbows and cutthroats occurred most commonly in the spring (Figure 1). Most impressive were two rainbows measuring 26 inches. Grayrocks offers the best opportunity to catch multiple warm water fish species of trophy-size. Anglers received the most awards for trophy-sized Smallmouth Bass caught in May. For other game fish in Grayrocks, June offers the best chance for anglers to receive a Master Angler award (Figure 2). The Master Angler Program is fun and rewarding, so participate by submitting photos of your outstanding catch!

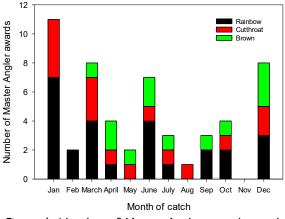


Figure 1. Number of Master Angler awards caught per month of Rainbow Trout (black bars), Cutthroat Trout (red bars), and Brown Trout (green bars) at Twin Buttes Reservoir since June 2019.

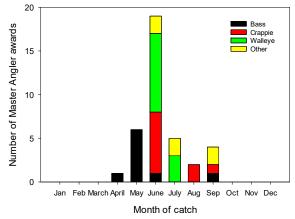


Figure 2. Number of Master Angler awards caught per month of Smallmouth Bass (black bars), crappie (red bars), Walleye (green bars), and Other (yellow bars; Channel Catfish, Freshwater Drum, Yellow Perch) at Grayrocks Reservoir since June 2019.

Laramie River Habitat Improvements

The Wyoming Game and Fish Department (WGFD) is the steward of all Wyoming's wildlife, dedicated to the conservation of sustainable, functional ecosystems capable of supporting wildlife populations at least as healthy, abundant and diverse as they were at the dawn of the 21st century. The Department promotes a holistic approach to habitat management, integrating management and various land uses through collaborative efforts with the general public, conservation partners, private landowners, and land management agencies. The Department strives to increase public awareness of the need to manage for quality wildlife habitat today to help ensure future healthy and abundant wildlife populations. Wyoming Game and Fish Commission lands, such as the Jelm Wildlife Management Area (WHMA), are managed to emphasize and maintain the wildlife habitat and public access values for which they were obtained.





Laramie River habitat improvements will continue along the southern end of the public fishing easement at the Jelm WHMA in 2021. The landowner is leading the effort along with assistance from the Natural Resources Conservation Service, Laramie Rivers Conservation District, US Fish and Wildlife Service, WGFD, Wyoming Wildlife and Natural Resource Trust, and Wyoming Water Development Commission. In spring 2018, the Laramie River cut through a large meander bend on the upstream end of the fishing easement. Along with increased fine sediments from the Badger Creek Fire (2018), the river channel was very unstable and had increased bank erosion. The improvements will address channel stability and aquatic habitat enhancements throughout a 3,000 linear foot reach of the Laramie River mostly within the public fishing easement.

Stream improvements began in summer 2020 with approximately 1,200 linear feet of channel restored. Efforts will continue in summer and fall 2021. Habitat improvements include channel re-positioning, woody debris treatments, boulder grade control structures, and deeper pools. Additionally, riparian habitat will be enhanced with new vegetation plantings.

Anglers who visit the Laramie River Jelm WHMA in summer and fall 2021 can expect to find cloudy, turbid water on days when heavy equipment is working in the channel. The heavy equipment will also prevent access to the upstream portion of the fishing easement for safety reasons. When finished, this project, along with improving river function, anglers can expect to find improved fish habitat and good fishing.

For project updates, please contact the WGFD Laramie Regional Office.



Wyoming Game and Fish Department

Conserving Wildlife-Serving People

Laramie Regional Office 1212 South Adams St. Laramie, WY 82070

Phone: 307-745-4046



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

Bobby.Compton@wyo.gov (Regional Fisheries Supervisor)
Steve.Gale@wyo.gov (Fisheries Biologist)
Chance.Kirkeeng@wyo.gov (Fisheries Biologist)
Christina.Barrineau@wyo.gov (Aquatic Habitat Biologist)
Travis.Beam@wyo.gov (Laramie AIS Specialist)
Kristopher.Fegler@wyo.gov (Cheyenne AIS Specialist)