

Waterfowl and Songbird Surveys Along the Upper Ruby River, April – June 2020

By Bo Crees



The southern part of Ruby River Reservoir as seen from our vantage survey location.

All photos by Bo Crees

The Ruby River in Southwest Montana originates in a high mountain valley that lies between the Snowcrest Mountains and the Gravelly Range. Approximately 76 miles long, it meanders through more than 30 miles of relatively remote and pristine narrow valley before entering the Ruby River Reservoir which was formed after the completion of Ruby Dam in 1938. Downstream from the dam the river flows through the broad, agricultural Ruby Valley, eventually reaching its confluence with the Beaverhead River near Twin Bridges. The upper Ruby River, upstream from Ruby Dam, is renowned for excellent fly-fishing and beautiful scenery, but not many people know that it is also an important stopover site and breeding area for dozens of bird species. Every spring and fall thousands of ducks, geese, swans, loons and grebes use the Ruby River, its oxbows, eddies, flooded areas, and the reservoir itself to rest and refuel during migration. Some, as well as many songbird species, stay and breed along the river and within the extensive willows and tall native grasses that line the banks. Such prime riparian and wetland habitat that so many birds depend upon is unfortunately relatively scarce on the landscape and is vulnerable to disturbance and development. For this reason, Montana Audubon conducted bird surveys to promote and support partners' and landowners' interested in a permanent conservation solution for this important area.

Before moving forward with conservation efforts for this section of the upper Ruby River, we must first try to gain a better understanding of the birds and habitat that need protection. In order to figure out which species rely on the riparian corridor of the upper Ruby River, we had to conduct two different types of surveys: vantage surveys and area searches. Vantage surveys are typically used to monitor waterfowl in large lakes and ponds from a prominent vantage point. Conveniently, there is a high natural bench overlooking the south end of Ruby River Reservoir from which we were able to see the entire southern half of the reservoir. Every survey morning we climbed to the top of the bench, set up the spotting scope, and over the course of 20-30 minutes recorded all the species we observed. We surveyed this area on six dates, from early April to mid-June, and each visit yielded a different species list. On the morning of April 10th we were excited to see a flock of 84 Trumpeter Swans resting and feeding just below the vantage point. It was incredible to watch them all take flight- trumpeting loudly- and fly north through the low gap in the mountains where Ruby Dam holds back the river. A week later we counted 53 Common Loons scattered over the same area! We also observed 20 duck species, Snow and Canada Geese, four grebe species, cormorants, many pelicans and Sandhill Cranes, and several Bald Eagles using the south end of the reservoir and dense willows along the Ruby River inflow.



(Left) A pair of Common Mergansers in the Ruby River. (Right) A Song Sparrow singing in the willows

Vantage surveys are very useful and convenient for waterfowl monitoring in open areas. But in order to survey birds that are using the river itself, as well as the riparian habitat south of the reservoir, we had to conduct area searches. During area searches we walked along or near the riverbank and periodically detoured away into large willow clusters and to search nearby oxbows, seeps, small wetlands and flooded areas. Interestingly, although the stretch of valley bottom we surveyed was about 3 miles long as the crow flies, the river meanders so much that in order to walk the entire stretch of river that lies within the 3 miles, we had to walk over 7 miles! Thankfully most of the surveys took place before mosquitoes and biting insects were out.

The most common ducks we encountered were Common Merganser, Green-winged Teal, Mallard and American Wigeon. The most common songbirds were, unsurprisingly, the Song Sparrow and Yellow Warbler. Since we started to survey well before many songbirds returned from their wintering grounds, it was exciting to encounter newly arriving species as the season progressed. In all we recorded 99 species that use and depend on the upper Ruby River for breeding, fueling-up and shelter. Ten of those species (Common Loon, American White Pelican, Clark's Grebe, Great Blue Heron, Trumpeter Swan, Ferruginous Hawk, Golden Eagle, Bald Eagle, Peregrine Falcon and Long-billed Curlew) are designated as vulnerable species of concern in Montana, so it was particularly nice to see them using this area of high conservation potential. We are hopeful that information like this will help build a case for both conserving and

(Below) An Adult Bald Eagle purveying the site.



(Above Top) The site was still chilly early in the morning during April. (Below) Greater Yellowlegs using the Ruby River as a stopover on its migration north.

enhancing portions of this habitat in perpetuity. In addition, the baseline survey data will allow us to better understand how future conservation efforts are benefiting bird populations that use and rely on this beautiful, unique area.

We wish to thank the Cadeau Foundation for supporting this effort, and wish to encourage all of you to stop and take a look next time you pass through the Ruby River Valley.