

Duck, Dodgin' and Weaving for Harlequins:

Searching for wild birds in wild rivers

May 4- June 7 by Amy Seaman



MONTANA
AUDUBON

Our **River Initiative** has lead us into the headwaters and habitat of fast-water, even white-water loving, ducks. **Harlequin Ducks** are wildly patterned and behaviorally suited for their favored foraging locations below plunging waterfalls and under stream-side willows. Climate change has been indicated as a huge threat to these birds, given a dependence on the timing of spring runoff, but they are also threatened by a limited amount of suitable habitat from the onset, a sensitivity to human disturbance, habitat loss, and altered

runoff. Our mission was to visit each region of Glacier National Park, an Important Bird Area, searching for not just new pairs of

Photos by Amy Seaman



(Top) St. Mary River in late May; (Above) Ole Creek in early May; (Below) Lake Sherburne, Many Glacier area, on our hike to Canyon Creek.



Harlequins, but pairs in locations where we may be able to capture them next year to affix transmitters that collect fine-scale habitat use data. This data will help us answer questions about the bird's biology that are key to understanding management needs such as those surrounding home-range, site fidelity, the timing of movements, nesting location, and more. We are lead by the intrepid non-game biologist in Glacier, Lisa Bate, and supported by focused efforts of the Glacier Conservancy. This May, Jack and I would be left

on our own to travel ~ 190 miles in search of new pairs in new places, and places we can trap ducks. We began with a crash-course on suitable trapping locations, helping recapture marked pairs at both Rock Creek near Noxon, and along McDonald creek in the park.



Photos by Amy Seaman

(Above) Jack Toriello bags a duck, Amy Seaman holds a male from Rock Creek, and a Mallard Duck nest along Canyon Creek; (Left) an American Dipper (lower right) along Canyon Creek



It is all hands on deck when it comes to trapping ducks, and our crash-course proved how true that is! It took 6 people to hold the capture net and nearly as many to herd the ducks towards their fate.

(Top) The trapping crew preparing logistics; (Left) Lisa Bate leads the crew deploying each person to their useful role; (Below Left) Lisa and 3 others aid in extracting the birds, a process where biologist are mindful of the bird's safety, its feathers, and its stress response. These ducks are quite calm. (Below Right) Barbara, a veteran duck trapping volunteer takes a "scarer" role along the bank, waiting to whoop and holler as the birds pass close between her and the net.

Photos by Amy Seaman





We visited 6 regions of the park, all but Waterton, and during the 4 week fury, surveyed 30 miles of creek. The survey is a tedious “leap frog” that slowed progress to about .5 creek miles per hour. During this 30 miles we visited 18 creeks, located 4 pairs, 3 lone males, and 3 lone females.

(Above) Hidden Falls (far left) drops into a pool and creek where a lone female foraged (at star). (Below) Cataract creek where it empties into Swiftcurrent Lake just below the bridge. A lone female was seen here two weeks before our visit to Hidden falls and was likely the same female.

Photos by Amy Seaman



We were able to locate pairs in areas nearby to a number of potential trap sites for the 2018 season. The majority of ducks we observed foraging in pools between falls or in creek-side eddies, locations along the stream that were isolated from others by geographic features like falls, tight canyons, and logjams. No mating behavior was observed, but male ducks observed in pairs always stuck closely by the female, moving up or downstream following her lead.

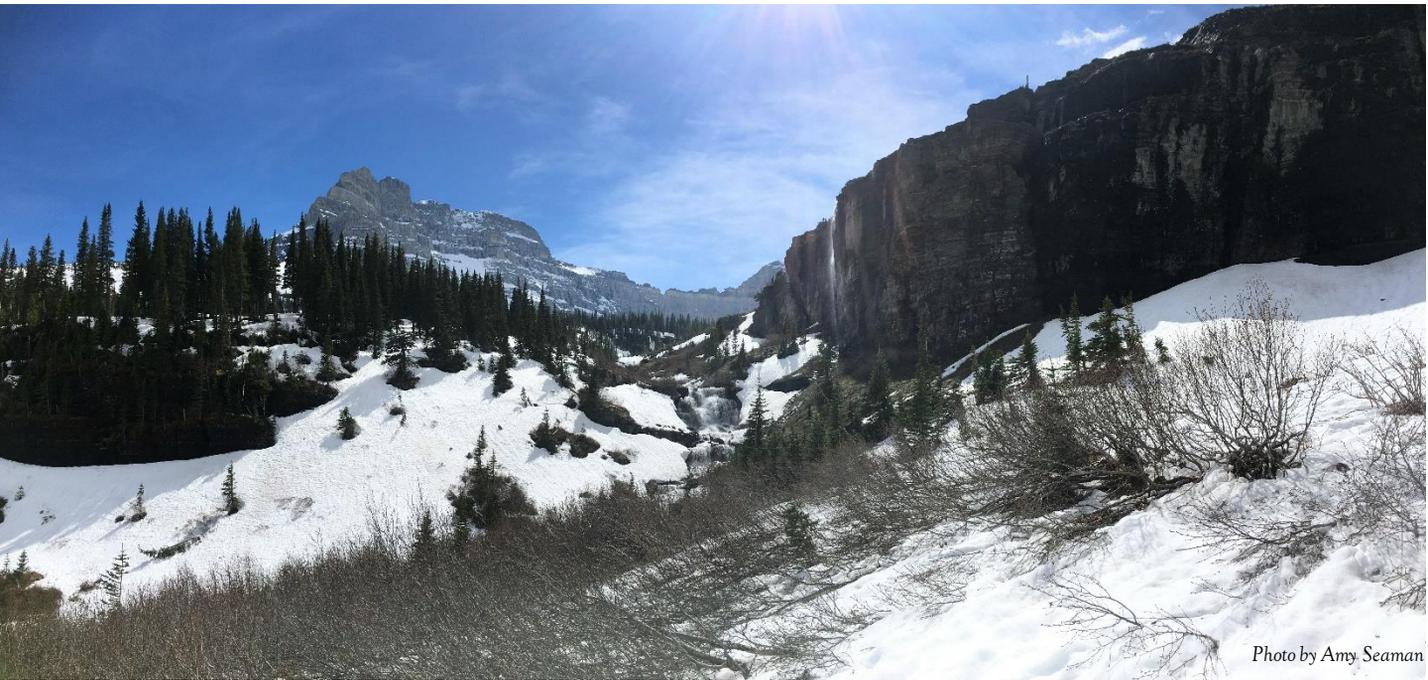


Photo by Amy Seaman

(Above) Falls pour snowmelt over a cliff of rock near Iceberg Lake above Wilbur Creek; (Below Left) Amy is rocking some vibrant colors and a fanny pack for the hike out – the waders were getting hot!; (Below Right) Jack is ready in his rain gear and gloves for a cold start to a cold day surveying Kintla Creek. There was no option to end this survey early and we sure got wet.





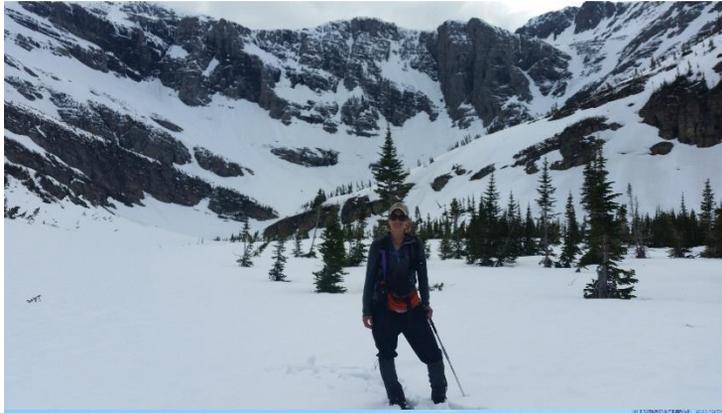
(Above) Water pools along St. Mary River; (Left) A pair of Harlequins along Canyon Creek; (Bottom Left) A bull moose crosses Bull Lake; (Below) A ground squirrel watches us pass; (Bottom Right) A snowshoe hare - we saw many this month.

Landscape photos by Amy Seaman, wildlife close-ups by Jack Toriello



In addition to the Harlequin ducks we recorded observations of 102 species, including 3 species of grouse, 9 species of raptors, 6 species of woodpecker and many more. We located nests of American Dipper, Boreal Chickadee, Mallard, Common Loon, Common Raven, and observed juvenile American Three-toed woodpeckers. While many birds had begun nesting, many were just arriving and starting to bicker over habitat, like the Gray Catbirds and Yellow Warblers. Each day we listened and watched for species to arrive in this northern portion of Montana. We threaded our surveys

in amongst turbulent spring weather that included high winds and devastating avalanches. Debris strewn lakes like Windmaker Lake above Swiftcurrent Creek, and snow bridges crossing our path were tributes to the wild weather we had missed while in other regions. May in an amazing time to be in



(Top Right) the creek above Bullhead Lake was under snow!; (Above) Jack ready to survey Ole Creek on day 2; (Left) Jack and volunteer Danny Stark on the trail after surveying Dry Fork.

(Below) Along Logging Creek water pools into a long backwater enjoyed by mergansers and Mallards alike.



(Below) An American Dipper silhouetted on the snow; (Below Middle) A male Harlequin Duck rests in a pool below a small plunge on Hudson Bay Creek; (Below Right) A Clay-colored Sparrow flicks its wings.



Photos by Jack Toriello

(Below) The confluence of the St. Mary River (left) and Reynolds Creek (right) is a potential trapping location for Harlequin ducks because it channels their escape routes.



Landscapes by Amy Seaman



Glacier though, when moose are giving birth, grizzlies are chasing young moose, and Harlequins have the cold rushing water to themselves. Many people will be eager to visit the park soon, when the going-to-the-sun road is open, but by then the male Harlequins, who depart in early June will



(Above) We ran into a snow bridge across Canyon Creek and thought the survey was over; (Left) Jack holds up a bull moose skull found along Paradise Creek; (Below) Despite a shower at Gunsight Lake, the skies along the namesake trail were crisp and blue.



Photos by Jack Toriello



already have left for their wintering grounds and left the females to tend the nest and raise the brood. The evening flights to open lakes for roosting will have ended and the secretive nesting locations of the females will remain a mystery. A few lucky hikers will spot male Harlequins congregating on lakes, like Cracker Lake, before their migration. The males will have spent just over a month here, but will have contributed to a place where more than 25% of Harelquin chicks are produced in the state. Unlike other regions, Glacier has not experienced population declines, and we need to understand why. Our efforts this May are another step towards these answers.



(Top Left) View from the trail of pool where we found a lone female on Dry Fork Creek; (Left) One of two grizzlies that crossed our path along Dry Fork Creek; (Below) Snow banks along creeks were common early in the season. This was along a creek emptying from Colter Lake.

