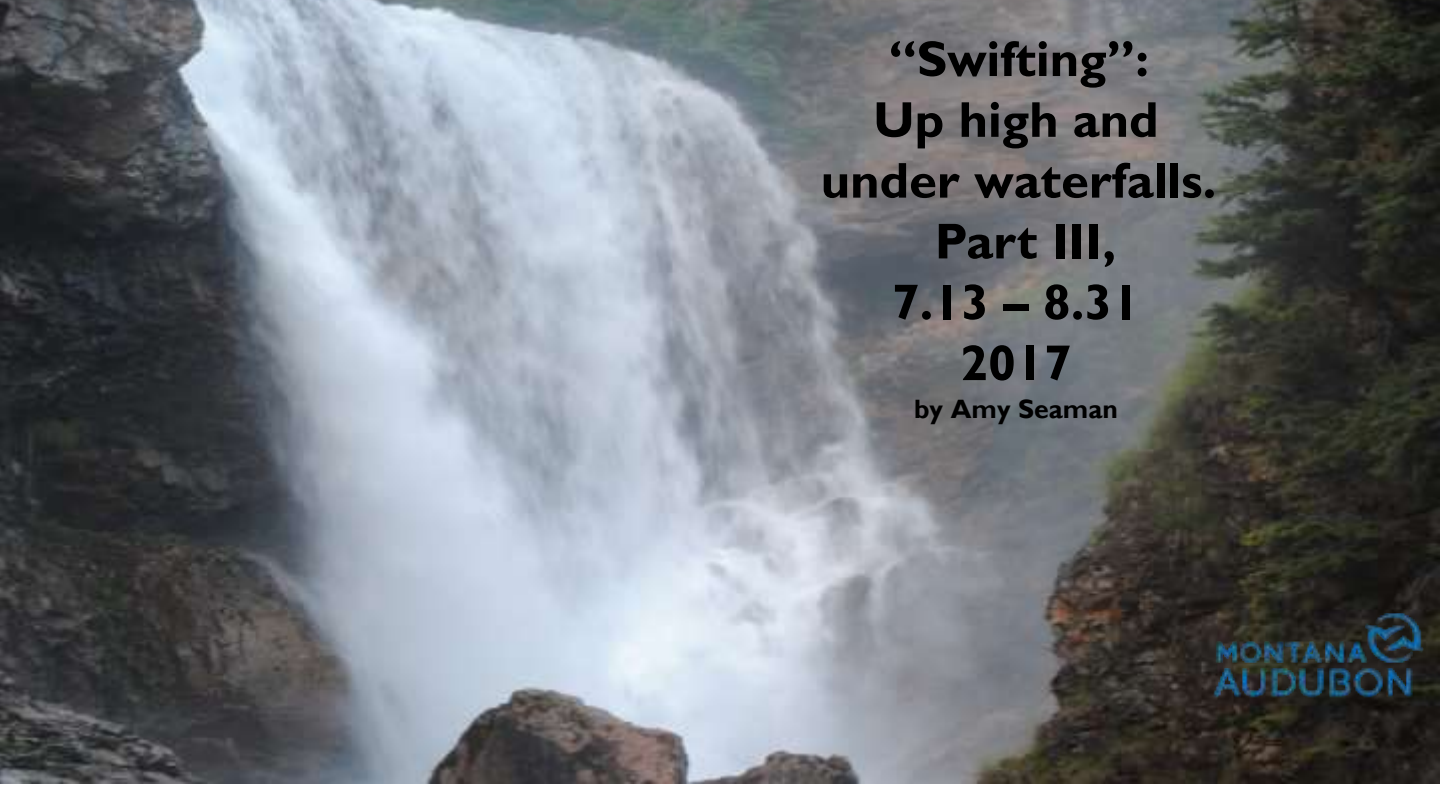


"Swifting": Up high and under waterfalls. Part III, 7.13 – 8.31 2017

by Amy Seaman

By February of 2017 I knew this year's Black Swift survey season, or "swifting season" as I like to call it, would be different. Instead of our piece-meal approach patching together the edges of small grants to find time for up to two weeks of surveys, by February I had already dug my heels in on 3 small grants and had my fingers crossed for good news from Lisa Bate, Glacier National Park's (GNP) non-game biologist and long-time Black Swift survey partner and co-conspirator. Good news came by March, and with The Glacier National Park Conservancy's (the conservancy) help, it became clear 2017 was time for a full survey effort, a push to train volunteers and agency staff, and a year to find some new nests! For those of you following the somewhat mystical Black Swift, you know we are only slowly unraveling the mysteries of their waterfall-obscured nesting locations. At the beginning of this summer our state had collected location information for17 nesting colonies around the

(Top) Dawn Mist Falls, the first site of the season. (Above) Lisa Bate and I in the North Fork in 2015.
Photos by Jack Toriello and Amy Seaman

state; 10 in Glacier National Park, and 7 scattered amongst the Yaak, the Bitterroot, the Missions, and beyond. This year's boost in funding meant that rather than the 4-6 survey nights we manage a year, we were able to get out and conduct 31 surveys, while scoring 45 waterfalls. That's amazing considering it has taken us since 1961 to find the first 17! For our 2017 efforts, field biologist Jack Toriello was brought on by GNP and the conservancy and together we documented 15 new waterfall locations where Black Swifts were seen entering and exiting the falls. Just 4 locations were east of the continental divide.

(Top) South Shepard Glacier Falls, Paoita Falls, and Astina Falls (top left to right) in the Belly River drainage – east of the divide. (Above) Raven Quiver Falls, Belly River, found occupied Photos by Jack Toriello

(Top Left) Jack Toriello and I were the core of Glacier National Park's survey team. (Above) Flattop Falls, suspected of occupancy in 2016 and confirmed in 2017. Photos by Jack Toriello and unk.

Our first surveys were conducted in the northeast portion of the park in the Belly River. Our long hike in took us to near-trail falls like Dawn Mist and Mokowanis Cascade, while our off-trail mission was getting to the base of falls like South Shepard Glacier and Raven Quiver, falls that pour hundreds of feet down near vertical walls. Our 4th night out we witnessed swifts entering and exiting the rightmost section of Raven Quiver falls, just the 2nd occupied site in Montana that is east of the continental divide. Seeing those first birds after a year-long season-driven hiatus brought back all of the excitement of past years' discoveries! And this was just the beginning. Every time I heard Jack yell "bird in" or "bird out" this season my excitement lead to a little internal laughter at how these birds really can make or break your day! 3 other sites were also surveyed in the Belly River by a team made up of GNP technician James Waddel and volunteer Danny Stark, bringing the survey number to 7 the first week. We figured if we maintained this almost 15% success rate we'd be golden! In order to boost that percent we re-surveyed Flattop Falls for

our second mission along with James, helping to confirm a site James and others suspected was occupied last year. Regrouping for our third major survey effort we headed to the Gunsight/Ellen Wilson region where we knew many falls emerged from glaciated basins. Just how many truly "swifty", a term given to those whose immediate appearance glares with water-sprinkled mossy-coated dark niches, looking falls emerged was shocking and we could have stayed and surveyed in the region for weeks. Instead we had just two nights in

(Above) About a dozen large falls surround the snow-filled basing above Gunsight Lake. The leftmost two falls (#5 and #6) were occupied. (Below) Gunsight falls # 1 and # 2. Falls #2 was found to be occupied during an evening survey. Photos by Amy Seaman and Jack Toriello

the Gunsight basin, 1 night at Ellen Wilson Campground, and 1 night to explore Siksika Falls along the St. Mary River. Each of the first 3 evenings brought the glints of "black lighting" we were hoping for, and we confirmed occupancy at 3 new falls. 2 of these were east of the divide (becoming MT's 3 and 4th eastern sites) and 1 was above Ellen Wilson Campground. This falls (below) proved the "swiftiest" of all with up to 7 or 8 nest sites likely.

Our attempt to reach Siksika Falls was thwarted by a deeper than anticipated glacial-carved creek, hornets angry from the August heat, and unexpected slow travel through dense alder thickets. Maybe next time! There certainly were many promising falls rimming the receding Jackson Glacier that feeds the St. Mary River below. Attempting to shift our focus to sites west of the divide we headed to Trout Creek in the Camas drainage, NW of McDonald Lake. But, along with our shift, came a

(Above Left) Sometimes wildlife comes to you! This pair of goats joined me during our Ellen Wilson surveys. (Above Right) A young-of-the-year walks into our Lake Ellen Wilson campsite. (Left) Ellen Wilson Campground Falls #2, the most active falls we surveyed all season. Photos by Jack Toriello and Amy Seaman.

shift in the park's fire activity, and no sooner had we entered the Camas drainage proper and were filtering our water, when we noted a column of smoke on the near side of the ridge between us and current fires in the Logging drainage. We notified authorities and continued to camp, where in a fit of irony our survey was canceled by rain, wind, thunder and lighting. Mid-August's T-storms flared up countless Montana fires, and Glacier was not spared. By 7am the next morning we were sent evacuation orders, and by 7:15 orders to help evacuate others! We joked that maybe they'd bring horses, but we were the horses! Luckily just one couple had spent the night at the camp above ours, so by 2pm we had found them, and left the area safely. This shift in the season brought fire and smoke in as a permanent backdrop to our work.

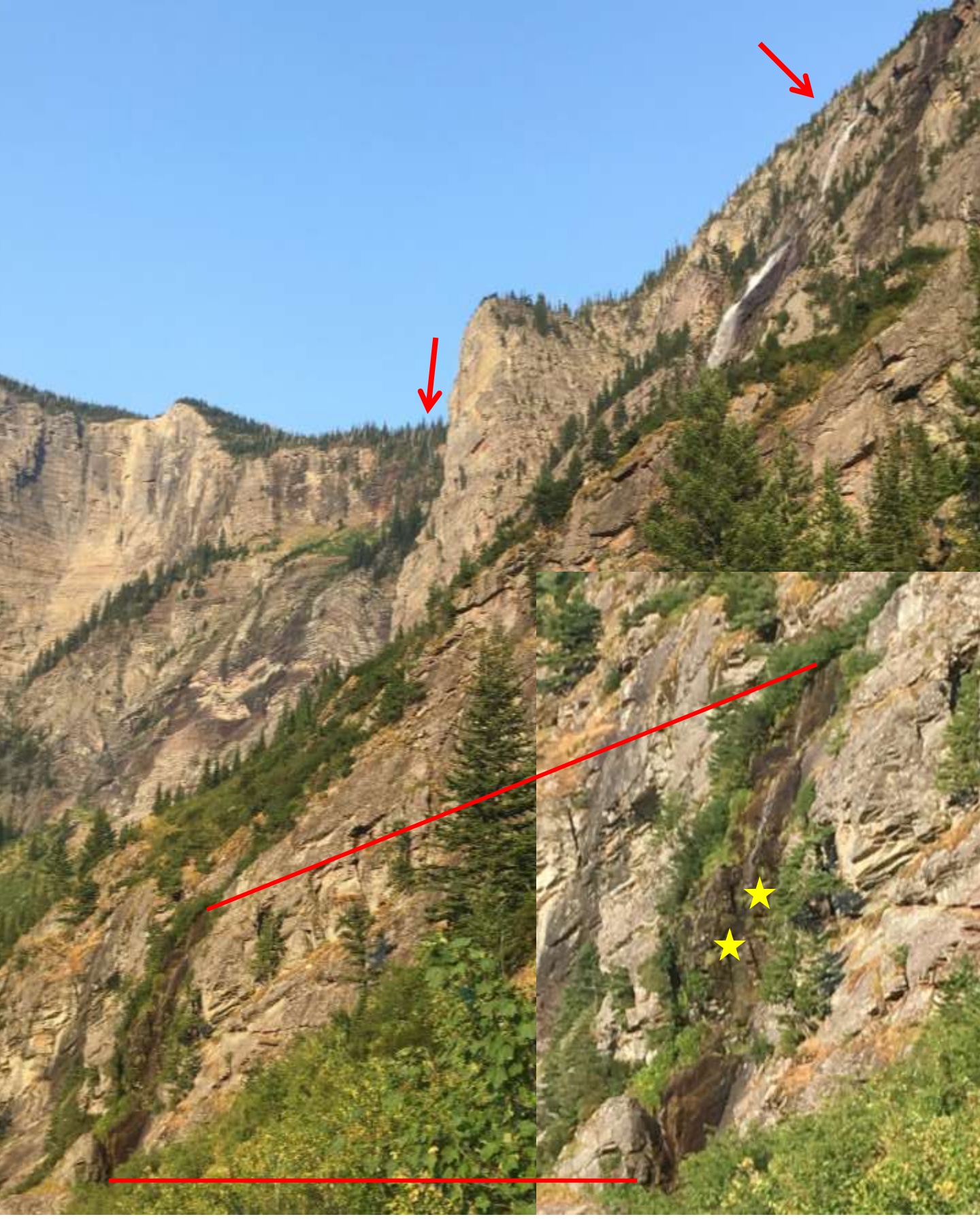
(Above) Jackson Glacier supports a host of waterfalls that are slated for exploration in 2018. (Below) Lower Lunch Creek Falls (far right) towers far above the surrounding terrain as was found unoccupied despite being occupied in 2016 Photos by Jack Toriello and Amy Seaman.

(Left) Jack surveying a waterfall in a tight crack along Reynolds Creek that was not found to be occupied. (Below) Reyonlds Creek Falls, slated for survey in 2018. (Bottom) Siyeh East Falls. One adult female was seen leaving the large cave to the right of the falling water. Photos by Amy Seaman and Jack Toriello

Forced back to Glacier's east side, we explored sites along Reynolds Creek, the Siyeh Bend, and Lunch Creek. Last year's discovery of occupancy at Lower Lunch Creek falls was the first ever east of the divide in Montana, but a volunteer had reported the site as vacant through July, and we hadn't seen birds either during our training about a month earlier. We decided to look one more time, yet both our survey and a subsequent volunteer survey found no birds. This site is now the first east-of-the divide, and the first we have witnessed to be occupied in one year and not the next. It is curious

activity, given the estimate of 3-5 nest locations the previous year. Mayve 2018 will bring some answers. During this time only 1 waterfall, Siyeh East Falls, was found to be occupied, and our evidence was just 1 female bird (identified by a rounded tail) exiting a deep cave adjacent the fall's main plunge. Sightings like that always remind you that you really can't even look away for a second! When would the day come that we would just look into our binoculars and, boom, find a nest? We figured never, but with luck on our side, Jack did just that during our 2 nights surveying

(Above) Avalanche Basin with Avalanche Lake visible far left and Monument Falls visible on the far right. (Below left) A wild caterpillar forages nearby our survey location. (Below Right) Jack and I ascend the very steep slopes surrounding Avalanche Basin's half-dozen falls. Photos by Boo Curry and Amy Seaman



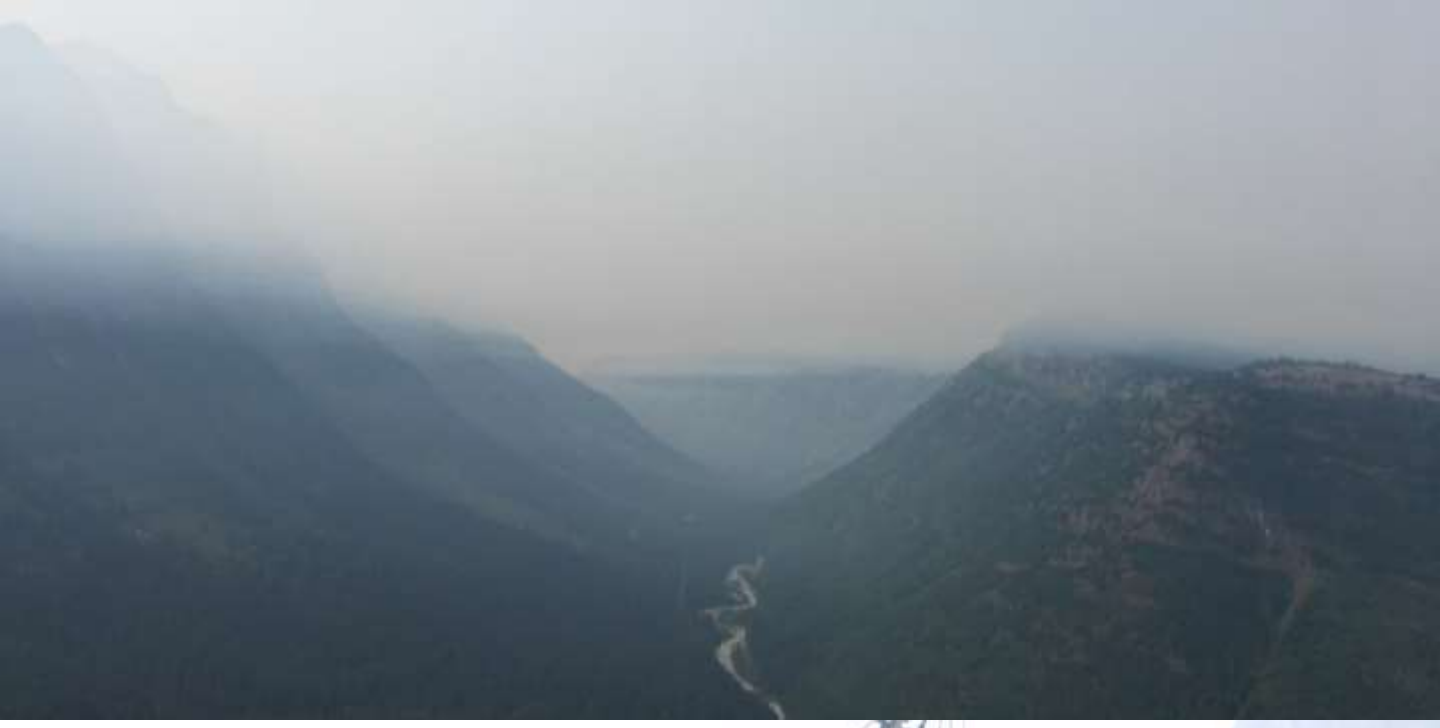
(Above) Monument Falls and Moment Falls Seep as viewed from our observation location. Major falls are located below each red arrow. (Inset) Zoomed in view of the seep where two occupied swift nests were located. Photos by Amy Seaman

above Avalanche Lake. The area has provided many of the park's historical swift sightings and the occupancy of Monument Falls was suspected since surveys in 2013. Jack was in disbelief as he watched an adult bird fly into a nest right around 7:15 pm. Not only was this a complete shock, but the nest was in a part of the falls barely covered by flowing water, and barely noticeable compared to the towering waters of Monuments falls above. We were shocked again when volunteer Boo Curry noticed a bird sitting in a nest just 1 meter above the last. Visiting

(Top Left) Black Swift nestling in the lower nest at the Monument Falls Seep colony August 18th. (Top Right) Black Swift nestling in the upper nest at the Monument Falls Seep colony August 18th. (Right) Monument Falls Seep. Nests here were discovered on August 4th and visited on August 18th. Photos by Amy Seaman and Jack Toriello

again with the scope, we confirmed the 2 nestlings! As we learned, nesting and activity in small seeps is not uncommon, and occupancy was found in similar locations in the Bowman drainage. We spent 5 nights searching this region near the end of the season, finding birds on 4 of 5 nights at locations like Baby Glacier Falls, Pocket Falls, and the popular Hole-in-the Wall Falls. These findings were the first in Glacier's North Fork region, an area that has beaten back our survey efforts in the past with bad weather and grueling access.

(Above) Jack walks towards an old snow bridge below Hole-in-the-wall Falls. (Top Right) A wild caterpillar makes a stir in camp. (Right) Amy, Wes, Christine, and Jack made up our Bowman Drainage survey crew. Photos by Amy Seaman and Jack Toriello.



The large Sprague Creek fire, burning in the heart of Glacier National Park, burned in the core of known Black Swift nesting colonies this summer and its unclear what affect this will have on these aerial foraging birds whose nestlings were still young.

(Top) Smoke shrouds mountains surrounding Lake McDonald the week Sperry Chalet burned. (Right) By mid-season a hazy smoke became our survey backdrop. (Bottom) Winds caused smoke from the Eureka, MT, fire to hide the sun during our Pocket Falls survey. It also prompted us to check the safety of our location! Photos by Amy Seaman and Jack Toriello.

The smoke continued into our final surveys near Cracker Lake. The promising Siyeh Glacier fed falls, and moss-bound seep we surveyed there turned up no birds, which was not surprising given the general aridity of the basin. In fact it was the only area we visited all season where we found NO American Dippers! A quiet end to the season. Despite the 15 new colonies found, we found nests at just 3 sites, and nestlings at just 1, proving how much is left to do.

Needless to say, the two of us, and now many more have been struck by the "black lighting's" awesome speed and stolen moments of observation that will carry us patiently through until we can begin "swifting" again.

(Top) Cracker Lake, the site of our last two surveys. (Above) Jack and I riding the Bowman patrol boat out after surveying the area for a week. (Left) Jack surveying at Raven Quiver Falls. Photos by Jack Toriello and Amy Seaman

(Top) Falls in the basin surrounding Hole-in-the-wall Falls (red arrow). (Below) Falls above Gunsight Lake as seen from Gunsight pass trail. Photos by Jack Toriello

We at Montana Audubon want to thank an incredible group of partners and list of funders including The Glacier Conservancy, Glacier National Park, Montana Fish, Wildlife, and Parks, The Caduea Foundation, LEAW foundation, and The Charolette Martin Foundation for supporting portions of this work!