

# Up high and under waterfalls: Year 9, 2021

by Bo Crees and Amy Seaman



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We are happy to report the completion of yet another fruitful Black Swift survey season! The 2021 “swifthing season” was the ninth consecutive season of monitoring this unique species that nests exclusively in or near majestic waterfalls in some of North America’s most rugged mountains. As in previous swifthing seasons, Montana Audubon collaborated with a number of partners, most notably Glacier National Park’s (GNP) non-game biologist Lisa Bate and her team of 6 wildlife technicians. The GNP crew provided invaluable support to our crew of Amy Seaman, Jack Toriello, Bo Crees, and Peter Dudley.



(Top) An adult Black Swift attends a nestling in ID, by Bo Crees. (Above left) Technician Jack Toriello joined us a 4<sup>th</sup> year, while (above right) Big Sky Watershed Corps member Peter Dudley joined us for his first time.



In addition to our continued waterfall monitoring effort in GNP, 2021 brought the opportunity for exploratory waterfall surveys in Northwestern Montana, and for the first time, the chance to work with partners in Idaho, like Idaho Fish & Game and the Idaho Bird Observatory; helping us carry out one week of productive waterfall surveys in Idaho's Panhandle region. During the season we were lucky to have a handful of volunteers join us, including the Montana Audubon Center's Big Sky Watershed Corps member, Miranda Hernandez.



(Above) Little North Fork Falls in the Yaak did not have swifts, but did have a very comfortable survey location. Photo by Amy Seaman.

Outside of “the park”, we visited five waterfalls in Northwestern MT, two waterfalls in the Bitterroot Mountains, and three waterfalls in the Mission and Swan ranges. Though fire kept us moving around closed roads and smoky valleys, it was good to finally firm up the absence of Black Swifts in some areas (Sweathouse Falls in the Bitterroot) and confirm the continuation of swifts at others (Holland Falls). This season we managed to visit 58 waterfalls with a total of seven surveys at previously un-surveyed locations. As usual, we started this year's season at Holland Falls in the Seeley-Swan Valley. This known, reliable front-country nesting location is always a good warm up to the more strenuous backcountry surveys.





(Above left to right) Holland Falls, Morning Star Falls #3 and #4 and Ellen Wilson #2 have all become regular monitoring sites for our Black Swift project. Photos by Bo Crees.

Holland Falls has the largest spray zone of any waterfall we monitor, so it was challenging to find a relatively dry observation spot, and we had to wear our rain gear for the entire survey. We were excited to see the first swift returning to the waterfall just after sunset, as they usually do, a sign of our first active nest of the season! We had a high count of two swifts that evening, and four swifts (indicating two probable active nests) the following morning. About three weeks later, we returned, and once again saw two swifts in the evening and four in the morning. A couple of days later, one crew loaded their backpacks for the first multi-day survey trip of the season in Glacier National Park. They met up with GNP technicians at the Cut Bank Creek campground, reaching base camp at Morning Star Lake a few hours later. The hike to Morning Star's series of four, several



(Above) A friendly Spruce Grouse visits the crew in Cutbank. Photos by Bo Crees.

hundred foot falls, is straightforward, but for surveying, you have to hike in the dark. We always make a lot of noise to alert animals, but on the return hike after the first evening survey, Holli and Jacob, GNP technicians, startled a bull moose that charged for a short distance before veering off the trail!





(Above) Peter Dudley scans for swifts above Lake Ellen Wilson.

While we did see Black Swifts leaving from or returning to each of the Morning Star waterfalls, one of the waterfalls had surprisingly little flow compared to previous years, barely a trickle, and we suspect it did not have an active nest this year. Drying waterfalls below shrinking snowfields are obviously a big concern for the long-term survival of this highly specialized species.

Thankfully the other three waterfalls had adequate flow and were occupied by 1-3 pairs each. Our second crew had less activity early on, finding no swifts at any of the five, low stature, waterfalls in the Yaak. Though disappointing, it was good to finally be able to survey in this remote region.

The following week our two teams went backcountry to Glacier's Sperry Chalet, Lake Ellen Wilson, Snyder Lake and Lincoln Lake. Feather Woman Falls, which is visible from the popular Sperry Chalet, is made up of a series of plunges and cascades that tower above a large, steep talus slope. The climb to the survey observation point at the base of the waterfall is always a bit slow and tricky. Seeing last year's observation point covered with freshly fallen rocks was a good reminder to wear our helmets! Just before sunset the swifts showed up and circled in front of Feather Woman Falls for 10-20 minutes



(Above) Volunteer Gerard Byrd rolls up our pack raft we used to access hard to reach falls. He has joined us each year since 2017!

before disappearing into their nest and roost pockets behind different parts of the waterfall. We had a high count of four Black Swifts during the evening survey and six swifts during the morning survey. This indicates there were at least three nests at this site, two of which we were able to observe!

Lake Ellen Wilson, a large mountain lake flanked by massive cliffs and vertical rocky slopes, some thousands of feet tall, is surely one of the most beautiful spots in the park. Melting snow fields high produce at least ten major waterfalls that are visible from the backcountry campground.

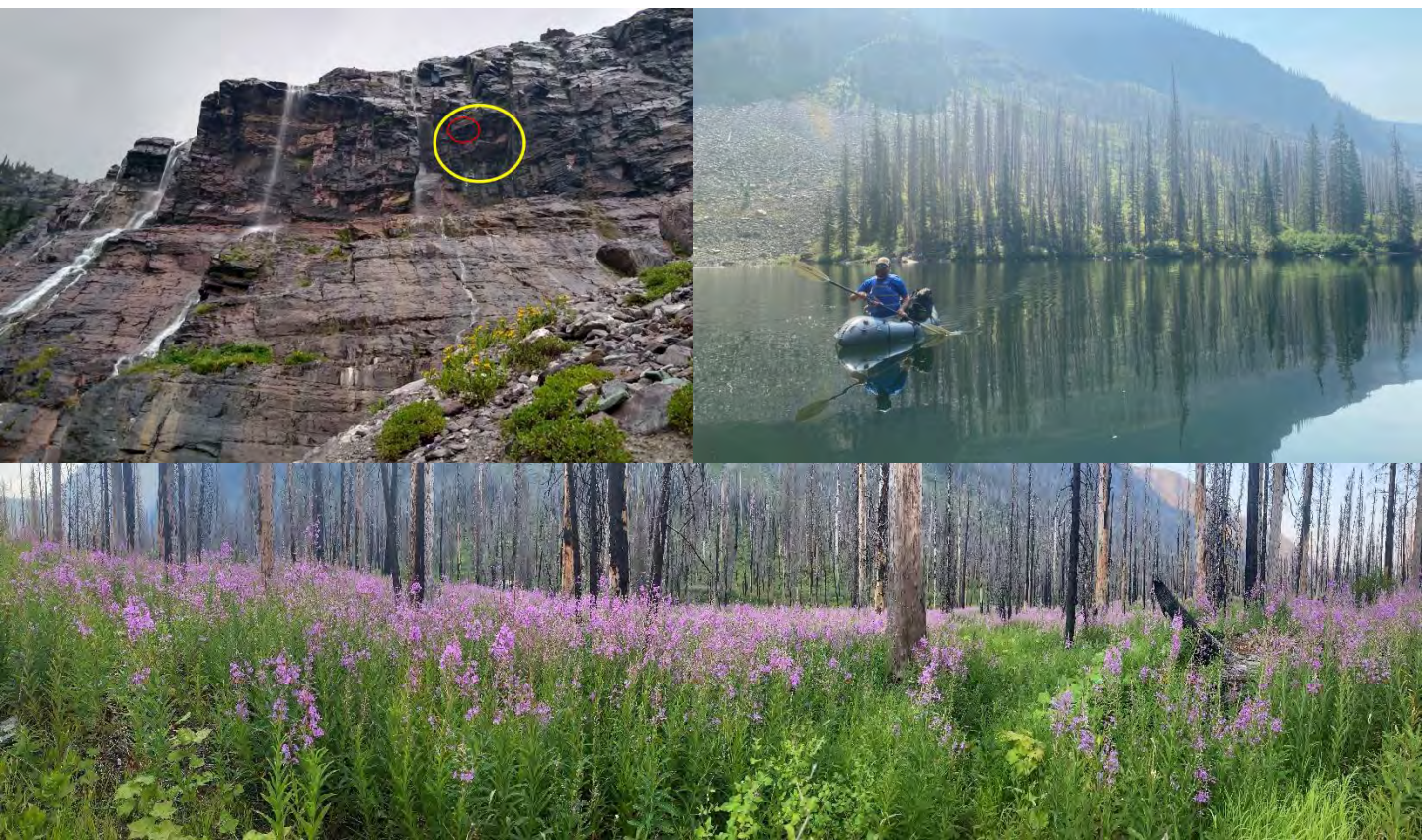


(Above) Mountain goats joined our Ellen Wilson surveys. Photo by Bo Creech.

There is a good chance most of these waterfalls have nesting swifts, but most are un-surveyed because climbing or boating equipment would be required for access, even under the cover of darkness. We stuck with the two waterfalls plunging over the cliffs above the campground. These have been surveyed many times, and one of them, “Ellen Wilson #2”, is a crew favorite because of its majestic beauty, and the large, flat rock slab at the base of the falls that offers unusually comfortable, though still helmeted, viewing spots. We noticed that one of last year’s nests at Ellen Wilson #2 appeared to be unoccupied, but we were thrilled to find two new nests a short distance below. Waterfall flow rates and channels regularly change and shift from year to year, and so do the nesting pockets and ledges. We saw 3 swifts in the evening and 4 swifts during the morning survey at both of the Ellen Wilson waterfalls we surveyed. Interestingly, we witnessed an impressive flock of 12 Black Swifts that briefly visited the waterfalls towards the end of the morning survey. Presumably these were swifts from other waterfalls in the area that banded together to form a large foraging social group. To our amusement, a fearless mountain goat nanny and her young kid visited us each time we surveyed.



On the other side of the same glacier complex, our second crew was busy at both Upper Snyder and Lincoln Lakes. Volunteers and GNP technicians helped us survey two falls at Upper Snyder Lake, and the large waterfall at the head of Lincoln Lake. We felt fortunate to make it to these two challenging sites that have been burdened by fires, bears in campgrounds, and wildlife overflow during rebuilding of Sperry Chalet. With much taller waterfalls than many other sites, we were encouraged to get high counts of 13 and 17 in each location. Unfortunately, our surveys above Lincoln Lake were hampered by weather, but combined with our surveys Feather Woman and Ellen Wilson show this is proving to be a very active region.



(Top left) Feather Woman Falls and its very hidden nest location lie high above talus fields near they Sperry Chalet. Photo by Bo Creees. (Top right) Jack Toriello captains a pack raft to remote survey locations. Photo by Amy Seaman. (Bottom) Fireweed's beautiful pink dominates landscapes near Lincoln Lake. Photo by Amy Seaman.

For the first time since the beginning of the Black Swift project in 2013, we traveled to northern Idaho to scout and survey several waterfalls where swifts have been reported historically. While there, we also checked out a handful of other falls that seemed suitable for nesting. But, waterfalls in northern Idaho are very different from those we survey in Glacier.





(Above left) Shadow falls and (Above right) Snow Creek Falls being observed by Jack Toriello show how different Idaho waterfalls look from those in Glacier National Park! Photos by Bo Crees.

They are generally much smaller and have much more moss. The small size is not ideal for swifts because it means potential nesting pockets will be closer to terrain accessible to predators. Moss, however, is extremely beneficial since swifts frequently use it as nesting and roosting substrate. We were happy to find nesting swifts at two of the three waterfalls where we conducted morning/evening surveys and found an active nest at one additional waterfall during a daytime visit! Though it was already mid August at this point, it was impressive to see how large the single nestling looked in the nest, and we felt spoiled by the ease of access to most of the northern Idaho waterfalls after the many long and strenuous hikes in Montana. The main challenge of surveying in Idaho ended up being the many area closures that resulted from the multiple wildfires in the region.



(Above) Bo Crees captures one of the many solitary moments of a Black Swift nestling's life!





(Above) Peter Dudley captures a burst of swifts flying out from the falls.

With two full months behind us we can say the 2021 swifting season was definitely a success, and it would not have been possible without the support and efforts of many partners. We at Montana Audubon want to thank an incredible group of partners and funders including The Cross Charitable Foundation, The Cadeau Foundation, The LEAW Family Foundation, individual donors, and the Glacier National Park Conservancy for supporting portions of this work!



(Above) Bo Crees and Jack Toriello found a nestling almost ready to fledge in Idaho! Photo by Bo Crees