

Solitary Sandpipers Breeding in Montana

Progress Report for the 2020 Field Season and Summary of Past Work

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Most Solitary Sandpipers (*Tringa solitaria*) breed in Alaska and Canada near wetlands surrounded by boreal forest habitat. They were first confirmed breeding in the contiguous United States in northern Minnesota in 1973 (Savolaja 1973). Additional nesting attempts (dependent young, not nests with eggs) were documented annually in Minnesota from 1982–1984 and in 1987, 2012, and 2013 (Hoffman and Hoffman 1982, Pfanmuller et al. 2017). Solitary Sandpipers were strongly suspected to have nested in Oregon several times between 1981 and 1995 (Sawyer 1981, Lundsten 1996), but no nest or dependent young were observed. The species had never been documented nesting in Montana prior to our work in 2018 (Marks et al. 2016). Recent observations from Glacier National Park (GNP) suggested that they bred in the state. Single adults were observed at two wetlands during the summer of 2007 and at a third location in 2010, 2011, and 2016 (see Tables 1 & 2) as they vocalized and perched in trees, which are typical behaviors of breeding birds but not of migrants (Paulson 1993). These three sites were on the west side of the park. Also, birds that may have been territorial were seen at two unnamed lakes near the eastern boundary of the park in June and July of 2013 (Steve Gniadek, pers. comm.). Habitat at these sites is similar to that at breeding sites in Canada.

We documented the first nesting attempt known for Solitary Sandpipers in Montana in 2018 at Sondreson Meadow just outside the boundary of GNP (Fig. 1). We documented a second attempt in 2019 at an unnamed wetland along the Inside North Fork Road within GNP (Fig. 2). In both cases, a single half-grown young was seen with its parents. To our knowledge, Montana and Minnesota are the only places in the lower 48 where Solitary Sandpipers currently are known to nest. Thus far, no nest of a Solitary Sandpiper has been found anywhere in the contiguous United States.

METHODS AND RESULTS

The Covid pandemic limited the amount of time and the number of people available to conduct field work in 2020. Jeff Marks searched various wetlands off the Inside North Fork Road on the west side of GNP and Sondreson Meadow outside the park from 1–3 June and 29–30 June. Jim Rogers accompanied Jeff in GNP on 3 June and also searched Unnamed Wetland No. 1 on 17 June. Rogers returned with Craig Barfoot to search Unnamed Wetland No. 1 and McGee Meadow on 24 June. He also searched Unnamed Wetland Nos. 1 and 2 on 4, 9, and 23 July.

1 June—Jeff found a pair of sandpipers near the southeastern corner of Unnamed Wetland No. 1 at 1345. They were calling and hopping onto downed logs in the wetland, and at one point one flew to a small tree and called. Both birds eventually flew off to the north and disappeared from view. Jeff walked the entire periphery of the wetland searching for old passerine nests and examined two American Robin (*Turdus migratorius*) nests and one non-robin passerine nest that seemed suitable for nesting sandpipers; each nest was empty. Jeff then drove along the Inside North Fork Road to the locked gate just past the Camas Creek Bridge and walked north and west along the road to Anaconda Creek, where GNP biologist Lisa Bate observed a Solitary Sandpiper at a small wetland adjacent to the creek in the summer of 2019. Rushing water from Anaconda Creek had overrun the small wetland, and no sandpipers were present. On the return walk, Jeff bushwhacked into an unnamed wetland just east of Dutch Creek and north of the road. The wetland was choked with old emergent vegetation and

appeared to contain no open water. No sandpipers were detected, but Jeff was unable to search the entire wetland. On the drive out, Jeff stopped and searched Unnamed Wetland No. 1 again, but no sandpipers were present.

2 June—In the morning, Jeff searched areas surrounding the open water at McGee Meadow but did not find any sandpipers. He then revisited Unnamed Wetland No. 1 and searched the entire area but found no sandpipers. At the extreme southern end of the wetland Jeff found a freshly constructed Red-winged Blackbird (*Agelaius phoeniceus*) nest in emergent vegetation less than 0.5 m above the water. Next, he searched an unnamed fen just west of the Inside North Fork Road and south of Camas Creek. Like the wetland near Dutch Creek, this one was choked with decadent emergent vegetation and contained no open water. No sandpipers were detected. Thus far, all wetlands in Montana where breeding by Solitary Sandpipers has been confirmed or strongly suspected contain a mixture of open water and emergent vegetation (see Figs 3 & 4).

Late in the afternoon Jeff left GNP and drove to Columbia Falls and then up the North Fork Road to Sondreson Meadow, where he camped for the night. The water was fairly high, and sandpiper habitat appeared to be very limited. No Solitary Sandpipers were seen that evening or the following morning.

3 June—After breaking camp, Jeff drove north up the North Fork Road to the Canadian border. Several wetlands on private land east of the road appeared suitable for Solitary Sandpipers. Jeff scanned each one with binoculars and saw several Spotted Sandpipers (*Actitis macularius*) but no Solitary Sandpipers. At around noon Jeff met Jim Rogers in West Glacier, and they drove back up the Inside North Fork Road, stopping to watch and photograph two Grizzly Bears (*Ursus arctos*) Jeff had found along Fish Creek earlier that morning. Jeff and Jim searched Unnamed Wetland No. 1 thoroughly, but again found no Solitary Sandpipers. The Red-winged Blackbird nest that Jeff found yesterday contained one egg, which probably was laid that morning.

17 June—Jim Rogers searched Unnamed Wetland No. 1 but found no sandpipers.

24 June—Jim Rogers and Craig Barfoot found one Solitary Sandpiper at Unnamed Wetland No. 1 at 0900. It was giving alarm calls at the southwestern end of the wetland, near where Jeff observed a pair of sandpipers on 1 June. It eventually flew off to the southwest toward McGee Meadow. Jim and Craig searched the rest of the wetland but found no other sandpipers. Next they drove back out the Inside North Fork Road and parked at McGee Meadow along Camas Road. They searched McGee Meadow around all of the open water but found no Solitary Sandpipers.

29 June—Jeff arrived at Unnamed Wetland No. 1 at 0830 and again searched it thoroughly without detecting a Solitary Sandpiper. Jeff then drove back down the Inside North Fork Road and stopped for lunch at a small turnout near a sedge-choked wetland at 48.58365°N, 114.02049°W. Within 5 minutes he heard a Solitary Sandpiper calling from a smaller wetland to the east above the main pond. He walked over and immediately found the bird, which was very agitated and repeatedly flew to the tops of small trees and called. Over the next hour, Jeff walked down to this second, smaller pond, which is at 48.58339°N, 114.01904°W, and to an even smaller pond a short way to the east. He found a total of three different Solitary Sandpipers, but only the first bird was calling and acting territorial. The surrounding area has been burned, with only a small number of live trees remaining, and Jeff searched extensively looking for old passerine nests. He found two American Robin nests, one empty, the other with nestlings. The one sandpiper followed him everywhere, calling and landing on the ground near him and in tree tops. Jeff walked several hundred meters to the north of the middle pond and sat down to

watch the birds in case they were tending young, but no young were seen. We have named this new site Unnamed Wetland No. 2. Jeff returned to this small wetland complex at 1745, again finding three different sandpipers, only one of which acted agitated (as if defending young) and called repeatedly. It seems as though a brood was here, but Jeff could not confirm that.

30 June—Jeff returned to Unnamed Wetland No. 2 at 0830 in a steady rain. He searched each of the three ponds and nearby uplands but found no sandpipers. Where had they gone? The rain increased, and Jeff left the park and returned to Missoula.

4, 9, & 23 July—On 4 July Jim Rogers found one Solitary Sandpiper at the first of the three ponds at Unnamed Wetland No. 2 and no sandpipers at Unnamed Wetland No. 1. He also found a sandpiper at the middle pond of Unnamed Wetland No. 2 on 9 July. The bird called several times and followed him as he walked up to search the third pond but spend most of its time at the middle pond. Jim returned to the park on 23 July and searched both of the Unnamed Wetlands. They were nearly dry, and he found no sandpipers at either site.

On the basis of our own field work since 2018, and our scrutiny of evidence provided by other observers dating back to 2007, we confirmed nesting by Solitary Sandpipers at two sites and strongly suspect that the species nested at three other sites (Table 1, Fig. 5). Brief details of documented and suspected nesting are provided in Table 2.

Table 1. Wetlands in and near Glacier National Park where Solitary Sandpipers have been confirmed or strongly suspected to breed. See Table 2 for additional details.

Site	Approximate location	Breeding suspected	Breeding confirmed
Sondreson Meadow ^a	48.83516°N, 114.34525°W	2017	2018
Unnamed Wetland No. 1	48.59768°N, 114.02524°W	2007	2019
Akokala Lake	48.88145°N, 114.19860°W	2007	No
McGee Meadow	48.59156°N, 114.03236°W	2010, 2011, 2016	No
Unnamed Wetland No. 2	48.58339°N, 114.01904°W	2020	No

^a Site adjacent to Glacier National Park on Flathead National Forest.

Table 2. Evidence for nesting by Solitary Sandpipers in and near Glacier National Park.

Site	Observer(s)	Date	Evidence
Sondreson Meadow	S. Gniadek	18 July 2018	Half-grown young
Unnamed Wetland No. 1 ^a	S. Gniadek/J. Covill	16 July 2019	Half-grown young
Akokala Lake	S. Gniadek	1 July 2007	Calling adult
McGee Meadow	J. Carlisle/H. Carlisle	22 May 2010	Calling adults
McGee Meadow	C. Robson	29 June 2011	Calling adult
McGee Meadow	E. Rasmussen	16 July 2016	Calling adults
Unnamed Wetland No. 2	J. Marks	29 June 2020	Calling adults

^a Nesting first suspected when Chris Peterson saw an adult calling from trees on 23 June 2007.



Fig. 1. Juvenile Solitary Sandpiper found at Sondreson Meadow, 18 July 2018 (Steve Gniadek photo).



Fig. 2. Juvenile Solitary Sandpiper found at Unnamed Wetland No. 1 on 16 July 2019 (Josh Covill photo).



Fig. 3. Unnamed Wetland No. 1, where nesting was confirmed in 2019 (Bruce Tannehill photo).



Fig. 4. Unnamed Wetland No. 2, where nesting was suspected in 2020 (Jeff Marks photo).

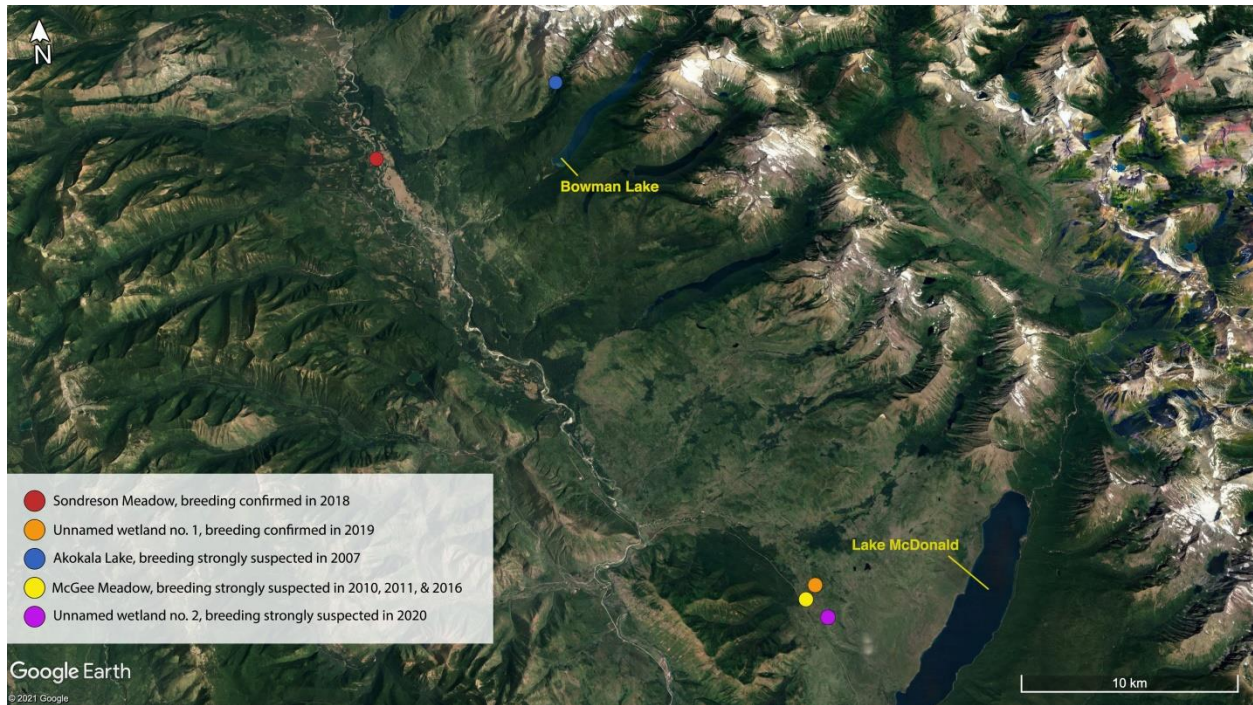


Fig. 5. Aerial photograph showing the five locations where nesting by Solitary Sandpipers has been confirmed or strongly suspected.

PLANS FOR 2021

During the 2021 nesting season (late May through late July) we will repeatedly visit each of the wetlands where we found birds since 2018 (i.e., McGee Meadow, Sondreson Meadow, and Unnamed Wetland Nos. 1 & 2). If time permits, we will visit additional sites that seem suitable for nesting sandpipers. Volunteers will make at least six visits to these wetlands beginning in mid-May to increase chances of detecting breeding adults.

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LITERATURE CITED

- Hoffman, K., & M. Hoffman. 1982. Second breeding record for the Solitary Sandpiper south of Canada. *Loon* 54: 144-147.
- Lundsten, J. 1996. Solitary Sandpiper nesting in Marion County, Oregon? *Oregon Birds* 22: 40-41.
- Marks, J. S., P. Hendricks, & D. Casey. 2016. *Birds of Montana*. Buteo Books, Arrington, Virginia.
- Paulson, D. 1993. *Shorebirds of the Pacific Northwest*. UBC Press, Vancouver, British Columbia.
- Pfannmuller, L., G. Niemi, J. Green, B. Sample, N. Walton, E. Zlonis, T. Brown, A. Brace, G. Host, J. Reed, K. Rewinkel, & N. Will. 2017. *The first Minnesota Breeding Bird Atlas (2009-2013)*. <https://mnbirdatlas.org/> (accessed 1 March 2021).
- Savolaja, T. 1973. Evidence of Solitary Sandpiper breeding. *Loon* 45: 96.
- Sawyer, M. 1981. Solitary Sandpiper: Probable nesting in Oregon. *Oregon Birds* 7: 131-133.