

MASHKIIIZIBII NATURAL RESOURCES DEPARTMENT

# 2024

## Chequamegon Point Piping Plovers

Seasonal Report



BAD RIVER BAND  
OF LAKE SUPERIOR TRIBE  
OF CHIPPEWA INDIANS  
ODANAH, WI, U.S.A.



MASHKIIZIBII NATURAL RESOURCES DEPARTMENT

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2024 Piping Plover Report prepared by  
Rowan Gibson and Angel Holcomb with  
additional data sourced by Elouise Lozinski

Cover photo: Rowan Gibson, Piping Plover Monitor  
All photos in this report were taken by the Plover Monitors  
during the 2024 season unless otherwise noted.



Female #4



Male #4



Female #5



Male #5

# Overview

## PIPING PLOVER RECOVERY EFFORTS

### What are piping plovers?

Piping plovers are small, sand-colored shorebirds, between the size of a sparrow and a robin, that nest only on wide beaches between sand dunes and the shoreline. The Great Lakes population of these birds are listed as endangered due to nesting habitat loss and disturbance by humans, their pet dogs, and ATV traffic.

Piping plovers were listed as endangered in 1986, when there were only 16 nesting pairs left around the Great Lakes. Since then, aided by recovery efforts, the number of unique pairs nesting along the Great Lakes has grown to 80, as of 2023. With an estimated historical total of between 500-800 pairs before human encroachment, the recovery has a long way to go and work continues.\*

### Project Goal

The goal of the piping plover project is to get these birds off the endangered species list by helping their population reach a higher, stable number closer to what occurred naturally before human interference.

### Here, in Northern Wisconsin

On Chequamegon Point a team works to accomplish this goal, including two piping plover “monitors” recruited each year to monitor the areas where these birds nest. Every day during breeding season they walk the beaches, first to find,

then ultimately to protect piping plovers, their nests, eggs and hatchlings. The monitors watch for signs of natural predators and human disturbances, assist in plover chick banding, and educate the public visitors, especially those who bring dogs.

### Who is Involved?

This project is a cooperative effort between the Mashkiiziibii Natural Resources Department, the National Park Service ([Apostle Islands National Lakeshore](#)), the U.S. Fish and Wildlife Service, the Wisconsin Department of Natural Resources, and the Nature Conservancy.

2024 was the 51st year of monitoring the Great Lakes piping plovers at Chequamegon Point on the south shore of Lake Superior, the 38th year since the species received endangered status, and the 26th year of partnership in restorative efforts with the Mashkiiziibii Tribe. The monitors for this field season were Rowan Gibson and Angel Holcomb.

Between May 28 and August 4, the monitors conducted daily surveys on Chequamegon Point, weather permitting. Five piping plover (*Charadrius melodus*) nests were documented and monitored. This season, 14 eggs hatched on Chequamegon Point and 8 chicks fledged. This season, there were no nests observed on Chequamegon Point’s north beach. An additional piping plover pair on Outer Island was reported, however, the female of the pair was predated by a peregrine falcon.

## MAKING PROGRESS

**Great Lakes Piping Plovers Federally Listed as Endangered Species**

**Less than 15 breeding pairs in ALL the Great Lakes**

**In ALL the Great Lakes**

- **81 unique breeding pairs**
- **124 chicks fledged in the wild, 17 captive-reared chicks released**



**Locally, at Chequamegon Point and Mashkiiziibii**

- **6 unique breeding pairs**
- **5 nests**
- **8 chicks fledged in the wild**

**1986**

**2024**

\*Source - [www.Greatlakespipingplover.org](http://www.Greatlakespipingplover.org)

# Nests



Five piping plover nests were monitored during the 2024 season. Three nests were located on the eastern shore of Chequamegon Point within an area commonly referred to as Plover Beach because of the recurrence of nests for several years. Located at Long Island (one of the Apostle Islands) these three nests would also be within the national park boundaries of the Apostle Islands National Lakeshore. The two other nests, one located further south along the eastern shore, and one located on a sandy point where Mashkiiziibii (Bad River) meets Anishinaabeg-Gichigami (Lake Superior), were outside of the national park boundaries. All nests were located within the traditional tribal lands of the Bad River Band of Lake Superior Chippewa.

The Bad River Reservation was established by the 1854 Treaty of La Pointe with the U.S. Government and was sited along the beautiful shores of Anishinaabeg-Gichigami and Chequamegon Bay. Bad River is the largest Chippewa reservation in the state of Wisconsin at 124,459 acres. The reservation boundaries encompass lands in two counties and six municipal townships with 36 miles of Anishinaabeg-Gichigami shoreline and over 488 miles of rivers and streams. To learn more about the Bad River Band of Lake Superior Chippewa you are encouraged to visit <https://www.badriver-nsn.gov/history/>. (Source: <https://www.badriver-nsn.gov>)

## CHEQUAMEGON POINT AND LONG ISLAND

Where is Long Island?

Long Island was at one time a true island, located at the northeast of Chequamegon Bay on Lake Superior in northern Wisconsin. However, since the 1970's, sand accumulation has connected the island with the mainland, making it part of a peninsula known as Chequamegon Point. An act of Congress in

1986 added the area known as Long Island to the Apostle Islands National Lakeshore (National Park Service).

Vast wetlands near Chequamegon Point have meant less development and no roads means visitors arrive to the Long Island area of Chequamegon Point by watercraft or float plane/ultralight.





## NEST 1

Location: 46.709193 N, 90.760588 W

Female: X, - : O (red dot), G [0831/83581]

Male: X, - : O (red dot), O/G [0831/83581]

Nest found: 5/23

Hatch date: 6/24

Banding date: 7/3

Fledge date: 7/17

Chicks fledged: 2

Chick band combinations and weight:

- X,G(453):-,O (red dot) [8101-36774]
- X,G(454):-,O (yellow dot) [8101-36775]

Exclosure installed: 5/26

Psychological fencing installed: 6/10



Lower Left: 5/29 - A view of Nest #1 and three eggs the day the exclosure was placed.

Below: 7/23 - Chick from Nest #1





Nest #1 prior to psychological fencing being installed

## NEST 1 (Continued)

### Nest Overview/Site Description

Nest #1 was the northern most nest on Chequamegon Point and in the area which has repeatedly hosted piping plover nests over the years of monitoring. This area of Plover Beach was an expansive, flat beach with wide wash zones and cobble, with driftwood scattered throughout, including some larger logs with root balls. The plovers made this nest just inside the cobble pan, closest to the water of any of the nests on Chequamegon Point. North of the nest was more beach, often frequented by human visitors. When humans were not present, the adults ventured quite a distance in this direction. To the east was Lake Superior. To the west was dune and dune grasses. Only a couple of bushes occupy this area. Plovers found cover from the elements beneath driftwood stumps. Approximately 100 yards south was Nest #2.

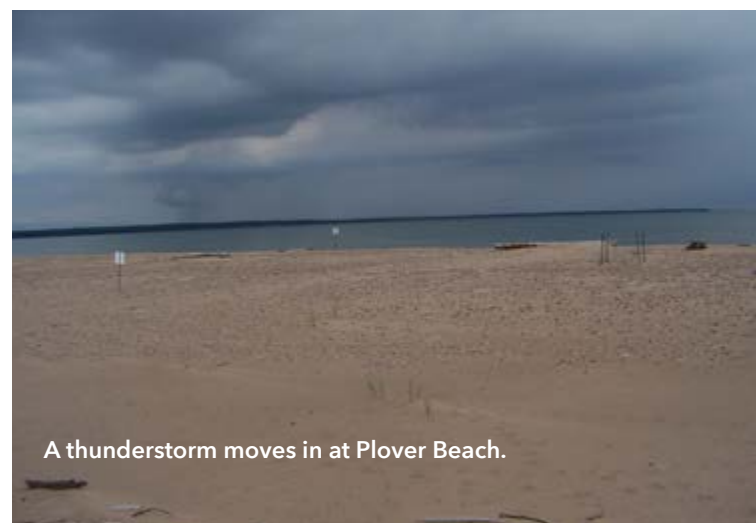
Significant sand deposited on shore late in the season due to surging waves and high wind events. Cobble and driftwood were completely covered reaching as far back as the Nest #1 psychological fencing.



Male #1 foraging amid the wrack line



Male #1



A thunderstorm moves in at Plover Beach.



Female #2



Male #2



## NEST 2

Location: 46.708101 N, 90.759296 W

Female: X, - : O (yellow dot), G/O/G [0831/83452]

Male: X, G : Of, - [2651/63531]

Nest found: 5/23

Hatch date: 6/20

Banding date: 7/3

Fledge date: 7/13

Chicks fledged: 1

Chick band combinations and weight:

- X,G(455):O (blue dot), G/O/G [8101-36776]

Exclosure installed: 5/26

Psychological fencing installed: 6/10

Lower Left: 6/23 - Male #2 and his chicks.

Below: Nest #2 - Two eggs, which didn't hatch after full-term incubation, were collected and found to be unfertilized.



Nest #2

## NEST 2 (Continued)

### Nest Overview/Site Description

Nest #2 was located amid the cobble with large driftwood logs within 10-15 feet on three sides. The stones near the nest varied in size from very small to kiwi size.

While incubating, Female #2 and Male #2 often faced Nest #3, maybe because Nest #3 was so close, and the Nest #3 pair were always within sight.

Shortly before hatching occurred, Female #2 was restless, constantly fluffing herself. She would rise, then settle back down on the eggs. She also pulled tiny pebbles up under her, tucking them just under her breast.

Two of their eggs never hatched. The adults returned to the nest area, inside the enclosure, often. The chicks followed, although later they were more inclined to retreat under a large driftwood stump nearby. Especially during very hot days, it afforded them some shade as well as concealing them.

Nest #2 was set far enough back from the wash zone that the sand did not encroach. The deposited sand did change the visibility from the nest site to the wash zone. A significant buildup in the sand meant a drop-off to the waterline. Plovers back by the foredune or nest enclosure could not see their chicks or partners foraging at the wash zone. Vocalizations were the norm when they were keeping track of each other.

Like the other nests this year, there was no grass in the immediate nest location.



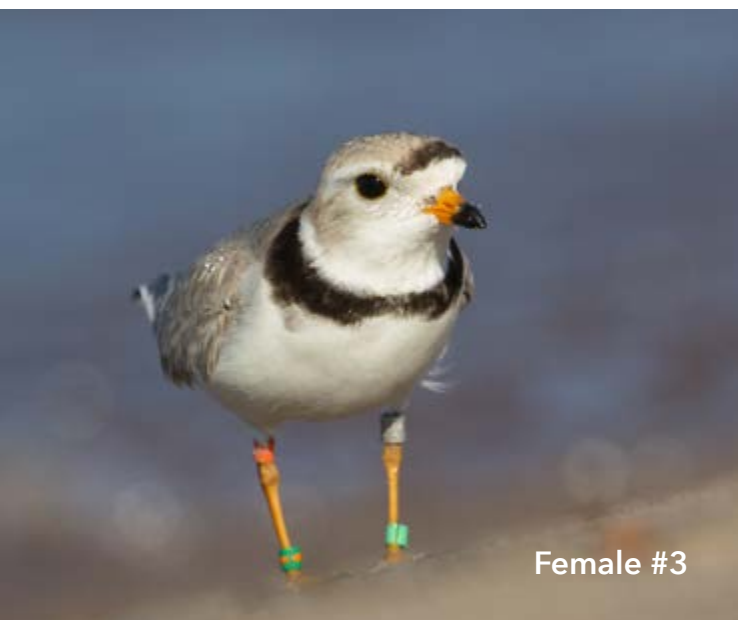
Male #2



Female #2 foraging



One of the chicks from Nest #2 - 7/3



## NEST 3 "PINECONE"

Location: 46.707717 N, 90.758842 W

Female: X, G(410) : O (yellow dot), G/O/G [2651/63498]

Male: X, - : O, - [1841/67224]

Nest found: 5/29

Hatch date: 6/20

Banding date: 7/3

Fledge date: 7/13

Chicks fledged: 1

Chick band combinations and weight:

- X,G(444):O (blue dot), G/o [2651-63503]

Exclosure installed: 5/31

Psychological fencing installed: 6/10

Lower Left: 6/21 - The sole unhatched egg left amid the tiny pebbles of Nest #3.

Below: 6/21 - A one-day-old chick from Nest #3 navigates the cobble. This chick would ultimately stay the longest of all the chicks at Plover Beach.



## NEST 3 (Continued)

### Nest Overview/Site Description

Rowan Gibson found this nest on his first shift as monitor and nicknamed it “Pinecone” for the White Pine cone right next to the nest. Nest #3, located amid the cobble pan, was the furthest back from the wash zone of the three nests at Plover Beach. It was also the furthest south of these three nests. It was only a few yards from Nest #2 which created a conflicting dynamic between the birds of the two nests. Nest #3 was set closest to a concentration of larger stones on the beach, which edged the Nest #3 area to the south. This area was a draw for “rockhounds” throughout the season. Just beyond the stones, was a small, sand point where large concentrations of gulls had established an ongoing presence. Between that gull-inhabited point and the dune was a high concentration of large pieces of driftwood, thus resulting in a narrowing of the flat open beach.

When young and small, the chicks from Nest #3, much like those at Nest #1 and #2, spent a lot of time foraging in the sand near the foredune and used the dune grass as a cover from perceived threats.

The birds from Nest #3 spent a good amount of time amid the driftwood, often skittering underneath stump root overhangs when trying to hide. Chicks escaped to these areas during times of excessive heat as the shade probably afforded them a bit of relief from the relentless sun on cloudless days.

On 6/20 a hatchling was observed and shortly thereafter predated by gulls. Two more hatchlings were observed. One egg remained in the nest unhatched and was later determined to be unfertilized. Presumably, one #3 chick was predated. By July 3 only one chick remained. It ventured all the way to Nest #5, then returned to Plover Beach where it tried to mingle with Male #1 and his chicks. Male #1 would often chase the #3 chick away, yet despite this, as late as July 30, the #3 chick was seen closely following Male #1 and his chicks as they foraged.

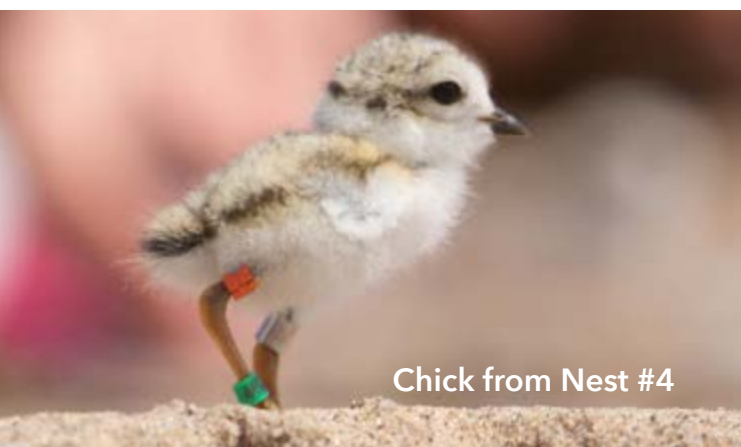




Female #4



Male #4



Chick from Nest #4

## NEST 4 "MASHKIIZIBII"

Location: 46.637781 N, 90.651854 W

Female: X, - : O (yellow dot), G (447) [08101/36789]

Male: X, G (442) : O (red dot), - [8101/36793]

Nest found: 5/28

Hatch date: 7/6

Banding date: 7/11

Fledge date: 7/30

Chicks fledged: 3

Chick band combinations and weight:

- X, - :O (green dot), G (460) [8101-36790]
- X, - :O (yellow dot), G (461) [8101-36791]
- X, - :O (blue dot), G (462) [8101-36792]
- X, - :O (blue dot), G (463) [8101-36773]

Exclosure installed: 6/7

Psychological fencing installed: 6/9

## NEST 4 (Continued)

### A Return to Mashkiiziibii!

Nest #4 was an exciting nest, right from the beginning. At the start of the 2024 plover season, while boating by to do some scouting for nests up near Plover Beach, we recognized piping plovers at the mouth of the Bad River (Mashkiiziibii) where it empties into Lake Superior. Within minutes, we witnessed the male making scrapes; flinging sand. It was quite the spectacle. Because of the behavior exhibited, the site was checked often thereafter and by the end of May a nest was found containing three then four eggs and parents incubating. Piping plovers had returned to Mashkiiziibii and everyone was rooting for this nest's success, as well as hoping for their return in the future.

The site consisted of a sandy point with cobble and driftwood set further back. The nest was elevated slightly from the wash zone. A flock of approximately 30 Ring-billed Gulls shared the space throughout the season. Occasionally, terns and visiting shorebirds were spotted as well. The plovers here tolerated an abundance of passing boat traffic, although, the speed of these boats was far less dramatic than at the more open waters further north at Nests 1, 2, 3 and 5. The wrack line presented differing opportunities for foraging. The west side receiving water action from the river, the east from Lake Superior. Even though the nest was set back from the water by a reasonable distance, and amid the cobble and driftwood, the protections afforded did not shield the plovers from wind. On one occasion as our boat traveled past, we observed the incubating plover enduring extreme wind and blowing sand. Despite these hardships, the nest proved to be the most successful in terms of chicks fledged and by the end of season, the parents and chicks were venturing considerable distances to the southeast, comfortable to enjoy the foraging opportunities.



Above: Nest #4 - Two young chicks navigate the beach shortly after being banded.  
(Photo by Billy Flynn, Visual Information Specialist, National Park Service)



Male #4 - 6/9





## NEST 5

Location: 46.68734 N, 90.73012 W

Female: X, G : O, -

Male: X, G : O (yellow dot), G (359) [9831/83584]

Nest found: 6/10

Hatch date: 6/30

Banding date: 7/11

Fledge date: 7/23

Chicks fledged: 1

Chick band combinations and weight:

- X,GOG:O (red dot), G (457) [8101-36998]

Exclosure installed: 6/13

Psychological fencing installed: 7/6

Nest #5 chick 7/11



Nest #5 chick 7/17



Nest #5



## NEST 5 (Continued)

Plover Monitor Angel Holcomb discovered Nest #5 by following tracks from further north up the beach. The breeding pair had been spotted in the general vicinity May 31 by Sumner Matteson and his guidance to Angel, to re-check this area, was key in the nest being discovered. June 10, seeing a proliferation of tracks near the dune, the monitor decided to follow. The tracks eventually led to a nest containing four eggs. The monitor observed Female #5 close by and quickly retreated to behind the dune. Female #5 then immediately resettled on the nest and continued incubating.

This nest was a significant distance south of Plover Beach. The distinctions of the nest area, however, were much like Plover Beach. Wide, level beach with cobble and various driftwood pieces scattered throughout. Varying sizes of stones and pebbles were abundant. The nest itself was amid the cobble pan, a good distance from the wash zone and incurred no danger due to wave action or flooding during the season.

Shortly after the exclosure was installed, human footprints were observed going right up to the exclosure. It looked like one adult and one small child. Psychological fencing was installed, and no further human tracks were seen near the area. About 400 yards south of the nest were seasonally occupied cabins.

The plovers here had no near competitors. They regularly ventured a good distance north and south to forage. Once the chicks hatched, the family unit stayed together longer than the other nests. Female #5 departed much later than the Nest 1, 2 and 3 females.



6/20 - Nest #5 Male as he switches on to the 4 eggs in the nest.



Male #5



6/29 - Nest #5 bird tucks in amid the driftwood.



7/6 - A small Nest #5 chick, wary of the approaching monitor, retreats to the foredune.



Above: Earliest explorations for nests by monitors included this site. A proliferation of piping plover tracks was seen here, especially further back amid the cobble and driftwood. The site was checked several times, yet ultimately, no nest was found. This site later became familiar with monitors for abundant coyote tracks and maybe the plovers detected that danger here earlier than we did.



## Plover Behavior

Differing amounts of cumulative time was spent watching each nest due to nest locations, so monitors observed varying amounts of behavior from the different nests. Nests 1, 2, and 3 were observed the most, followed by Nest #5, due to its location being much farther from camp. The Mashkiiziibii Nest was observed even less because it was not accessible without the use of a boat.

From what was observed, the plovers seemed to have little issues with incubating. All nests had four eggs, and the plovers were observed swapping consistently, rarely leaving the eggs alone for more than a minute. Despite this, five of the eggs did not hatch. For three of the eggs, this was because they were not fertilized, however, the remaining two were fertilized.

After hatching, four chicks were seen, but went missing in subsequent days and presumably died. An additional three eggs were unaccounted for. These were not left unhatched in their nests, but the resulting chicks were never seen. Presumably they died soon after hatching.

Adult plovers were seen defending their territories from potential nest predators, other shorebird species, and other Piping Plovers. Adult plovers from nests 1 and 2 were seen, more often than the other adults, defending and marking their territories from other plovers. Despite their nests being fairly far apart, adults from nests 1 and 2 were frequently seen chasing each other, and chicks, away, and doing parallel walks along the boundary of their territories. This seemed to come as the result of the nest 2 birds shifting up the beach a ways, hanging out much closer to nest 1.

After approximately July 18, male 1 was the only adult not to have departed. The chicks remained and were often seen foraging together. On July 24, nest 3 chick was seen at nest 5 (a long way from nest 3). The next day, this chick was seen back at Plover Beach (the area with Nests 1, 2, and 3). After this, fewer and fewer fledglings were observed at Plover Beach until August 4, when the plover monitors left and one fledgling remained.

Overall, the five nests hatched 14 eggs from which eight chicks fledged, for a success rate of 40%.

Below: Female #1 is with Male #2 and Chick #2 on 7/16. The next day Female #1 departed for the season.



## Plover Behavior (Continued)

Clockwise from above:

- Female #2 - A close-up view of the piping plovers' pigeon-toed walk.
- By the end of season, monitors discovered plover tracks in locations where previously they had not. For example, the two pictures at right show the top of a dune where plover tracks are seen over top of gull tracks and tracks left by monitors on previous days. The plovers had become more brave or curious, it seems.
- Monitors would often witness plovers climbing onto logs or posting themselves on elevated positions from which to survey the beach or waterline.
- Plovers rarely took flight, usually only to jet to a territorial boundary when engaging a neighbor plover, to defend their chick(s), or to transit speedily around someone walking into their foraging space in the wash zone.





## Plover Behavior (Continued)

Counter-clockwise from above:

- Female #1 snatches up a bug to eat.
- Female #3 was easy to distinguish by her more squarely shaped head.
- 7/3 - Nest #2 adults anxiously observe activities as their chick is banded.
- 6/10 - A strong surf has left an easily visible wrack line for the plover to pick through for food.
- Male #2 has spotted the monitor and finds a vantage point on driftwood near the foredune to check them out more closely.
- 6/20 - Female #5 stands on driftwood after turning over incubation to the male plover.





## Plover Behavior (Continued)

Clockwise from above:

- Once the chicks hatched, plovers chose to nest away from the enclosure. Here, one of the plovers has settled down with one chick under it, while the other one-day-old chick walks nearby.
- Weather could be quite blustery. Female #2 endures wind and blowing sand.
- A chick climbs atop a half-buried birch log on the beach.
- A piping plover surveys the wrack line for something to eat.
- Nest #2 male is easy to spot by his orange flag leg band.
- 6/21 - Still incubating diligently. In three days, the eggs would hatch.



## Predators



Coyote tracks



Bear tracks



## AVIAN PREDATORS BY DAY, MAMMAL PREDATORS BY NIGHT

### Tracks and Scat Prevalent

Gulls pressured the plovers throughout the entire monitoring season. There was only one day when no gulls were observed near the nesting sites.

Most commonly, the gulls invaded the plover nesting areas early in the morning and then dispersed to other areas as evening

approached. The only time their behavior seemed put into check was when a group of five immature bald eagles perched on a driftwood construction near Nest #1. For the short duration the eagles were present, the gulls positioned themselves further off.

Unfortunately for the plovers, the young eagles were more prone to perch in tall dead snags on the western shore, concentrating their efforts on fishing in Chequamegon Bay.

On June 20, at Nest #3, within 15 minutes of the first hatchling of the season being observed, the monitor witnessed three gulls fly into the Nest #3 area. Male #3 flew himself directly into the group,



## Predators (Continued)

followed shortly after by Female #3. During the ensuing chaos, as the piping plover parents tussled with the gulls to defend their hatchling, a fourth gull flew into the area and the chick was gone. The monitor watched the area closely for an hour. The chick was never seen again. Male #3 settled into the sand where the encounter had taken place and didn't move. Female #3 stood nearby, flapping her wings, stretching and preening her feathers over and over. She also did not move from her location. Ultimately, the plovers became aware of the monitor. The monitor, not wanting to distract the plovers from defending themselves or their nest from the gulls, departed for Nest #5 to check on incubation there.

On several occasions over the season, merlins would swoop in from the dune aiming for the nest areas at Plover Beach. They were quite vocal as they made passes.

At Nest #5, a merlin maintained a perch in a dead birch located behind the dune.

By far, the most common of the known mammal predators to leave sign behind were coyotes. Coyote tracks were common in all areas near the nests; shore, cobble, foredune, dune tops and dune valleys. Their tracks were encountered daily during monitoring from beginning of season to end. Scat was encountered more frequently on the route to Nest #5, further to the south. The coyotes left scat close to the water's edge here but did not do this elsewhere.

Bear tracks were common at the northern end of Chequamegon Point, as was bear scat. Blueberries were prevalent both at camp and further north near the lighthouses and this might speak to the bears concentrating their time there.

Monitors didn't see any of the mammal predators during daylight hours. Tracks would be encountered first thing in the morning at the wash zone near camp (coyote, skunk and/or raccoon). As we made our way to the nests, we often followed the coyote tracks which hovered along the shoreline and then populated the nesting areas in all directions.

Evidence of predation with the attacker unidentified was observed throughout the season, as were carcasses where predation could not be determined as the cause of death.



# Visitation and Human Impact



Sunday, July 14, visitors to the north end of Plover Beach and the Narrows

## HUMAN VISITORS

How do they get to the Point?  
All observed visitors to Chequamegon Point arrived via watercraft this year. The most popular site for anchoring was at the north end of Plover Beach and the nearby “Narrows” area directly to the north. At the Narrows, boats anchored on both the east and western shores of Chequamegon Point.

### Boats/Humans/Dogs

As one might expect, Friday, Saturday, and Sunday were the busiest days for beach and water visitors as were sunny, hot days. The 4th of July and following two weekends saw the highest numbers of visitors for the season.

Visitors often created campfires, arranged driftwood into large piles and even constructed a fixture using driftwood nailed to live trees. This was most often done in the evening hours after the plover monitors had left the area, so opportunity to discourage this behavior was not available. These creations would be discovered the next morning. Abandoned campfires were often covered with sand with a vertical stick poked in the center - most likely to make others aware of it, or... The campfire logs were pushed to the water’s edge in an apparent attempt to extinguish them.

Plastic (by far the most abundant), glass, fishing lures/lines and other debris was collected by monitors from the beach and



Construction nailed to live trees, found the morning of July 5

shoreline during travel to and from the nests. Mylar balloons were found in many locations including on the beach, behind the dunes and in the tree lines. Twice during the season, cigarette butts were on the shoreline where beach visitors had been.

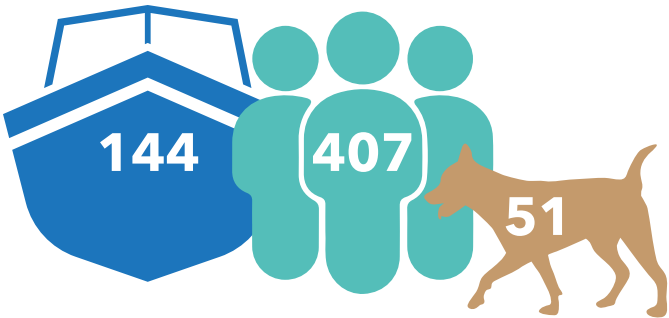
Unleashed dogs were the rule, not the exception, throughout the season. Monitors reminded visitors dogs are required to be leashed within park boundaries and in plover habitat areas.

While visitors acknowledged the rule, only two visitors leashed their dogs after the reminder. The rest promised to keep their dogs close - which almost all DID do. One gentleman even had a tiny tent on shore for his small dog. He placed the dog in the tent whenever he navigated back and forth to his boat which was anchored about 10 yards offshore. On one occasion, the monitor’s leash reminder was disregarded completely, and a dog was witnessed running extensive distances along shore. Luckily, this was near the monitor camp, not close to plovers or their nests. The monitor stayed close by this group. They departed within a half an hour.

Visitors in general avoided the immediate nesting area at Plover Beach. The boats coming closest to the nests were anchored at shore, approximately 20-30 yards south of the Nest #3 area.

### Camper/Barge

Throughout the season, a camper/barge was observed on the Chequamegon Bay (west) side of the Point. Campfire and cooking smells often emanated to the east shoreline, our route to Nest #5. On one occasion, while taking cover during rain, a monitor found a heavy tinfoil cooking pan in the tree line near the camper. The prevalence of coyote tracks in the area leads to the suspicion the cooking smells may be attracting coyote attention and camp interactions, with possibly the coyotes retrieving trash.



# Visitation and Human Impact (Continued)

## AIRPLANES and ULTRALIGHTS

No float planes were witnessed landing in the waters near

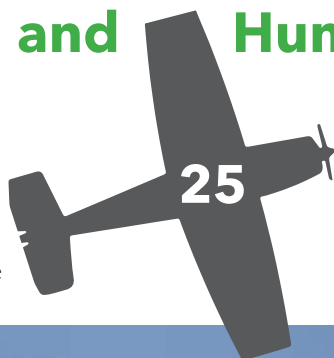
Chequamegon Point. There were, however, several aircraft which flew quite low near, or directly over the piping plover nesting areas and

adjacent shorelines. The lowest flying aircraft were float planes/float-equipped ultralights and after consultation with a local airport manager, it was related that sometimes float planes are surveying the shore and nearby water for best places to land, thus are flying lower than the 500-foot minimum ceiling for passing aircraft. Through further consultation, it was suggested that instead of reporting aircraft to the FAA or other regulatory entity, it might be a more successful strategy to reach out to local airport managers to have information regarding the piping plover nesting areas posted to their respective airport information pages. This would give pilots information ahead of travel to the destination and help them to avoid the habitat areas as they explore the islands and possible landing locations. A contact number for pilots to inquire about current nest locations was also a suggestion as this would provide updated/seasonal information in real-time. It was stated even a recording with this information would be helpful.

## HUMAN/MONITOR INTERACTION

Visitor/monitor interaction was overwhelmingly positive this season. Printed brochures were given out to those who were receptive, as well as small cards with a QR Code that when scanned would lead to [www.greatlakespipingplover.org](http://www.greatlakespipingplover.org) for more information.

Only during the 4th of July and subsequent two weekends did individuals or families walk directly in front of the nesting sites at Nests 1, 2 and 3. On these occasions, the monitor would greet them and explain about the plovers. Of those without prior knowledge of the piping plovers, children liked how “cute” the birds were from pictures on the brochures. Monitors emphasized the endangered status and rarity of the piping plovers in the Great Lakes and that they might be one of very few in their school or community to ever see one. Then, asking



them to listen for a “peep” as they quietly passed the nests via “staying on the wet sand” of the wash zone, they would spot a piping plover and point. Both kids and adults would be thrilled and motion silently to the monitor to indicate they saw one. It was very gratifying as a monitor.

The vast majority of visitors knew about the piping plovers habitat being in the local vicinity. They asked questions and were quite interested to learn more, especially how to best navigate or behave in the area while visiting. Many told us they were locals from either Ashland, Bayfield or Odanah. Visitors who self-identified as repeat or annual visitors to Chequamegon Point would ask how many nests there were this year, how many chicks, etc. During monitor training at the beginning of the season, Peggy Burkman (National Park Service) had emphasized the importance of acknowledging the considerable effort many visitors invest in making an annual trek to the island and to contemplate that when interacting. This early education for monitors was very helpful. We determined to focus on being approachable, and inclusive while sharing piping plover information and best beach behavior suggestions to beach visitors. Their receptiveness was reinforcement that this approach can be successful and empower the visiting public in feeling they are part of the conservation effort.

## VISIBILITY OF SUPPORTING STAFF



Additional personnel at the plover camp on “switch” days and during banding days was helpful in terms of visibility. Park Ranger Jordan Sjogren’s presence in the Park Service Ranger boat on the waters off Plover Beach was also helpful in curbing poor beach etiquette. On a couple of occasions monitors witnessed visitors digging large holes or moving driftwood and advised against these behaviors, however, it wasn’t until the Ranger boat came into sight that the visitors ceased these activities.

# Banding Day #1

## BIRD BANDERS:

**Sumner Matteson**, Avian Ecologist,  
Wisconsin Department of Natural Resources

**Dawn Marsh**, Fish and Wildlife Biologist,  
U.S. Fish & Wildlife Service (Minneapolis, MN)

## ADDITIONAL SUPPORT:

**Elouise Lozinski**, Wildlife Program Manager,  
Mashkiiziibii Natural Resources Department, Odanah, WI

**Jade Arneson**, Fish and Wildlife Biologist and Cat Island Piping  
Plover Lead, U.S. Fish & Wildlife Service (Green Bay, WI)

Both plover monitors were present.

Four chicks were banded July 3, 2024. The chicks were located at Plover Beach, Nests 1, 2 and 3.

On both banding days, chicks were weighed prior to banding, and after banding were released in the direction of their parents. Parent plovers and chicks were observed until they reunited, then we departed.

Weather was warm, sunny, and pleasant, but biting flies were of particular nuisance on this day. If you look closely at the photos, you will see flies peppered on most of our clothing.



Above: Jade Arneson, equipped with years of experience, gently retrieves a piping plover chick after capturing it in a drop net.



Above: Sumner Matteson and Dawn Marsh work quickly and with great care to solder a leg band on one of the squirmy plover chicks.  
Right: Elouise Lozinski carefully releases a newly banded chick.

Plover Monitors Rowan Gibson and Angel Holcomb release newly banded piping plover chicks in the direction of their parents who wait anxiously further down the beach.





(Photo: Rowan Gibson)

Clockwise from above:

- Preparing to weigh and band a chick.
- Piping plover chicks are extremely quick, and it doesn't take long for them to regain their footing once the banding process is over.
- Female #2 voices her disapproval of us intruding and taking her chick.
- Holding the plump #2 chick carefully to show the newly placed bands.
- Mentors to the Plover Monitors: (Left to right) Sumner Matteson, Elouise Lozinski, Jade Arneson and Dawn Marsh.
- #3 chick with its unique leg-band combinations in place.

## Banding Day #1 (Continued)



(Photo: Rowan Gibson)



(Photo: Rowan Gibson)



(Photo: Rowan Gibson)



## Banding Day #2

### BIRD BANDERS:

**Sumner Matteson**, Avian Ecologist,  
Wisconsin Department of Natural Resources

**Dawn Marsh**, Fish and Wildlife Biologist,  
U.S. Fish & Wildlife Service (Minneapolis, MN)

### ADDITIONAL SUPPORT:

**Elouise Lozinski**, Wildlife Program Manager,  
Mashkiiziibii Natural Resources Department, Odanah, WI

Also: *(Please see photo and caption, below.)* Banding day #2 was a great representation of the partnerships that have nurtured the Great Lakes piping plover recovery effort. On hand were individuals working for the tribal nation of the Bad River Band of Lake Superior Chippewa, the National Park Service, the U.S. Fish & Wildlife Service, and the Wisconsin Department of Natural Resources. Experience levels ranged from first exposure working with piping plovers to individuals with decades of expertise. Information was exchanged freely and encouragingly, and it made for a very productive and enriching day.

Both plover monitors were present.

The second day of banding took place July 11, 2024. The chicks were located at Nest #5 and at the mouth of the Bad River, Nest #4. The four chicks at Nest #4 were considerably smaller than the one chick at Nest #5. Sumner Matteson reminded the team of how delicate the chicks would be, and everyone took particular care.

It was a sunny day, quite warm, and flies were a slight distraction to the day's endeavors.



Left: Back row, left to right: **Ryan Brady**, Conservation Biologist, Wisconsin Department of Natural Resources; **Sumner Matteson**, Avian Ecologist, Wisconsin Department of Natural Resources; **Elouise Lozinski**, Wildlife Program Manager, Mashkiiziibii Natural Resources Department; **Rowan Gibson**, Plover Monitor, Mashkiiziibii Natural Resources Department; **Abby Stasko**, Invasive Plant Technician, Apostle Islands National Lakeshore, National Park Service; **Julie Van Stappen**, Former Chief of Planning and Resource Management (ret.), National Park Service; **Dawn Marsh**, Fish and Wildlife Biologist, U.S. Fish & Wildlife Service. Front row, left to right: **Peyton Martinson**, Ojibwe Education Park Ranger, Apostle Islands National Lakeshore, National Park Service; **Billy Flynn**, Visual Information Specialist, Apostle Islands National Lakeshore, National Park Service; **Izzy Vetterman**, Wildlife Technician (Biology), Apostle Islands National Lakeshore, National Park Service; **Kasey Arts**, Biological Technician, Apostle Islands National Lakeshore, National Park Service; **Tori Chevalier**, General Technician (Biology), Apostle Islands National Lakeshore, National Park Service.



(Photo: Rowan Gibson)



(Photo: Rowan Gibson)

Clockwise from above:

- One of the very small, freshly-banded chicks from Nest #4.
- A piping plover parent runs close by keeping track of the chicks which are being banded.
- Spotters amid grass look for chicks on the beach from the higher vantage point of the dune.
- Ryan Brady, Conservation Biologist, Wisconsin Department of Natural Resources, photographs the parent plovers on the beach while the chicks are banded. Through these photos, the identity of the parents can be verified according to their own leg bands.
- Kasey Arts, Biological Technician, Apostle Islands National Lakeshore, National Park Service, carefully holds a piping plover chick from Nest #5.

## Banding Day #2 (Continued)



# Other Wildlife

## BIRDS, MAMMALS, INSECTS AND MORE

### Frequent Visitors - Not Predatory

Immature bald eagles were frequent visitors throughout the season, flying both over the nesting areas and perching in dead trees near the east and west shores of Chequamegon Point. Mature bald eagles were seen far less frequently.

A whitetail doe was a frequent visitor to Plover Beach and further north at the monitor camp. As has historically been the case, the deer proved to be curious about the exclosures and/or plovers as exemplified by their exploring directly up to the exclosures while the plovers were incubating. There may have been more than one doe. At least one of them had a fawn.

Common mergansers were quite common in the waters along the eastern shore, both at camp and the plover nesting areas and in-between. Some groups were quite large including twenty or more birds. Lone females carrying chicks on their back while swimming along in the water were observed several times.

Biting flies were incredibly prevalent and bothersome on many days of the season, especially on hot humid days. They made monitoring quite difficult.

At the end of season, spotted sandpipers took up residence at Plover Beach, including adults and newly hatched chicks who foraged near the piping plovers at Nest #2.

### More Rare Visits

There was plenty of bear sign, both tracks and scat, at the northern end of Chequamegon Point. There was also one middle-of-the-night bear visit heard outside the tent by the monitor at camp, yet no bears were witnessed during daylight hours.

Pass-through, migrating birds filled the shoreline at the beginning of our season, but soon departed. Likewise, a return near the end of July saw an uptick in shorebird species for a few days, then a return to the local population. Only 2 Killdeer were noticed over the monitor period.



## Other Wildlife (Continued)

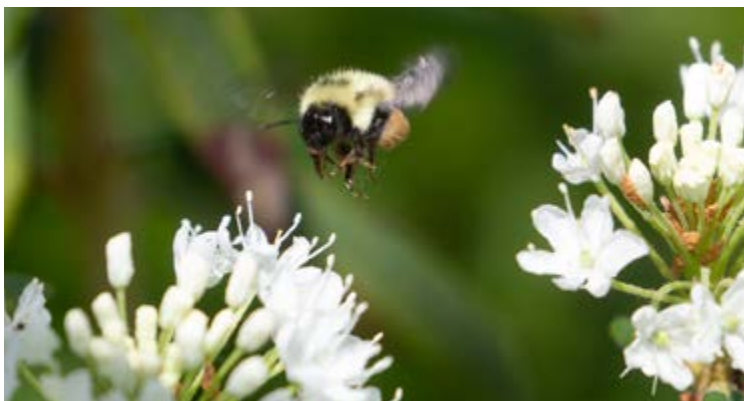
### OF SPECIAL NOTE: **MONARCHS**

An encouraging documentation of several milkweed plants (many with a monarch egg attached) and adult monarchs was made in several areas on the western shore of Chequamegon Point, as well as at the mouth of the Bad River near Mashkiiziibii Nest. Blooming was observed. Unfortunately, at the “Narrows” where humans have made a heavily-used, cross-over trail to walk between western and eastern shores, several milkweed plants near that trail were trampled.



### Pollinators Galore

Along with avian pollinators, plenty of insect pollinators were observed throughout the plover season on Chequamegon Point and near Nest #4..

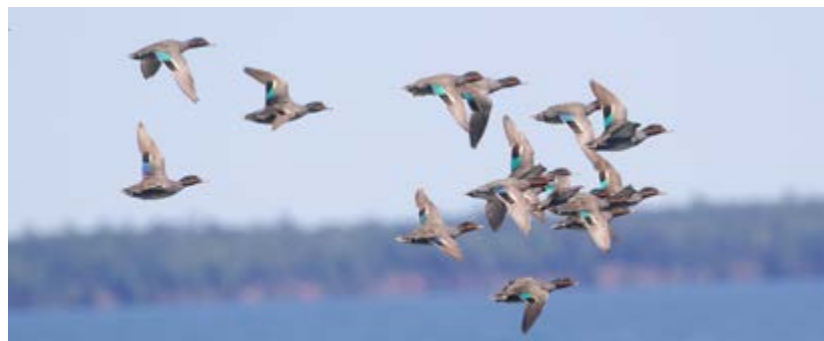


## Other Wildlife (Continued)

### BIRDS

| Common Name              | Scientific Name                     |
|--------------------------|-------------------------------------|
| Canada Goose             | <i>Branta canadensis</i>            |
| Wood Duck                | <i>Aix sponsa</i>                   |
| Blue-winged Teal         | <i>Spatula discors</i>              |
| Gadwall                  | <i>Mareca strepera</i>              |
| Mallard                  | <i>Anas platyrhynchos</i>           |
| Northern Pintail         | <i>Anas acuta</i>                   |
| Green-winged Teal        | <i>Anas crecca</i>                  |
| Greater/Lesser Scaup     | <i>Aythya marila/affinis</i>        |
| Hooded Merganser         | <i>Lophodytes cucullatus</i>        |
| Common Merganser         | <i>Mergus merganser</i>             |
| Red-breasted Merganser   | <i>Mergus serrator</i>              |
| Wild Turkey              | <i>Meleagris gallopavo</i>          |
| Ruffed Grouse            | <i>Bonasa umbellus</i>              |
| Horned Grebe             | <i>Podiceps auritus</i>             |
| Mourning Dove            | <i>Zenaida macroura</i>             |
| Black-billed Cuckoo      | <i>Coccyzus erythrophthalmus</i>    |
| Common Nighthawk         | <i>Chordeiles minor</i>             |
| Chimney Swift            | <i>Chaetura pelagica</i>            |
| Sandhill Crane           | <i>Antigone canadensis</i>          |
| Black-bellied Plover     | <i>Pluvialis squatarola</i>         |
| Killdeer                 | <i>Charadrius vociferus</i>         |
| Semipalmated Plover      | <i>Charadrius semipalmatus</i>      |
| Piping Plover            | <i>Charadrius melodus</i>           |
| Whimbrel                 | <i>Numenius phaeopus</i>            |
| Short-billed Dowitcher   | <i>Limnodromus griseus</i>          |
| Spotted Sandpiper        | <i>Actitis macularia</i>            |
| Lesser Yellowlegs        | <i>Tringa flavipes</i>              |
| Willet                   | <i>Tringa semipalmata</i>           |
| Ruddy Turnstone          | <i>Arenaria interpres</i>           |
| Buff-breasted Sandpiper  | <i>Calidris subruficollis</i>       |
| Sanderling               | <i>Calidris alba</i>                |
| Dunlin                   | <i>Calidris alpina</i>              |
| Baird's Sandpiper        | <i>Calidris bairdii</i>             |
| White-rumped Sandpiper   | <i>Calidris fuscicollis</i>         |
| Least Sandpiper          | <i>Calidris minutilla</i>           |
| Pectoral Sandpiper       | <i>Calidris melanotos</i>           |
| Semipalmated Sandpiper   | <i>Calidris pusilla</i>             |
| Bonaparte's Gull         | <i>Chroicocephalus philadelphia</i> |
| Franklin's Gull          | <i>Leucophaeus pipixcan</i>         |
| Ring-billed Gull         | <i>Larus delawarensis</i>           |
| Herring Gull             | <i>Larus argentatus</i>             |
| Caspian Tern             | <i>Hydroprogne caspia</i>           |
| Forster's Tern           | <i>Sterna forsteri</i>              |
| Common Tern              | <i>Sterna hirundo</i>               |
| Common Loon              | <i>Gavia immer</i>                  |
| Double-crested Cormorant | <i>Nannopterum auritum</i>          |
| American White Pelican   | <i>Pelecanus erythrorhynchos</i>    |
| Great Blue Heron         | <i>Ardea herodias</i>               |
| Turkey Vulture           | <i>Cathartes aura</i>               |
| Northern Harrier         | <i>Circus hudsonius</i>             |
| Sharp-shinned Hawk       | <i>Accipiter striatus</i>           |
| Bald Eagle               | <i>Haliaeetus leucocephalus</i>     |
| Broad-winged Hawk        | <i>Buteo platypterus</i>            |
| Belted Kingfisher        | <i>Megasceryle alcyon</i>           |
| Downy Woodpecker         | <i>Dryobates pubescens</i>          |
| Hairy Woodpecker         | <i>Dryobates villosus</i>           |
| Pileated Woodpecker      | <i>Dryocopus pileatus</i>           |
| Northern Flicker         | <i>Colaptes auratus</i>             |
| American Kestrel         | <i>Falco sparverius</i>             |

| Common Name                  | Scientific Name                  |
|------------------------------|----------------------------------|
| Merlin                       | <i>Falco columbarius</i>         |
| Eastern Wood-Pewee           | <i>Contopus virens</i>           |
| Alder Flycatcher             | <i>Empidonax alnorum</i>         |
| Least Flycatcher             | <i>Empidonax minimus</i>         |
| Eastern Phoebe               | <i>Sayornis phoebe</i>           |
| Great Crested Flycatcher     | <i>Myiarchus crinitus</i>        |
| Eastern Kingbird             | <i>Tyrannus tyrannus</i>         |
| Yellow-throated Vireo        | <i>Vireo flavifrons</i>          |
| Red-eyed Vireo               | <i>Vireo olivaceus</i>           |
| Blue Jay                     | <i>Cyanocitta cristata</i>       |
| American Crow                | <i>Corvus brachyrhynchos</i>     |
| Common Raven                 | <i>Corvus corax</i>              |
| Black-capped Chickadee       | <i>Poecile atricapillus</i>      |
| Bank Swallow                 | <i>Riparia riparia</i>           |
| Tree Swallow                 | <i>Tachycineta bicolor</i>       |
| Barn Swallow                 | <i>Hirundo rustica</i>           |
| Red-breasted Nuthatch        | <i>Sitta canadensis</i>          |
| Sedge Wren                   | <i>Cistothorus stellaris</i>     |
| Eastern Bluebird             | <i>Sialia sialis</i>             |
| Veery                        | <i>Catharus fuscescens</i>       |
| Hermit Thrush                | <i>Catharus guttatus</i>         |
| American Robin               | <i>Turdus migratorius</i>        |
| Cedar Waxwing                | <i>Bombicilla cedrorum</i>       |
| American Pipit               | <i>Anthus rubescens</i>          |
| Purple Finch                 | <i>Haemorhous purpureus</i>      |
| White-winged Crossbill       | <i>Loxia leucoptera</i>          |
| Pine Siskin                  | <i>Spinus pinus</i>              |
| American Goldfinch           | <i>Spinus tristis</i>            |
| Chipping Sparrow             | <i>Spizella passerina</i>        |
| Dark-eyed Junco              | <i>Junco hyemalis</i>            |
| White-throated Sparrow       | <i>Zonotrichia albicollis</i>    |
| Savannah Sparrow             | <i>Passerculus sandwichensis</i> |
| Song Sparrow                 | <i>Melospiza melodia</i>         |
| Swamp Sparrow                | <i>Melospiza georgiana</i>       |
| Eastern Towhee               | <i>Pipilo erythrophthalmus</i>   |
| Baltimore Oriole             | <i>Icterus galbula</i>           |
| Red-winged Blackbird         | <i>Agelaius phoeniceus</i>       |
| Common Grackle               | <i>Quiscalus quiscula</i>        |
| Ovenbird                     | <i>Seiurus aurocapilla</i>       |
| Northern Waterthrush         | <i>Parkesia noveboracensis</i>   |
| Golden-winged Warbler        | <i>Vermivora chrysoptera</i>     |
| Black-and-white Warbler      | <i>Mniotilta varia</i>           |
| Tennessee Warbler            | <i>Leiothlypis peregrina</i>     |
| Nashville Warbler            | <i>Leiothlypis ruficapilla</i>   |
| Mourning Warbler             | <i>Geothlypis philadelphia</i>   |
| Common Yellowthroat          | <i>Geothlypis trichas</i>        |
| American Redstart            | <i>Setophaga ruticilla</i>       |
| Cape May Warbler             | <i>Setophaga tigrina</i>         |
| Magnolia Warbler             | <i>Setophaga magnolia</i>        |
| Blackburnian Warbler         | <i>Setophaga fusca</i>           |
| Yellow Warbler               | <i>Setophaga petechia</i>        |
| Chestnut-sided Warbler       | <i>Setophaga pensylvanica</i>    |
| Black-throated Blue Warbler  | <i>Setophaga caerulescens</i>    |
| Pine Warbler                 | <i>Setophaga pinus</i>           |
| Yellow-rumped Warbler        | <i>Setophaga coronata</i>        |
| Black-throated Green Warbler | <i>Setophaga virens</i>          |
| Canada Warbler               | <i>Cardellina canadensis</i>     |
| Scarlet Tanager              | <i>Piranga olivacea</i>          |
| Rose-breasted Grosbeak       | <i>Pheucticus ludovicianus</i>   |
| Indigo Bunting               | <i>Passerina cyanea</i>          |



All photos this page taken by Rowan Gibson, Plover Monitor





All photos this page taken by Rowan Gibson, Plover Monitor



## Other Wildlife (Continued)

### INSECTS

| Common Name                     | Scientific Name            |
|---------------------------------|----------------------------|
| Sand Chafer                     | Strigoderma arvicola       |
| White-collared Chafer           | Dichelonyx albicollis      |
| European Chafer                 | Amphimallon majale         |
| Seven-spotted Lady Beetle       | Coccinella septempunctata  |
| Bigeminate Sigil Lady Beetle    | Hyperaspis bigeminata      |
| Eye-spotted Lady Beetle         | Anatis mali                |
| Chinch-bug                      | Blissus leucopterus        |
| Hairy-necked Tiger Beetle       | Cicindela hirticollis      |
| Six-spotted Tiger Beetle        | Cicindela sexguttata       |
| Oblique-lined Tiger Beetle      | Cicindela tranquebarica    |
| Ant-like Longhorn Beetle        | Cyrtophorus verrucosus     |
| Spotted Cucumber Beetle         | Diabrotica undecimpunctata |
| Baly's Earth-boring Beetle      | Geotrupes balyi            |
| Three-lined Hoplia              | Hoplia trifasciata         |
| Black Firefly                   | Lucidota atra              |
| Tumbling Ragdoll                | Mordella marginata         |
| Fan-shaped Fire-colored Beetle  | Neopyrochroa flabellata    |
| Green Immigrant Leaf Weevil     | Polydrusus formosus        |
| Rain Beetle                     | Pterostichus melanarius    |
| Red Triangle Long-horned Beetle | Purpuricenus humeralis     |
| Bee-mimic Beetle                | Trichiotinus assimilis     |
| Red-blue Checkered Beetle       | Trichodes nuttalli         |
| Thin-tailed Long-horned Beetle  | Typocerus acuticauda       |
| Banded Longhorn Beetle          | Typocerus velutinus        |
| Roughened Darkling Beetle       | Upis ceramoides            |
|                                 | Xantholinus sp.            |
| Yellow-spotted Webworm Moth     | Anageshna primordialis     |
| Spongy Moth                     | Lymantria dispar           |
|                                 | Macaria sp.                |
| Virgin Tiger Moth               | Apantesis virgo            |
|                                 | Caenurgina sp.             |
| Arctic Skipper                  | Carterocephalus mandan     |
| Northern Pearly-eye             | Lethe anthedon             |
| European Skipper                | Thymelicus lineola         |
| Monarch                         | Danaus plexippus           |
| Viceroy                         | Limenitis archippus        |
|                                 | Ophioninae                 |
| Eastern Calligrapher            | Toxomerus geminatus        |
| Half-black Bumble Bee           | Bombus vagans              |
| Yellow-banded Bumble Bee        | Bombus terricola           |
|                                 | Ectemnius sp.              |
|                                 | Aritranis director         |
| Mining Bee                      | Andrena sp.                |
|                                 | Pyrobombus sp.             |
|                                 | Pandivirilia sp.           |
|                                 | Therevinae sp.             |
| Stable Fly/Sand Fly/Biting Fly  | Stomoxys calcitrans        |
| Common Snipe Fly                | Rhagio mystaceus           |
|                                 | Nephrotoma wulpiana        |
| Narrow-headed Marsh Fly         | Helophilus fasciatus       |
| Common Drone Fly                | Eristalis tenax            |
| Wandering Deer Fly              | Chrysops aberrans          |
| Frigid Deer Fly                 | Chrysops frigidus          |
|                                 | Mesembrina latreillii      |
| Unadorned Bog Fly               | Parhelophilus obsoletus    |
| Narrow-banded Pond Fly          | Sericomyia militaris       |
|                                 | Physocephala furcillata    |
| Racket-tailed Emerald           | Dorocordulia libera        |
| Giant Mayfly                    | Hexagenia sp.              |
| Common Marauder                 | Proctacanthus milbertii    |
| Say's Cicada                    | Okanagana rimosa           |



All photos this page taken by Rowan Gibson, Plover Monitor





## Other Wildlife (Continued)

### ARACHNIDS

| Common Name .....                    | Scientific Name               |
|--------------------------------------|-------------------------------|
| American Dog Tick.....               | <i>Dermacentor variabilis</i> |
| Eastern Black-legged Tick.....       | <i>Ixodes scapularis</i>      |
| Versicolor Long-jawed Orbweaver..... | <i>Tetragnatha versicolor</i> |
| .....                                | <i>Habronattus cognatus</i>   |
| Arabesque Orbweaver.....             | <i>Neoscona arabesca</i>      |
| Goldenrod Crab Spider .....          | <i>Misumena vatia</i>         |
| Multicolored Bark Crab Spider.....   | <i>Bassaniana versicolor</i>  |
| Harvestmen sp. ....                  | <i>Opiliones sp.</i>          |



### OTHER ARTHROPODS

| Common Name ..... | Scientific Name            |
|-------------------|----------------------------|
| (Centipede) ..... | <i>Strigamia sp.</i>       |
| (Plankton).....   | <i>Holopedium gibberum</i> |

### REPTILES AND AMPHIBIANS

| Common Name .....        | Scientific Name                   |
|--------------------------|-----------------------------------|
| Gray Treefrog.....       | <i>Hyla Versicolor</i>            |
| Green Frog.....          | <i>Lithobates clamitans</i>       |
| Mink Frog.....           | <i>Lithobates septentrionalis</i> |
| Common Garter Snake..... | <i>Thamnophis sirtalis</i>        |
| Snapping Turtle.....     | <i>Chelydra serpentina</i>        |



### FISH

| Common Name .....    | Scientific Name            |
|----------------------|----------------------------|
| Spottail Shiner..... | <i>Hudsonius hudsonius</i> |



### MAMMALS

| Common Name .....      | Scientific Name                |
|------------------------|--------------------------------|
| Shrew sp.....          | <i>Soricidae</i>               |
| Gray Squirrel.....     | <i>Sciurus carolinensis</i>    |
| Red Squirrel.....      | <i>Tamiasciurus hudsonicus</i> |
| Black Bear.....        | <i>Ursus americanus</i>        |
| Coyote.....            | <i>Canis latrans</i>           |
| White-tailed Deer..... | <i>Odocoileus virginianus</i>  |

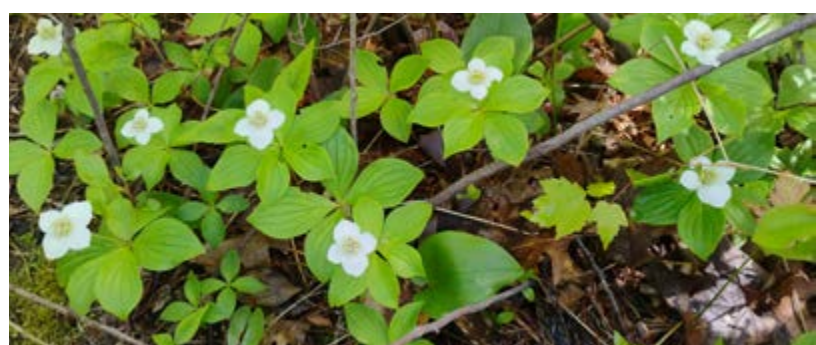




## Other Wildlife (Continued)

### PLANTS

| Common Name .....           | Scientific Name                    |
|-----------------------------|------------------------------------|
| common yarrow .....         | <i>Achillea millefolium</i>        |
| Serviceberry .....          | <i>Amelanchier</i> sp.             |
| pearly everlasting.....     | <i>Anaphalis margaritacea</i>      |
| Lyreleaf Rockcress .....    | <i>Arabis lyrata</i>               |
| bearberry .....             | <i>Arctostaphylos uva-ursi</i>     |
| Field Sagewort.....         | <i>Artemisia campestris</i>        |
| American marram grass ..... | <i>Calamagrostis breviligulata</i> |
| Marsh Calla .....           | <i>Calla palustris</i>             |
| fireweed.....               | <i>Chamaenerion angustifolium</i>  |
| bastard toadflax.....       | <i>Comandra umbellata</i>          |
| marsh cinquefoil .....      | <i>Comarum palustre</i>            |
| Canadian bunchberry .....   | <i>Cornus canadensis</i>           |
| red osier dogwood.....      | <i>Cornus sericea</i>              |
| pink lady's slipper .....   | <i>Cypripedium acaule</i>          |
| wood fern.....              | <i>Dryopteris</i> sp.              |
| trailing arbutus.....       | <i>Epigaea repens</i>              |
| field horsetail.....        | <i>Equisetum arvense</i>           |
| Virginia strawberry.....    | <i>Fragaria virginiana</i>         |
| Eastern Teaberry.....       | <i>Gaultheria procumbens</i>       |
| Black Huckleberry.....      | <i>Gaylussacia baccata</i>         |
| woolly beachheather .....   | <i>Hudsonia tomentosa</i>          |
| Baltic Rush.....            | <i>Juncus balticus</i>             |
| common juniper .....        | <i>Juniperus communis</i>          |
| Swamp Laurel.....           | <i>Kalmia polifolia</i>            |
| seaside pea .....           | <i>Lathyrus japonicus</i>          |
| Balkan toadflax .....       | <i>Linaria dalmatica</i>           |
| stag's-horn clubmoss .....  | <i>Lycopodium clavatum</i>         |
| northern starflower .....   | <i>Lysimachia borealis</i>         |
| Tufted Loosestrife.....     | <i>Lysimachia thyrsiflora</i>      |
| Canada mayflower.....       | <i>Maianthemum canadense</i>       |
| narrowleaf cow wheat .....  | <i>Melampyrum lineare</i>          |
| evening primrose.....       | <i>Oenothera</i> sp.               |
| Hawkweed .....              | <i>Pilosella</i> sp.               |
| sand cherry .....           | <i>Prunus pumila</i>               |
| common bracken.....         | <i>Pteridium aquilinum</i>         |
| Bog Labrador Tea .....      | <i>Rhododendron groenlandicum</i>  |
| Rose sp. ....               | <i>Rosa</i> sp.                    |
| Sheep's sorrel .....        | <i>Rumex acetosella</i>            |
| common soapwort.....        | <i>Saponaria officinalis</i>       |
| purple pitcher plant.....   | <i>Sarracenia purpurea</i>         |
| Marsh Skullcap.....         | <i>Scutellaria galericulata</i>    |
| interrupted clubmoss .....  | <i>Spinulum annotinum</i>          |
| white meadowsweet .....     | <i>Spiraea alba</i>                |
| marsh hedge nettle .....    | <i>Stachys hispida</i>             |
| common dandelion .....      | <i>Taraxacum officinale</i>        |
| western poison ivy.....     | <i>Toxicodendron rydbergii</i>     |
| lowbush blueberry.....      | <i>Vaccinium angustifolium</i>     |



All photos this page taken by Rowan Gibson, Plover Monitor



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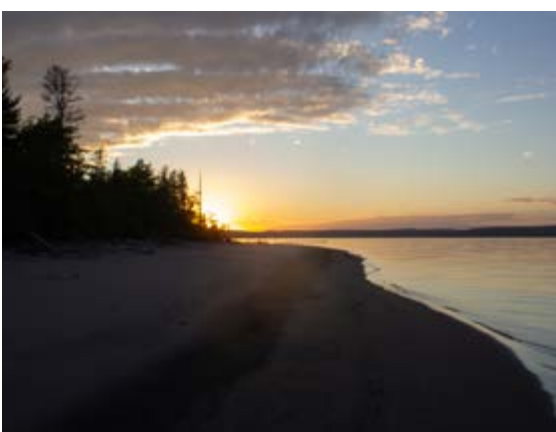
| Common Name .....            | Scientific Name              |
|------------------------------|------------------------------|
| Chicken of the Woods.....    | <i>Laetiporus sulphureus</i> |
| British Soldier Lichen ..... | <i>Cladonia cristatella</i>  |



All photos this page taken by Rowan Gibson, Plover Monitor



# Weather



|                     |                                 |  |  | AVERAGE<br>TEMP<br><small>Includes over<br/>night temp</small> | <br>°F<br>NORMAL |  DAYS WITH<br>PRECIP | PRECIP<br>TOTAL | NORMAL<br>PRECIP<br>TOTAL |  GUST<br>MAX |
|---------------------|---------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------|---------------------------|---------------------------------------------------------------------------------------------------|
| <b>May</b>          | Nest building<br>and incubating | <b>81°F</b>                                                                         | <b>30°F</b>                                                                         | <b>50.7°F</b>                                                  | <b>51.4°F</b>                                                                                       | <b>17</b>                                                                                                 | <b>2.79"</b>    | <b>3.63"</b>              | <b>26</b> mph                                                                                     |
| <b>Jun</b>          | Incubating<br>and hatching      | <b>89°F</b>                                                                         | <b>37°F</b>                                                                         | <b>62.5°F</b>                                                  | <b>61.2°F</b>                                                                                       | <b>25</b>                                                                                                 | <b>8.66"</b>    | <b>4.18"</b>              | <b>53</b> mph                                                                                     |
| <b>Jul</b>          | Fledging and<br>departing       | <b>88°F</b>                                                                         | <b>44°F</b>                                                                         | <b>68.2°F</b>                                                  | <b>67.2°F</b>                                                                                       | <b>6</b>                                                                                                  | <b>2.22"</b>    | <b>4.08"</b>              | <b>45</b> mph                                                                                     |
| <b>Aug (4 days)</b> | ↓                               | <b>88°F</b>                                                                         | <b>56°F</b>                                                                         | <b>73°F</b>                                                    | <b>67.6°F</b>                                                                                       | <b>1</b>                                                                                                  | <b>.31"</b>     | <b>.45"</b>               | <b>15</b> mph                                                                                     |

Historical weather data sourced from [weather.gov](https://weather.gov) and [wunderground.com](https://wunderground.com)

The season started quite cool, moved to wet in June and then, as is the norm, hot and humid in July and August. The plovers endured thunderstorms and high wind events. Late season storms and wind made significant changes to the beach. Several lengths of shoreline that were easily traversed early in the season disappeared

completely later in July. On three occasions in June, the monitor had to be removed from Long Island because of the threat of dangerous storms. Despite the adverse weather, no nests were lost to flooding, and while they surely endured hardship, especially while incubating, the plovers did not appear overly stressed.



# Glossary

**Cobble Pan** The strip of beach parallel to the shore where cobblestones have been most densely deposited by the tide.

**Fledged** The point reached in a juvenile plover's life when its flight feather growth allows for the ability to fly.

**Foredune** The dune ridge in a system of dunes that is closest to the shoreline.

**Tree Line** The belt where the dune system transitions into forest habitat; the edge of the dunes where trees begin to grow.

**Wash Zone** The region of the shoreline within which waves break.

**Wrack Line** The impermanent line of debris, usually dark organic material, that is deposited on the beach by the tide.



A chick from Nest #3 testing its wings



# Special Thanks

While compiled by two people, this report represents the effort of a far larger team. First and foremost, thank you to **Elouise Lozinski**, for leadership, mentorship and logistical support throughout the season. From early morning boat transportation to late night security check-ins, Elle was our 24/7 go-to-person from May through August. You shared your knowledge of piping plovers and Chequamegon Point without hesitation, making our responsibilities so much easier to navigate. We also acknowledge all the behind the scenes details you addressed so we could concentrate on the birds.

Our thanks to the **Mashkiiziibii Natural Resources Department**: Deputy Director **Dan Wiggins, Jr** and his wife **Gloria**, **Zakkary Zander**, **Jacob Rodmaker**, and **Bridget Thornburg** for helping us with everything from camp set-up and exclosures installation, to transportation to/from camp. Extra special thanks to **Elouise Lozinski**, **Kris Arbuckle**, **Nick Blanchard**, and **Mark Arbuckle** for all your work to monitor and support Mashkiiziibii Nest (nest #4) at the mouth of the Bad River. Because we (the monitors) could only visit the nest while transporting by boat to/from Chequamegon Point, that area needed additional support. For the entire season, all of you tended this site. Our immense gratitude for your dedication to the additional duties and responsibility. The success of that nest reflects all your care.

Thanks to **Sumner Matteson** for leadership and experienced banding on both banding days, as well as your tremendous avian expertise which you so encouragingly shared all through the season. Your upbeat attitude and humor were a treat! Also, thanks to **Dawn Marsh** for the knowledge you shared and your masterful banding of chicks on both banding days. Sumner and Dawn, both of you showed tremendously careful proficiency,

especially with the very small chicks of Mashkiiziibii Nest on the second banding day.

Our thanks to National Park Service staff: **Peggy Burkman**, **Kasey Arts**, **Izzy Vetterman**, **Abby Stasko**, and **Tori Chevalier** for early training in May and introducing us to the rest of the supportive staff of the National Park Service serving the Apostle Islands National Lakeshore in Bayfield, WI. For all your assistance on the second banding day, we salute **Abby**, **Izzy**, **Kasey**, **Tori**, **Peyton Martinson**, **Billy Flynn**, and **Julie Van Stappen**. A Big Thank You to NPS Law Enforcement and Rangers **Chris Smith** for pre-season training and **Jordan Sjogren** for your presence on busier days of the season.

Thank you to **Jade Arneson** for guidance and instruction on our first banding day and throughout the season regarding our weekly observations.

Thanks to **Ryan Brady** for his adept photographic documentation of all our adult bird pairs on the second banding day, helping us verify accurate identification.

Finally, recognition and praise to our partner organizations: the **Mashkiiziibii Tribe**, the **National Park Service**, **U.S. Fish & Wildlife Service**, **Mashkiiziibii Natural Resources Department**, **Wisconsin Department of Natural Resources**,

**The Nature Conservancy**, the **Johnson Family**, and the **WISKERT Corporation** for your dedication to the conservation of Chequamegon Point piping plovers on Lake Superior of the Great Lakes. Together, progress is being made with the hope that generations to come will be able to be as enchanted by these amazing birds as we were this summer. Thank you all!



Female #3

