



Irving Nature Park Shorebird Conservation and Education Project - 2022

Final Report – November 9, 2022

Background

In 2019, the Saint John Naturalists Club, the Irving Nature Park (J.D. Irving, Ltd.) and Nature NB partnered to engage and educate the public on the conservation threat posed by human disturbance of shorebirds roosting on Saints Rest Beach. The project included a trial basic shorebird census. Due to challenges presented by the COVID-19 pandemic, the project was not conducted in 2020 but did take place in 2021 and 2022.

The project began on August 20 with a Volunteer Workshop which covered shorebird identification and life history as well as strategies on how to positively engage with beach visitors. A public “Shorebird Talk and Walk” attended by some 40 participants followed on August 27.



“Talk and Walk” participants

The three partners promoted the project through social media postings.

The project involved visits by 18 volunteers to the Saints Rest Beach during the two-and-a-half-hour period (decreased from three hours in 2021) around high tide on five consecutive weekends between August 27 and September 25. The volunteers, wearing blue volunteer “pinnies”, approached beach visitors and initiated conversations about the



Volunteer talking shorebirds

shorebirds of the park including their life history, migration and the importance of allowing the birds the opportunity to rest on the beach during high tide. An information “postcard” (Appendix B) was offered to each contact. Visitors were asked to detour quietly around the birds and to consider leashing their dogs. The lead volunteer on each shift counted the birds on the beach during the shift.

This year a shorebird counter was hired to count in the park on weekdays. This involved daily visits to the mudflats southwest of the boardwalk 2h45m before high tide followed by walking the marsh 2h before high tide. The counter then visited the main beach and the eastern beach for the 2h30m around high tide (Figure 1). The counter, wearing a blue

volunteer “pinnie”, counted the birds on both the main and eastern section of the beach and approached beach visitors about the shorebirds of the park.



Emily Williams,
Counter- Educator

Six pocket beaches around Taylors Island were checked throughout the season to see if the shorebirds were using other beaches throughout the park (Figure 2 and Table 1). At the start of the season, the island beaches were checked 3h before high tide on Monday, Wednesday, Friday and 1h15m after high tide on Tuesday and Thursday. On September 6 when the tides switched to early morning, pocket beaches could only be checked after the beach count due to park closure. Additionally, by this point very few to no shorebirds had been observed using the island beaches 3h before high tide as they are out feeding at this point so pocket beach checks were switched to 1h15m after high tide for the remainder of the season.

Figure 1: Principal Counting Locations – Irving Nature Park



Figure 2: Pocket Beaches Surveyed, Irving Nature Park, Saint John NB.

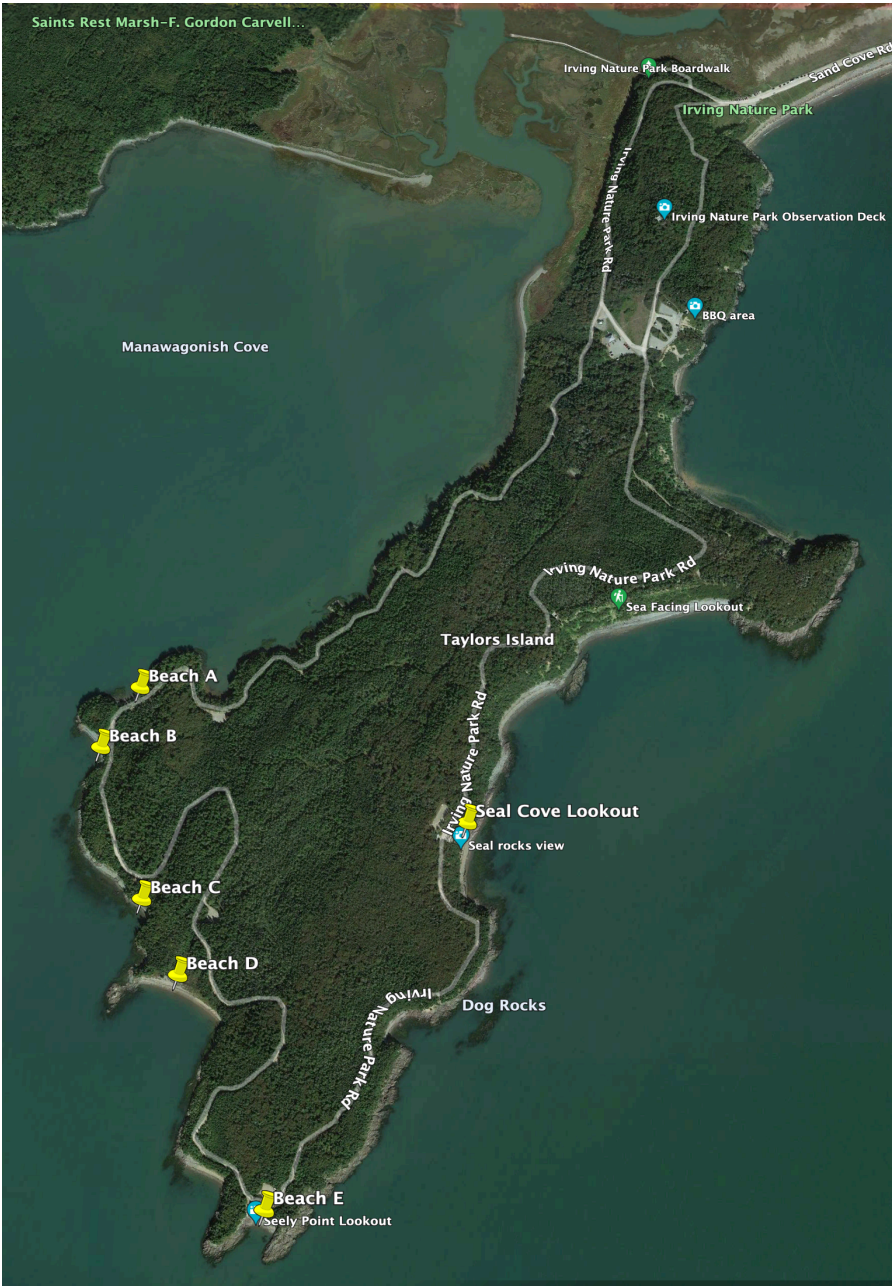


Table 1. Coordinate locations of pocket beaches throughout Taylors Island, NB.

Beach	Latitude	Longitude
Beach A	45.212943	-66.141471
Beach B	45.211911	-66.142261
Beach C	45.209407	-66.14114
Beach D	45.208046	-66.140445
Beach E	45.204225	-66.13822
Seal Cove Lookout	45.2114635	-66.130761

Daily records were kept on the number of visitors on the beach, the number of people engaged, the number of dogs on and off-leash, the meteorological conditions, the species, and numbers of birds observed and the number of predator attacks. During weekdays, counts of other water and seabirds were conducted at each location as well. Notes were also kept on feedback from the public. Daily reports were circulated to the volunteers, friends and partners in the project. Weekly and weekend summaries were prepared and were posted on the Nature NB Listserv as well as on social media, beginning mid-way through the project.

Results and observations

As noted in Appendix A, a total of 381 (290 in 2019, 328 in 2021) people were engaged in a shorebird conversation. Appendix A illustrates the numbers of beach visitors, people engaged, dogs leashed and unleashed, as well as the data collected respecting the birds present and disturbances noted on the main beach. 162 dogs were recorded with 62 (38%) being off leash. This compares with 32% off leash in 2019 and 37% off leash in 2021.

With only three years of data collected on numbers of shorebirds and with a much more formal count done this year, a meaningful comparison of numbers is difficult. It can be noted that volunteers' comments and observations from the weekday counter emphasize that flocks of shorebirds which were flushed by visitors on the main beach would circle over the beach before either diverting to the marsh or the eastern section of the beach, indicating that human activity was dissuading them from roosting on the beach. On a handful of occasions birds from the eastern section of the beach were observed diverting to Manawagonish Island after being flushed by a predator or, in one instance, two dogs.



Feedback from Volunteers and Beach Visitors

A number of volunteers reported that the orientation and public Walk and Talk were difficult to follow given the noise of pedestrian and vehicle traffic and the related distraction they created.

Throughout the project most conversations were positive in nature with most visitors expressing interest in the birds and their life history. Four visitors were indifferent and two were somewhat rude and marched through the flocks of roosting birds but not one was hostile. One local person who visits the beach every morning was uninterested in chatting with the weekday counter several times but one day was very chatty about some of the raptors over the marsh. After that positive interaction, they were much more open to discussing the shorebirds. Many visitors thanked the volunteers for the job they were doing and nearly all agreed to detour quietly around the roosting birds. On the eastern section of the beach, three ATVs were observed very close to a large flock of roosting

shorebirds. The riders assured that they do not ride along the beach but the sounds from the ATVs leaving the beach appeared to unsettle the roosting flock.

Unleashed dogs were identified as being a significant issue of concern. Nancy Perry, the INP manager, is taking the on-leash rule very seriously this year and stressed that volunteers can inform visitors of this. If anyone was unwilling to leash their dog, she asked that her staff be informed, and they would enforce the rule more strictly. Volunteers asked owners to consider leashing their dogs and to avoid areas where the birds were roosting. Most agreed. On two occasions owners did not have a leash for their dog so they left the beach and in one instance an owner agreed to leash their dog but was seen a few minutes later at the other end of the beach with their dog off-leash again. Two incidents of dog repeatedly flushing birds were observed, one of which on the eastern section of the beach two dogs repeatedly chased after large flocks of birds even after being spoken with about the park rules. Several dog owners were not aware of the “dogs on leash” rule and volunteers reported that the signs were small and effectively camouflaged by their surroundings. Most off-leash dogs and owners who are not aware of the rules appear to be coming onto the beach from the Sheldon Point trail. Nancy Perry mentioned that the majority of the Sheldon point off leash dogs are coming from a section that is not owned by INP so it is very difficult for them to enforce the rule when these visitors first exit their vehicles; however, they appear to be walking through the gravel pit owned by INP to get to the beach. Nancy and her staff are working on enforcing the on-leash rule in the gravel pit which should result in a decrease in off-leash dogs on the eastern section of the beach.

The project covered 29 high tides in peak shorebird season meaning that there was only one tide when no educational effort took place due to the passing of hurricane Fiona.

During weekdays, the shorebird census effort on the marsh can prove challenging as it is difficult to see through the grass. Additionally, on the main beach the frequent disruption of the birds and the tendency of the birds to shelter in the marram grass on days of frequent disturbances and high winds can make accurate counts challenging.

Volunteers reported that they found their efforts to be positive and rewarding and believed their work contributed positively to public education and conservation.

The Shorebird Counter/Educator developed a comprehensive database incorporating observations from previous and current years on all aspects of the project. She also researched and reported on the Atlantic Flyway Shorebird Initiative and the Atlantic Canada Shorebird Survey.

The Shorebird Conservation and Education Project (SCEP) Committee was established by the Saint John Naturalists Club to lead the project. The Committee reports to the Club President.

Recommendations

The positive reception and noted changes in behavior by the public combined with the perceived contribution to the conservation of roosting shorebirds suggest that there is value in continuing with the project in future years should a sufficient number of volunteers be available. The following recommendations are offered:

1. Subject to the availability of a sufficient number of volunteers and funding for a weekday counter, the project in 2023 should run for eight weeks as per Table 2, “Proposed 2023 SCEPT Schedule”; below. This would start the project 2 weeks earlier than in 2022 as large number of shorebirds, including more unique species, were observed during the week leading up to the formal start of the program. As well, this would allow the Shorebird Counter/Educator to explore neighboring beaches to identify potential sites where people/shorebird interactions may exist. Consequently, funding should be sought for eight weeks of employment.
2. Should funding for the Counter/Educator not be received, the project should continue as in previous years with volunteer-based weekend counts as per the schedule in Table 2 (below).
3. The pre-project volunteer workshop and social media promotional efforts should be repeated.
4. The Shorebird Talk and Walk should be repeated with a second session to be added (see Table 2, below, for timing). Ways to improve the delivery to counter the noise and distractions should be investigated with the INP Manager.
5. The shift time should remain at 2½ hours with volunteers feeling free to spend more or less time meeting beach goers as conditions might dictate.
6. The shorebird census on the mudflats, marsh, eastern beach, and main beach should be repeated at a basic level with variables as reported in Appendix A to give some year-to-year comparability.
7. Pocket beaches around Taylors Island should continue to be checked after the beach counts despite the lack of use in 2022 as park visitors reported that these beaches have been used in past years.
8. The “Atlantic Flyway Shorebird Initiative” is focused on sites that host much greater numbers of shorebirds than is the case of the INP. However, it is recommended that the INP be entered on the AFSI “Story Map” to show that conservation and education work is underway at the site. The AFSI website offers “best practices” advice in areas such as public communications and signage (see recommendations 10 and 11 below).
9. The “Atlantic Canada Shorebird Survey” is conducted every five years and requires a minimum of 10 weekly visits to designated sites. It is recommended that we explore the opportunity of becoming a part of the survey if that role is not already being fulfilled by others. Also, we should ask if our data could be included.
10. Given the persistent conservation and public safety threats posed by unleashed dogs, it is recommended that we work closely with Nancy Perry, INP Manager, to identify interventions that might reduce the level of non-compliance of this key park rule. Acknowledging the understandable

reluctance of the INP to add more signage to the landscape, some ideas have emerged through ongoing discussions:

- a. add a smaller QR code sign to the already existing posts off the first parking lot and perhaps also halfway down near the road pull-off. Visitors could then scan the code for information about the birds and their conservation needs; this would then be information they could look back on at any point.
 - b. Work with INP on ideas for improving the visibility of dogs-on-leash signage.
 - c. Increase social media messaging to reenforce the park rule requiring dogs to be on-leash.
11. Tent signs with a very brief description of appropriate behavior could be placed on busy days when volunteers are on the beach. Ideal locations for these signs would be at the two parking lots, midway down the beach where a number of visitors enter off the road, off the Sheldon Point access trails and/or directly around large flocks of roosting shorebirds.

Table 2: 2023 Proposed SCEP Schedule

Dates	Activity
August 7-11	Counter/Educator to survey neighbouring beaches.
Sat., August 12	Shorebird Talk and Walk #1
Sun., August 13	Volunteers Training Session
August 14-18	Orientation and practice counting with Counter/Educator
August 19-20	Weekend 1 of engagement and counting
August 21-25	Week 1 of weekday counts
Sat., August 26	Shorebird Walk and Talk #2
August 26-27	Weekend 2 of engagement and counting
Aug. 28-Sept. 1	Week 2 of weekday counts
September 2-4	Weekend 3 of engagement and counting (incl Labour Day)
September 4-8	Week 3 of weekday counts
September 9-10	Weekend 4 of engagement and counting
September 11-15	Week 4 of weekday counts
September 16-17	Weekend 5 of engagement and counting
September 18-22	Week 5 of weekday counts
September 25-29	Counter/Educator report prep, data management, Administrative duties, SCEP post-project meeting
October 31	Completion of 2023 Annual Report with recommendations.

Recognition:

The Irving Nature Park Shorebird Project could not have happened without the contributions of:

- ⇒ Nancy Perry, Manager, and the Irving Nature Park staff
- ⇒ Adam Cheeseman, Lauren Verner and Nature NB staff
- ⇒ Vicki Cowan, President, the executive and members of the Saint John Naturalist Club
- ⇒ Jim Wilson (assisting in training).
- ⇒ Emily Williams, SJNC Shorebird Counter and Educator
- ⇒ Julie Bauer, Project Coordinator, Saint John Naturalists Club
- ⇒ The many volunteers who took the time (estimated at 139.5 hours) and interest to meet with park visitors and otherwise support the project (with apologies to anyone missed):
Vicki Cowan, Brian Comeau, Andrew Miller, Ashley Brown, Lauren Verner, Brigitte Green, Nancy Hamilton, Julie Bauer, Jan and Ray Riddell, Suzanne Bonnell, Chuck and Jeannette Perry, Maureen Boone, Renz Abuhan, Bernard Brideau, Gina Comeau, Jim Wilson, Hank Scarth.

Submitted by:

Hank Scarth, Project Coordinator

Appendix A
Data recorded on main section of Saint Rests Beach during 2022 Irving Nature Park Shorebird Conservation Education Project

Date	People on beach	People engaged	Dogs unleashed	Dogs on leash	Predators	SESA	LESA	SAND	SEPL	WRSA	Other	Unidentified shorebirds
Aug-26	25	8	0	1	3	54	2	4	62	0		140
Aug-27	52	17	4	11	2	325	150	13	50	0		0
Aug-28	65	55	3	4	4	12	13	0	4	0		25
Aug-29	60	19	0	6	1	80	140	3	5	2		0
Aug-30	30	11	4	4	0	32	230	3	3	2		2
Aug-31	0	0	0	0	0	130	30	0	20	0		400
Sep-01	15	5	3	1	0	5	183	2	0	0		0
Sep-02	33	12	1	2	0	52	105	0	6	0		40
Sep-03	45	18	4	9	2	265	145	0	7	0		280
Sep-04	40	21	1	3	2	515	130	315	18	3	1 REKN	200
Sep-05	17	16	0	2	1	824	111	8	81	2		90
Sep-06	5	3	3	1	2	532	180	1	18	0		20
Sep-07	8	4	2	1	2	2060	157	2	56	5		0
Sep-08	20	12	7	4	0	767	202	4	15	0	1 BBSA	25
Sep-09	10	5	2	4	1	41	268	2	17	0		0
Sep-10	22	6	0	1	0	58	97	2	28	1	1 BBSA	550
Sep-11	95	21	9	2	1	513	176	0	20	0		90
Sep-12	9	5	0	1	1	14	281	0	26	0	4 PESA	0
Sep-13	17	12	1	1	0	55	321	0	4	0	3 AMGP	0
Sep-14	12	4	1	2	1	13	380	0	35	0		0
Sep-15	7	2	0	1	1	18	168	0	29	1	1 BASA	2
Sep-16	20	6	1	1	0	22	88	0	19	2	1 PESA	0

Sep-17	43	34	0	7	1	12	36	1	18	0	0
Sep-18	46	34	0	9	1	12	35	0	28	1	22
Sep-19	7	1	0	0	0	31	1	0	7	0	0
Sep-20	0	0	0	0	0	229	0	0	7	2	0
Sep-21	6	3	3	2	1	2	2	0	0	0	5
Sep-22	5	3	0	4	0	6	2	0	10	1	0
Sep-23	15	5	1	2	2	27	18	0	2	0	8
Sep-24	15	0	3	0	0	0	0	0	7	4	1 AMGP
Sep-25	53	37	7	14	1	1	2	0	3	2	18
Sep-27	24	0	0	0	0	13	20	0	0	0	0
Sep-28	10	2	2	0	0	20	34	0	6	0	0
Totals	831	381	62	100							

AMGP – American golden plover
 BASA – Barids sandpiper
 BBSA – Buff-breasted sandpiper
 PESA – Pectoral sandpiper
 REKN – Red knot
 SAND – Sanderling
 SEPL – Semipalmated plover
 SESA – Semipalmated sandpiper
 LESA – Least sandpiper
 WRSA – White-rumped sandpiper

Appendix B Information Post Cards

Sharing beaches with shorebirds Mid-July to Mid-September



Hundreds of thousands of migrating shorebirds stop in the Bay of Fundy to eat and rest during their Fall migration from the Arctic to South America.

After a 21 day stay in the Bay of Fundy they fly non-stop over the ocean for 3 days.
They can't swim!

Our population has **dropped by over half** since the 1970s. **Please give us space to rest** on Bay of Fundy beaches!

Photo: Richard Stern

 
 SpacetoRoost

Developed with support from:
IBA Local Action Fund

Help shorebirds continue their migration

Shorebirds can't swim, so they must be well-rested and well-fed to fly 4,000 km non-stop over the ocean to their wintering grounds in South America!

What months are shorebirds present?

- Mid-July to mid-September (highest numbers in August)

When is shorebird resting time?

- 2 hours before to 2 hours after high tide (refer to tide chart on back side)

How do I view shorebirds safely?

- Use binoculars for a closer look
- Take photos with a telephoto lens

How do I avoid disturbing resting flocks?

- Stay as far away from flocks as possible
- Walk slowly when shorebirds are present
- Keep dogs on leash
- Explain to children why shorebirds need rest

What else can I do to help shorebirds?

- Keep beach litter-free (pack out used fishing line, hooks, bait, cans, bottles, plastics etc.)



Photos: Richard Stern, Louis Raines

