Shorebird Conservation and Education Project - 2024

Final Report – February 6, 2025

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 from 2021 through 2024. A professional Counter/Educator has been hired since 2022 to conduct education and detailed shorebird counts. In 2024, the project received funding support from the NB Wildlife Trust Fund, the NB Environmental Trust Fund, Birds Canada and private donors.

The project began on August 12 with training and orientation of Counter/Educator Paul Martin. It continued with a Volunteer Orientation and Training workshop on August 17 attended by 27 people. The session covered basic covered shorebird identification and life history as well strategies on how to positively engage with beach visitors. A public "Shorebird Talk and Walk", attended by nine participants, followed on August 24.

"Talk and Walk" participants

The three partners promoted the project through social media postings.

The project involved visits by a project record 29 volunteers (see Recognition, later in this report) to the Saints Rest Beach during the two-and-a-half-hour period around high tide on five consecutive weekends between August 24 and September 22. The volunteers, wearing blue volunteer "pinnies" and "Shorebird Conservation" caps, approached beach visitors and initiated conversations about the 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 A) was offered to each contact. Visitors were asked to detour quietly around the birds and

Volunteers ready to talk about shorebirds

to consider leashing their dogs. The lead volunteer on each shift counted the birds on the beach during the shift.

Signage was deployed on the beach during high tide periods. The signs alerted beach walkers of roosting shorebirds and reminded them that dogs must be on leash.

Photo: Nancy Hamilton

A Shorebird Counter/Educator was contracted to conduct weekday counts and to engage with beach visitors on the conservation needs of the shorebirds. The Official Counter/Educator, Paul Martin, conducted counts mainly between two hours before and two hours after high tide with the main areas of focus being the tidal flats, the marsh and the Saints Rest Beach. Wearing a blue "pinnie," and the Shorebird Conservation cap, the Official Counter/Educator recorded the birds observed in each of these areas while approaching beach visitors to educate them about the birds and the importance of allowing them to rest undisturbed.

Shorebirds stream past Paul Martin

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 species and numbers of shorebirds observed, and the number of predators observed. Any other birds observed were recorded 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. All counts were entered in eBird and, thus, are freely available to research and management institutions as well as the general public.

Volunteer participation was up significantly compared to previous years with a record 29 different volunteers visiting the beach on one or more occasions. The Volunteer Orientation also set a record with 27 attending. The Talk and Walk had lower than usual participation with nine participants.

Results and observations

In 2023, several beaches between Seeley's Cove to the west and St. Martin's to the east were surveyed to determine if they had appropriate roosting habitat and to assess their relative risk for human disturbance. From that survey, the beaches with the highest potential for hosting a roost site were visited this year at high tide during the peak of migration. See Appendix C for a summary of results.

A record total of 686 people (328 in 2021, 381 in 2022 and 373 in 2023) were engaged in shorebird conversations. Appendix D illustrates the numbers of beach visitors, people

engaged, dogs leashed and unleashed, as well as the data collected respecting the birds present and predators noted on the beach. The number of dogs recorded was 189 with 64 (33.8%) being off leash. This is a significant rebound from a record low of 18.6% in 2023 but still below the 37.5% average of off-leash dogs in the initial two years of the project. When dog owners were approached, many expressed knowledge of INP's requirement for dogs to be leashed or of the sensitivity of the wildlife to the presence of dogs. Others simply preferred to leash their dogs at all times. Participants feel that in addition to their efforts over the life of the project, the signage plays an important role in the reduction of off-leash dogs.

A number of new and emerging threats to shorebird conservation were noted in 2024.

Striped Bass angling: Local anglers have discovered that the beach is a good spot for fishing for Striped Bass. By the end of the SCEP timetable, as many as 15 anglers were present at high tides. Their preferred location is at mid-beach where most shorebirds roost, causing disturbance of the shorebirds. The anglers throw unused/stale bait and unwanted species on to the beach or into the water, attracting dozens of gulls. Gulls, while not usually direct predators of shorebirds, do significantly disturb roosting birds. There were also reports of shorebird mortality from colliding or entangling with fishing lines. Education efforts to date have not resulted in the anglers moving to areas of the beach where shorebird disturbance would be less likely as they state that their hooks are more likely to snag on rocks in those areas and that their fishing success would be less.

This situation puts the Shorebird Conservation and Education Project at risk as the public will note that the anglers are clearly disturbing the birds yet beach visitors are being asked to leash their dogs and avoid, or detour around, the roosting birds.

Kite flying: For the first time this year, there was a small number of kite flyers using large bird-shaped kites, suggesting that the popularity of this pastime may be on the increase. Kites clearly disturb roosting birds. When engaged by the Counter/Educator or volunteers, the kite flyers either moved to the ends of the beach away from the shorebirds or left the beach entirely

Drones: Only one incident of drone usage on the beach was noted and it is evident that drones do disturb the birds. It is felt that education efforts will be effective should this practice continue. Note that drone use in the INP is permitted only when approved in writing by the INP staff.

Instagram filming: While only witnessed once, running through the flocks of shorebirds to get video for social media postings is a direct harassment of roosting shorebirds. Education should be successful in nipping this activity in the bud.

Birding activity: There were some incidents where individual birders would "push" the birds in their efforts to get closer views or photos. There were also two reported incidents of ecotour and training groups stressing birds on the marsh side. Once again, education efforts by the Counter/Educator and volunteers as well as on social media should deter this practice.

2024 was an unusual year respecting the timing and numbers of birds present in the Irving Nature Park. On August 12, the first beach visit found some 4,000 peeps roosting on the Saints Rest Beach. In the four previous SCEP years, very small numbers of birds were encountered as late as the last week of August. Numbers remained high throughout August and September with the final count day (September 27) noting some 1,100 peeps on the beach.

The year saw very high levels of predator attacks with 38 of 42 days recording disturbance from predators. Peregrine Falcons were noted almost daily with frequent sightings of Merlins and Northern Harriers. Even the famed Herring Gull ("Herman") was seen to have successfully captured at least one shorebird, the first time recorded.

Peregrine Falcon in pursuit of a shorebird (photo: Hank Scarth)

Most visitors approached with information about the birds expressed enthusiasm and interest with only a few acting dismissively. Some visitors expressed knowledge of the need to respect the birds due to past contact with SCEP volunteers or having visited other sites around the Bay of Fundy where shorebirds stop on their migration. Of those spoken to by the Official Counter/Educator, only one person refused to divert around the roosting birds stating it was the easiest part of the beach to walk on. When the owners of unleashed dogs were approached, most would leash their dogs in response. Only one pair of dog owners refused, though they did so politely by simply ignoring the reminder that the INP required dogs to be leashed.

The SCEP database maintained by the SJNC of shorebird observations has been updated to include the numbers from this year. Also, all bird counts were recorded in eBird under the International Shorebird Survey so the data can be accessed by anyone working on shorebird conservation.

The Counter/Educator, Paul Martin, prepared a report describing the count areas, noting the average numbers of birds on the beach by week and presenting his findings and observations. It is included in Appendix E.

Past Counter/Educator, Emily Williams, worked with the data set to 1) overlay the number of peeps on the beach with the number of people on the beach and 2) to graphically display the numbers of birds by species on the Saints Rest Beach. The graphs are presented in Appendix F.

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. The following recommendations are offered:

1. Subject to the availability of a sufficient number of volunteers and funding for a weekday Counter/Educator, the project in 2025 should run for eight weeks as per Appendix D, "Proposed 2025 SCEP Schedule". Consequently, funding should be sought for eight weeks of employment.
2. Due to the very low numbers recorded on other Fundy north beaches, further assessment should not continue. Rather, SCEP volunteers and the Counter Educator will monitor eBird reports and investigate potential human disturbance on a reactive basis.
3. Should funding for the Counter/Educator not be received, the project should continue with volunteer-based public engagement and weekend counts as per the schedule in Appendix D.
4. The pre-project volunteer workshop should be offered a week later than past practice and should take place in the Irving Barn, if possible. The workshop should focus on the role of the volunteers (conservation exchanges with visitors), the Migration Story and the strategies of how to have positive encounters with visitors. That would be followed with a very basic introduction to the identification of the four most commonly sighted "peeps" observed on the beach.
5. Social media promotional efforts should be repeated by the partners. There should be a post-season analysis of the contact metrics to inform future promotional strategies.
6. The Shorebird Talk and Walk should be repeated. Promotion on the INP's social media sites may help boost attendance. The talk should focus on the migration story followed by a short introduction to the Shorebirds of the INP (e.g.: the 6-8 most common species seen in the park). The opportunity to become a SCEP volunteer should be highlighted.
7. 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.
8. The "post card" handout should be updated with current funders' logos and with a QR code linking to the Club's website (SCEP page and Species Overviews).
9. The shorebird census on the mudflats, marsh, eastern beach, and main beach should be repeated.
10. The shorebird count protocol should be updated with experience gained in 2024.
11. All count data should continue to be entered in eBird under the International Shorebird Survey tab.
12. Given the persistent conservation and public safety threats posed by unleashed dogs and other emerging issues, especially Striped Bass angling, we should seek a meeting with the INP Site Manager and Reg Woods, the Director or Partnerships and Engagement at JDI, to identify interventions that might reduce the conservation threats these practices pose.
13. Shorebird Conservation hats should again be provided to all volunteers should sufficient funding be received. The hats should feature new species and colour each year (effectively, a collector's item).

14. A new supply of pinnies should be secured including some “Small” and some “XXL” sizes.

Recognition

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

- ⇒ The 29 volunteers who took the time (estimated at 188 hours) and had the interest to meet with park visitors and otherwise support the project (with apologies to anyone missed):
  Nancy Hamilton (Lead), Brian Comeau (Lead), Jan and Ray Riddell, Audrey and Dick Peters, Sarah Aucoin, Vicki Cowan, Martina Toner, Brigitte Greene, Don Evans, Erin Brown, Mark Biddulph, Rebecca Rolo, Paul Mansz, Pat Rogers, Susan Sholly, Hari Shankar, Prince Thomas, Tanuja Balse, Maureen Boone, Paul Mansz, Ann McAllister, Emily Williams, Brie Blair, Heidi Hudson, Vincent Scully, Jay Mesereau and Hank Scarth (Lead).
- ⇒ Nancy Perry, Manager, Steph Rae and the Irving Nature Park staff
- ⇒ Adam Cheeseman, Lauren Verner, Vanessa Roy-McDougall and Nature NB staff
- ⇒ The executive and members of the Saint John Naturalists Club
- ⇒ The SJNC Shorebird Conservation and Education Project (SCEP) Committee: Emily Williams, Brigitte Greene, Nancy Hamilton Lauren Verner, Hank Scarth and ex officio members, Johanne McInnis, Kavitha Jagadeesan, Julie Bauer, and Paul Martin.
- ⇒ Environment and Climate Change Canada (Julie Paquet)
- ⇒ Birds Canada (Kelsey Butler)

Submitted by:

Hank Scarth, Project Chair

The 2024 Saint John Naturalists Club Shorebird Conservation and Education Project would not have been able to accomplish its full objectives without the funding support of private donors and the following organizations:

Appendix A

Information Post Cards

Appendix B
Data recorded on main section of Saint Rests Beach during 2024 Irving Nature Park Shorebird Conservation Education Project

Date	People on beach	People engaged	Dogs unleashed	Dogs on leash	Predators (incl Marsh & Beach)	SESA	LESA	SAND	SEPL	WRSA	Other	Unidentified shorebirds
16-Aug	40	33	4	3	1 MERL, 1 PEFA	0	0	0	323	2	1 GRYE	4000
18-Aug	77	38	0	9	1 MERL, 2 PEFA 1 HEGU	3850	140	6	565	0		0
20-Aug	24	6	0	2	1 BAEA	1292	47	3	208	1		20
21-Aug	75	52	3	12	3 PEFA , 1 OSPR	2366	78	0	112	6		0
22-Aug	50	42	4	7	1 OSPR, 3 PEFA 1 MERL, 1 NOHA	515	33	3	26	0		97
23-Aug	30	24	2	3	1 MERL, 2 PEFA 2 OSPR	599	88	0	10	0		1200
24-Aug	61	43	1	4	2 MERL, 2 PEFA	4500	400	3	75	20	3 RUTU	--
25-Aug	90	28	2	5	2 PEFA	1950	160	3	10	3		0
26-Aug	30	21	1	4	2 PEFA, 1 NOHA 2 OSPR, 1 BAEA	240	100	6	0	2	1 SPSA	50
27-Aug	25	22	4	2	2 PEFA, 1 NOHA 2 OSPR, 1 BAEA	974	42	4	15	0	1 BASA	150
28-Aug	6	6	1	2	1 PEFA	984	118	7	111	1		
29-Aug	56	53	1	4	1 PEFA, 1 MERL 2 NOHA, 1 BAEA 1 OSPR	237	106	0	15	0	2 PESA	130
30-Aug	16	10	1	2	2 PEFA, 1 NOHA 1 MERL	843	90	0	34	2		35
31-Aug	17	5	0	1	2 PEFA	850	50	7	40	3		1200
01-Sep	0	0	0	0	1 PEFA, 1 HEGU 1 BAEA	1100	150	3	15	1	4 BBPL	
02-Sep	70	28	9	4	2 PEFA, 1 BAEA 1 OSPR	2150	170	0	26	1		0
03-Sep	28	21	0	3	1 PEFA, 3 NOHA	1800	135	8	2	3		37

					2 BAEA, 1 HEGU							
04-Sep	9	5	1	4	1 PEFA, 3 NOHA 1 MERL	2860	260	1	7	0		
05-Sep	22	11	4	3	2 PEFA, 1 MERL 2 NOHA, 4 BAEA 1 HEGU	2370	284	11	47	1		
06-Sep	20	7	2	3	2 PEFA, 1 NOHA ! BAEA, 1 OSPR 1 HEGU	2800	500	3	7	1		445
07-Sep	--	--	--	--		--	--	--	--	--		--
08-Sep	35	21	1	3	0	3050	285	0	73	0	-	625
9-Sep	11	8	0	3	1 PEFA, 1 MERL 2 NOHA, 1 HEGU	3860	232	0	0	0		0
10-Sep	20	11	0	1	1 PEFA, 1 MERL 1 NOHA, 1 AMKE 1 HEGU	2780	256	0	10	1		0
11-Sep	6	3	0	1	1 MERL, 1 NOHA 1 HEGU	NC	NC	NC	NC	NC		
12-Sep	6	6	0	4	1 PEFA, 2 NOHA 1 MERL, 1 OSPR 2 BAEA, 1 CORA 1 HEGU	420	0	0	226	0		
13-Sep	4	4	2	1	2 PEFA, 1 NOHA 1 MERL, 2 AMKE 1 HEGU	3000	65	0	4	0		
14-Sep	16	4	3	5	1 PEFA	950	8	1	20	0	3 PESA	--
15-Sep	17	11	2	5	1 PEFA	350	6	1	18	2		--
16-Sep	9	4	2	2	2 PEFA, 1 NOHA 1 MERL, 1 OSPR 1 CORA, 1 HEGU	1152	84	0	18	0	1 DUNL	--
17-Sep	20	10	2	5	2 PEFA, 1 MERL	1016	160	5	63	3	3 DUNL	

					1 HEGU						1 AMGP 1 BASA	
18-Sep	17	9	1	4	1 PEFA, 1 NOHA 1 BAEA, 1 OSPR 1 CORA, 1 HEGU	604	58	5	63	3	1 DUNL 1 BBPL	160
19-Sep	30	12	1	0	1 PEFA, 1 OSPR 1 HEGU	937	189	0	198	4	3 DUNL 9 PESA	636
20-Sep	15	7	5	2	1 PEFA, 1 BAEA 1 HEGU	1032	191	3	262	4	7 DUNL 1 BBPL	
21-Sep	60	48	0	3		110	220	0	15	0		
22-Sep	63	37	0	5		675	150	0	25	0		
23-Sep	20	15	2	1	1 BAEA, 1 HEGU	622	36	1	136	2	5 DUNL 1 BASA	
24-Sep	20	11	0	2	1 NOHA, 1 HEGU	143	21	0	186	1		20
25-Sep	15	6	2	0	1 PEFA, 1 HEGU	598	1	3	157	0		146
26-Sep	5	0	0	0	1 BAEA, 6 HEGU 2 RBGU, 2 GBBG	774	0	2	247	1		108
27-Sep	6	2	1	1	1 PEFA, 1 BAEA 2 HEGU, 1 RBGU 2 GBBG	976	0	4	196	6	2 PESA	973
Totals	1141	686	64	125								

AMGP – American Golden Plover
AMKE – American Kestrel
BAEA – Bald Eagle
BASA – Baird's Sandpiper
BBPL – Black-Bellied Plover
CORA- Common Raven
DUNL – Dunlin
GBBG – Greater Black-backed Gull
GRYE – Greater Yellowlegs
HEGU – Herring Gull
LESA – Least Sandpiper
MERL – Merlin
NOHA – Northern Harrier
OSPR – Osprey
PESA – Pectoral Sandpiper
PEFA – Peregrine Falcon
REKN – Red Knot
RBGU – Ring-billed Gull
RUTU – Ruddy Turnstone
SAND – Sanderling
SBDO – Short-Billed Dowitcher
SEPL – Semipalmated Plover
SESA – Semipalmated Sandpiper
SPSA – Spotted Sandpiper
WRSA – White-rumped Sandpiper

Appendix C

List of Potential Roost Beaches Visited at High Tide in 2024

[1]Effective August 31, 2024

Beach	Rating	Date Visited	Observations
St. Martins Beach	19	Aug 23	No birds seen. Outer beach inaccessible due to tides
Bean Beach	14	Aug 19	65 peeps, 5 SEPL,3LESA,3SESA. Local indicates small roosting flock occ
Red Head Marsh Beach	17	Aug 19	No birds, perhaps wrong beach; check with Erin
Ferry Terminal Beach	15	Aug 19	Small busy beach. No birds
Bayshore Beach	15	Aug 19	Very busy beach. No birds. Potential at eastern end among birds/cobble
McLaren's Beach	14	Aug 21	Busy beach; scanned further to the east. No birds
Saints Rest Eastern Beach	19	Ongoing SCEP	Well known roosting beach
Saints Rest Beach	20	Ongoing SCEP	The primary known roost beach on the Fundy north shore
Saints Rest Marsh	14	Ongoing SCEP	Well known roosting area that has very low risk of human disturbance
INP Mud Flats Overlook	17	Ongoing SCEP	The primary known shorebird feeding area on the Fundy north shore
Lorneville Com. Ctr Beach	15	Aug 21	Small beach with exposed gravel; no birds
Dipper Harbour	17	No visit	The absence of birds elsewhere suggested low probability of finding roosts
Crow Harbour	15	No visit	The absence of birds elsewhere suggested low probability of finding roosts
Seeley's Basin	16	No visit	The absence of birds elsewhere suggested low probability of finding roosts
Seeley's Cove	15	No Visit	The absence of birds elsewhere suggested low probability of finding roosts

[1] In 2023, Counter/Educator Erin Brown, visited the beaches and assigned scores of 1-10 relative to a) suitable habitat for roosting shorebirds and b) degree of risk for human disturbance. The rating is derived by combining the two scores.

Appendix D

2025 Proposed SCEP Schedule

Date	Activity	Comments Times indicated on weekends are the start times for the 2 ½ hour shifts
August 11	Shorebird Counter/Educator begins	
August 11-15	Orientation and practice counting	
Sat. August 16	Volunteer Orientation and Training	10:00 – INP Barn
August 18-22	Week 1 of weekday counts/edu	
Sat. August 23	Shorebird Talk and Walk	10:00 for 11:44 tide
August 23-24	Weekend 1 of beach coverage	10:30-13:00, 11:15-13:45
August 25-29	Week 2 of weekday counts/edu	
Aug. 30-31, Sep 1	Weekend 3 of beach coverage	15:15-17:45, 16:15-18:45,17:45-19:45
September 1-5	Week 3 of weekday counts/edu	
September 6-7	Weekend 3 of beach coverage	9:15-11:45, 10:00-12:30
September 8-12	Week 4 of weekday counts/edu	
September 13-14	Weekend 4 of beach coverage	14:15-16:45, 15:30-18:00
September 15-19	Week 5 of weekday counts/edu	
September 20-21	Weekend 5 of beach coverage	09:30-12:00, 10:15-12:45
September 22-26	Week 6 of weekday counts	
Sept. 30-Oct. 4	Wrap up of reports, data mgmt., etc.	

Appendix E

Shorebird Conservation and Education Project - 2024

Report of Paul J. Martin, Counter/Educator

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, 2022 and 2023.

The Count Areas:

Shorebird census was broken into counts of certain habitats and how each habitat's bird population consisted during the hours around high tide. Counts were conducted mainly between 2 hours before high tide, high tide and 2 hours after high tide.
The main areas of focus: the mudflats for incoming tide or outgoing tide, the marsh, and the beach during the high tide cycle.
Certain locations with each of these habitats experienced varying population frequencies, not only during different points in the tidal cycle but also as the season progressed.All counts were entered in eBird and, thus, were available to the Canadian Wildlife Service for the Atlantic Canada Shorebird Survey and the International Shorebird Survey.

The Beach

The beach starts at the edge of Taylor Island and continues up towards Sheldon Point, but for our purposes we will slice the beach into 2 sections, one being the Main Beach from the parking lot close to Taylor Island to the flags parking lot and the 2nd section from the flags parking lot traveling 1km up the beach towards Sheldon Point where at high tide you cannot pass beyond a rock outcropping. This section of beach will be labelled the East Beach. In total 7 weeks of counting from August 12th to Sept 27th occurred with average numbers for each species below;

1. SESA 2400, LESA 122, SEPL 150, WRSP 2, Peeps 4000, HUGO 1, PEFA 2, BAEA 1, OSPR 2, HERG 3,RTLO 1, COEI 1, DCCO 8
2. SESA 1587, LESA 209, SEPL 80, SAND 3, WRSP 7, Peep Sp. 1592, SPSA 2, RUTU 3, SBDO 1, PEFA 2, MERL 1, OSPR 1, HERG 3, RBGU 2, AMCR 3

3. SESA 786, LESA 84, SEPL 24, SAND 6, WRSP 2, Peeps 331, SBDO 1, BASA 1, BBPL 4, PEFA 2, MERL 1, NOHA 2, OSPR 2 (Sat 10), HERG 3, RBGU 3, TUVU 1, AMCR 2
4. SESA 2137, LESA 233, SEPL 28, SAND 4, WRSP 1, DCCO 4, SNEG 1, WHIM 1, GREG 3, PESA 1, PEFA 2, NOHA 1, BAEA 1, HERG 3, RBGU 4
5. SESA 1893, LESA 114, SEPL 13, SAND 1, WRSP 2, Peeps 1350, DCCO 1, COLO 1, PESA 4, RUTU 1, BBSA 1, PEFA 2, HERG 2, RBGU 3,
6. SESA 632, LESA 145, SEPL 95, WRSP 3, DUNL 7, Peeps 415, DCCO 2, CAGO 12, RTLO 1, BBPL 1, GBHE 1, BASA 1, AMPI 4, HOLA 6, COEI 7, PEFA 1, HERG 3, RBGU 2, GBBG 2, Gull sp 30
7. SESA 817, LESA 15, SEPL 161, SAND 6, WRSA 6, DUNL 22, Peeps 271, RTLO 1, COLO 1, DCCO 1, BBPL 4, BEKI 1, PESA 2, SOSP 2, PEFA 1, NOHA 1, HERG 7, RBGU 5, GBBG 2, AMCR 2

A) Main Beach

The main beach has a key area for roosting Semipalmated Sandpipers and Least Sandpipers, mainly found within the center section of the beach with a good portion of cobblestone which the birds utilize for protection. Many of the bird species, especially the Semipalmated Sandpipers clustered in large numbers within the center of this area vs. the Least Sandpiper which were spread throughout the cobblestone and upper beach sections amongst the seaweed as well.

B) East Beach

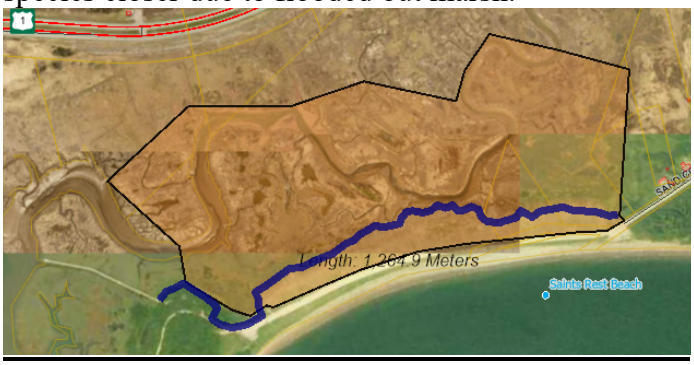
The East Beach is more frequented by Semipalmated Plovers and Sanderlings which would move up and down along the beach section. During the month of September as there were more juvenile birds present the East end of this beach had larger numbers of Semipalmated Sandpipers, Semipalmated Plovers, and a number of Dunlins present. Speculation on the main beach being used by fisherman as Striped Bass were more frequent is a possible explanation.

The Boardwalk

During the census it was found that within a 3-hour window of pre high tide the boardwalk became a good place to count the peeps as they moved from the mudflats to the marsh and beach areas. Large numbers of peeps would fly directly over the boardwalk and counts of the birds from this location added up closely to the same numbers of the birds found on the beach sections at high tide. The first set of seats on the boardwalk where the interpretive sign is located is a good position for the census count, at end of count cycle moving to the end of the boardwalk to get a count of birds located on river and across from boardwalk within the marsh area.

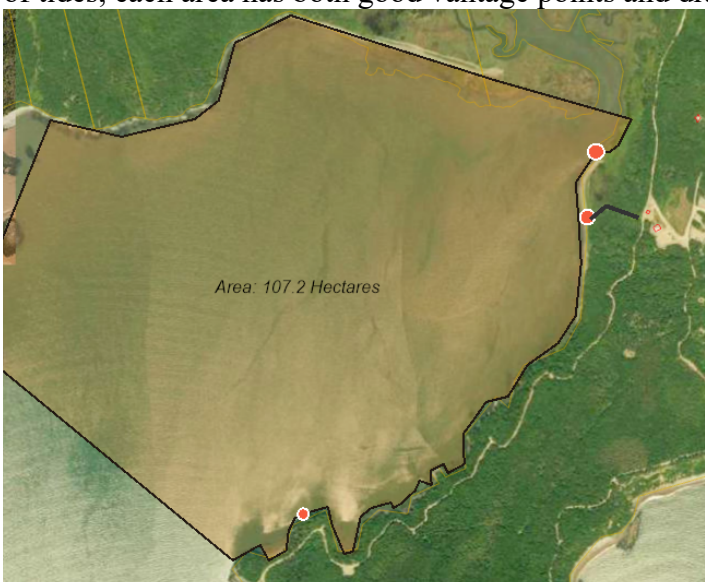
The Marsh

The marsh, located parallel to the beach is a 1km walk through short grass, gravel and at points close to the river. It has an abundance of tidal pools and viewpoints that allow for both visual and audio census of the birds found within the marsh. The tidal cycle when at 7.5 to 8.5m makes traversing the marsh more difficult but will also draw many of the bird species closer due to flooded out marsh.



The Mudflats

The mudflats are a 120ha area to the West of Taylor Island in which the majority of the shorebirds traverse to as the tide recedes to feed on the mud shrimp and other crustaceans and creatures which inhabit the area. There are 3 key points in which have been used to do the census of birds of this habitat, the first is a bench on the Seal Trail, the 2nd being where the cobblestone beach ends at the marsh opposite of the berm that separates the marsh from the tidal mudflats, and the 3rd is an overlook that is halfway out on the mudflats and gives a good view of the overall area. Depending on time of day and level of tides, each area has both good vantage points and drawbacks.



A) The Bench

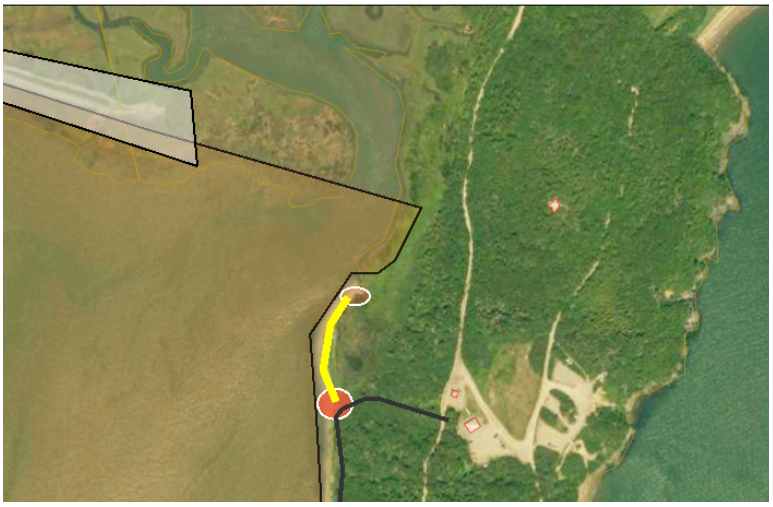
The bench is located directly on the Seal Trail and overlooks a portion of the mudflats allowing the counter to see both sides of the mudflats from the river with a higher vantage point then that of the beach opposite the berm. This location gives a good view of the area of the mudflats directly beside the Seal Trail as well as a higher view of the point out from the berm. The drawback depending on viewpoint is the interaction with the general public, since it's on the trail system you will get people stopping to ask about the counts, what's out there and how you do the census. Public education is important but it can take away from accuracy of census if trail is busy with people.

Mudflats The Bench

B) The Beach Opposite the Berm

At the beginning of the count, this point has a definite advantage as birds begin to arrive and are feeding where the river meets the tidal flats, it is close to the berm which is where most species of birds congregate at the start of receding tides. It allows for bird identification but as the tide moves out it becomes less active as the birds move further into the mudflats and are more difficult to ID.

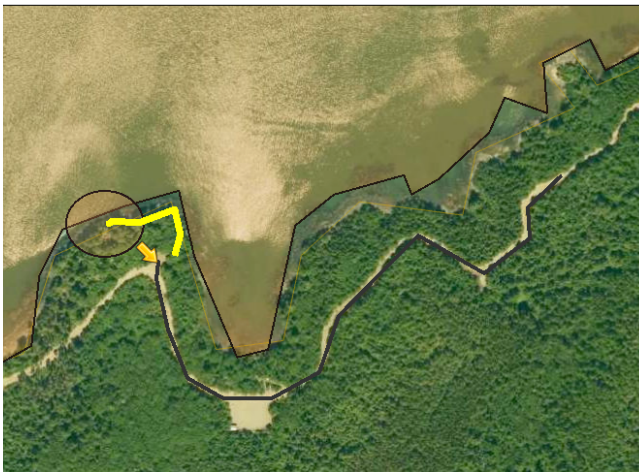
Mudflats The Beach opposite the berm



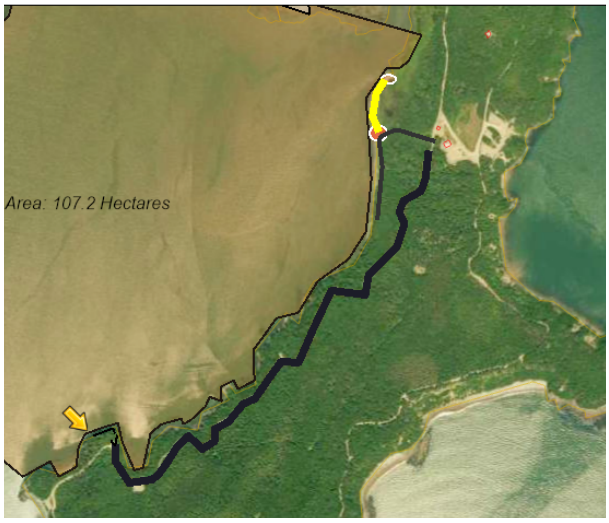
C) Midway Section Lookout

This vantage point allows for a good overall view of most of the mudflats, it's close to the main channel and many of the species feeding at certain points are close enough for positive ID. Since it's further out in the mudflats, the counter has more time to spend at other locations till they need to set up at this view station. From here you not only get an overall good picture but can identify some key areas of the mudflats that are more actively used by the birds. The drawback is on days when the park is closing near time of mudflat counts, the distance to this location and parking aren't practical as the mudflat counts are close to sunset.

Mudflats Midway Section Lookout



Mudflats Midway Section Lookout



Engagement with Public

Education is the key to impacting the birds in a positive way, the more information on shorebird migration, shorebird populations and the overall issues with climate change and its effects on bird populations the more the general public will want to become invested in the birds' future. The signage placed on the beaches 2 hours before high tide till 2 hours after high tide make an impact on those who utilize the beaches. Many people have mentioned seeing the signs and beginning to understand the importance of giving the shorebirds space while sharing the beach.

A) General Public

During the 6 weeks the counter/educator connected with between 30 to 170 people a week on the beach and boardwalk explaining why the shorebird are here, where they came from, as well as where they are flying to, the distance to travel as well as the difficulties with migration. Also sharing the importance of becoming involved in conservation and success stories, like those of the Bald Eagle, Osprey and Peregrine Falcons. It should be noted that most had a positive view towards conservation efforts and there were many who after learning the importance of sharing the beach chose not only to give the birds distance but to educate others that were walking along the beach.

B) Dog Owners

Over all most dog owners had a positive view on the issue of sharing the beach with the shorebirds, many of the dog owners recall the efforts from previous years of the work about shorebird conservation and the importance of allowing space for the birds on the beach. Many of who either took their dogs down the East beach where there was less bird activity or chose to change direction when getting close to roosting birds.
I witnessed some dog owners after talking with me approach other dog owners and point out the birds and then point in the other direction upon leading them away from the roosting birds. There was a small number of negative dog owners and a few who were indifferent about the issue, but I believe as the numbers grow with people who care and make an effort to share the beach with the birds, giving them space the attitude of those who are indifferent will change. Public opinion is a strong motivator of change, and this a good reason to continue and step up education about shorebirds and conservation efforts.

C) Anglers

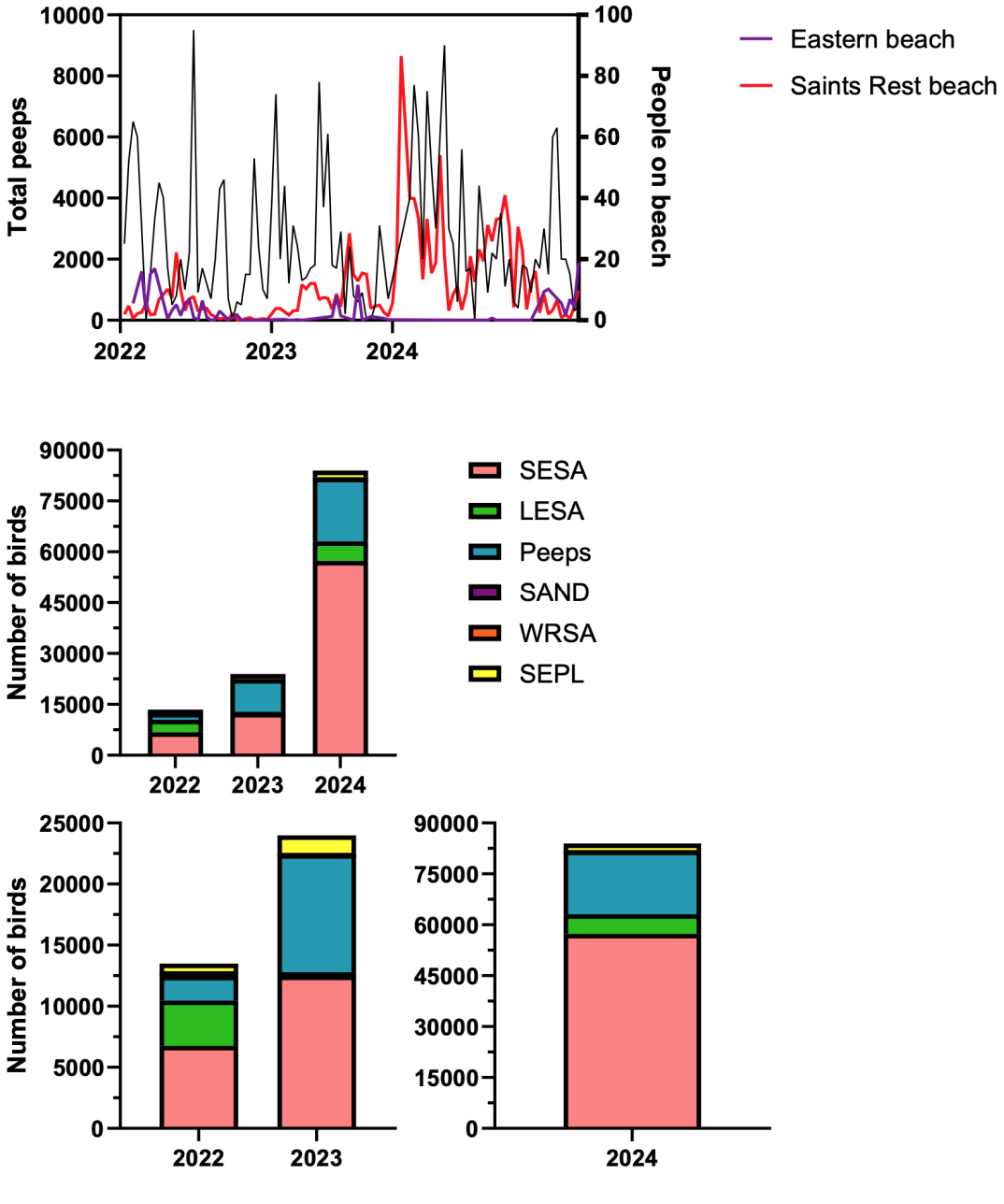
A difficult issue is the anglers on the beach, Irving Nature Park is known for opening up the park to all users free of charge to enjoy a piece of nature within the boundaries of the City of Saint John NB. The anglers are often at the beach during the month of September, they are there to fish Striped Bass, and it's at high tide along the same stretch of beach that the birds use. There are a couple of issues, one is the cut bait they use as it attracts a large number of gull species which are detrimental to the shorebirds as gulls will also prey on the weaker sandpipers. The fishing lines are another hazard, as the birds fly along the shoreline, there is the possibility of entanglement with the fishing lines. We had an individual share about saving a bird that was fetched up in one of the fishing lines and I've had fishermen tell me they have witness birds flying into their lines but continuing along in flight. The question of the fishing line harming the bird as it comes into contact with it is an unknown. The third issue which I noticed on a couple of occasions is the number of anglers on the beach at high tide, at times up to 9 individuals,

but most often it's 5 individuals. I've had a couple explain to me that the reason they don't tend to move up the East beach is because there are more rocks which cause their lines to snag. There's been the question raised if Irving should choose to post no fishing as it's a conservation park, or limit the times to fish which likely would be during the Striped Bass movements.

D) Kite Flyers

On our first visit to the beach Hank Scarth and Paul Martin witnessed a number of large kites being flown along parts of the beach as there are no trees or wires to hamper the kites flight. The issue is raised that A] the shadow/ silhouette of the kites may disturb the roosting sandpipers and B] the guide wire for the kites might be harmful for birds in flight. We approached the owners of the Kites and they were willing to move down the beach towards areas less frequented by the birds which is helpful and a sign that education and choices in sharing the beach are important and that positive influence is the best path moving forward in conservation. I had the opportunity to witness this after talking to some people about the importance of giving the birds space, I then watched as they talked to kite flyers further down the beach about the birds and then all of them moved down towards the parking lot side of the beach away from the birds.
A question to pose to Irving Nature Park is the possibility to posting a scheduled time where kite flying is limited or not allowed on the beach, e.g. the months of August and September while the birds are roosting. It brings about the question of roping off part of the beach, like the cobblestone section in the middle and limits everyone from using that part of the beach in those months.

Appendix F


Total peeps
People on beach
Eastern beach
Saints Rest beach
Number of birds
SESA
LESA
Peeps
SAND
WRSA
SEPL
2022
2023
2024