

Healthy Beaches and Dunes for Tomorrow

A Stewardship Guide for Nova Scotia Landowners





Healthy Beaches and Dunes for Tomorrow

By Sue Abbott, Bird Studies Canada

Bird Studies Canada is a national not-for-profit organization dedicated to advancing the appreciation, understanding and conservation of Canada's wild birds and their habitats.

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Cover: Roseway Beach, NS
Photo: Linda Ross

Inside Cover: North Harbour, NS
Photo: Bird Studies Canada





Port Joli, NS
Photo: Andy Dean

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BIRD STUDIES
ÉTUDES D'OISEAUX CANADA



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Stewardship = Caring for the land and its resources, like animals, plants, water, soil, or dunes, in a responsible way to ensure that natural, healthy systems are passed on to future generations.

Sandy beaches and dunes are important economic, ecological and cultural resources. This guide will help you protect your valuable asset, whether you own, care for, or visit a sandy beach property.

GETTING STARTED

Economic, Cultural and Environmental Assets

Beaches and dunes are among the most beloved coastal features in Nova Scotia. They have played an important role in our province's cultural history and economy. The Province of Nova Scotia manages hundreds of beaches, many of which have special designations as Provincial Parks and Protected Beaches. However, most of Nova Scotia's 6,000 kilometers of coastline is privately owned. Beaches and dunes are dynamic features that provide habitat for plants and wildlife – some of which are now rare. For example, the endangered Piping Plover, once common on Nova Scotia's beaches, now numbers only about 40 breeding pairs.

Making a Difference

Beaches and dunes face growing pressures from development, recreation and climate change. More than ever, wise stewardship is needed on private and public lands. Luckily, there are landowners who are working hard to keep beach systems healthy and protect sensitive plants and wildlife.

This guide is part of a series of stewardship guides for Nova Scotians and is a resource for anyone who owns or cares for a beach and dune property. Other guides in this series are available on-line (visit www.speciesatrisk.ca). The stewardship tips outlined are based on the best existing knowledge at the time of printing and are subject to improvements as management goals change and new research comes to light. All activities are subject to provincial and federal legislation (see Resource section for links to legislation).

Being a Wise Steward Makes Sense

We are faced with many decisions when it comes to caring for homes and properties. Becoming a wise steward of your land just makes sense, as you will add value to your land in many ways for years to come. Your actions can make a difference both on your land and on adjacent coastal areas of Nova Scotia.

| Value-added by Wise Stewardship | Description of Benefits |
|--|---|
| Enhanced property value | <ul style="list-style-type: none"> • Reduced need for costly shoreline protection. • Reduced erosion and property damage. • Improved natural properties, like views, that are attractive to potential buyers. • Clean drinking water. |
| Flood buffers | <ul style="list-style-type: none"> • Intact dunes protect against storms and sea level rise. |
| Healthy habitats for plants and wildlife, both common and uncommon | <ul style="list-style-type: none"> • Rich web of plants, fish and other wildlife thrive on natural dunes and beaches. • Improved habitats for species at risk helps their populations recover and prevents common species from becoming endangered. |
| Community building | <ul style="list-style-type: none"> • Practicing wise stewardship shows your commitment to conservation to your family, friends and community. • Allows others to enjoy beaches and dunes in their natural state. |

What's Inside this Guide?

Stewardship Goals and Tips for Healthy Beaches and Dunes

- Specific actions that work toward three important goals:
 - 1) Protect and maintain natural beach and dune features.
 - 2) Support healthy habitats for plants and wildlife.
 - 3) Track and share the results of your stewardship actions.
- Profiles of Beach Stewards in Nova Scotia.

Resources

- Background information on:
 - 1) Value of beaches as cultural, recreational, economic, and environmental assets.
 - 2) Physical processes that shape beaches and dunes.
 - 3) Common plants and wildlife that depend on healthy beaches and dunes.
- Internet Resources



Beach Pea
Photo: Brennan Coverhill

YOU CAN HELP

This section lists over twenty stewardship tips to help you reach three goals for your land. Beside each tip you will see one or more symbols that represent the three stewardship goals (shown below).

Some of these tips may be easy to do on your land while others may not be possible at this time. However, every step towards stewardship is an important one and this guide can be used as a tool when making future decisions on your land. Follow your progress over time by using the checklist at the back of the guide.

Stewardship Goals for Healthy Beaches and Dunes



Protect and maintain natural beach and dune features.



Support healthy habitats for plants and wildlife.



Track and share the results of your stewardship actions.



Keep houses and other built structures safe from flooding and wave damage by building well back from beaches and dunes and preferably on higher ground.

Areas near the high tide mark are not safe for permanent structures. Many parts of Nova Scotia's coast are at high risk of flooding because of the combined impact of our 'sinking' coastline and rising global sea levels.¹ To ensure your house and buildings have a long life, plan for increased numbers of storms and higher water levels caused by storm surges and rising sea level. See Resources section of guide and check with your municipality about local building regulations.



Keep shorelines "soft."

Maintain natural shorelines that support native beach and dune plants and avoid using hard materials like rocks or cement as 'armour' against erosion. Visit Living by Water (www.livingbywater.ca) for more information.



Avoid building docks.

Docks can negatively affect natural sand movement and can actually increase scouring and erosion where the structure attaches to sandy ground. If you need a dock, you can reduce impacts by following dock building recommendations (see Resources section of guide). In Nova Scotia, a permit is required from the Department of Natural Resources for any structure below the "ordinary high water mark."



Set aside foot traffic-free zones on beaches and dunes and always use a boardwalk or established path when accessing the beach.

Wildlife breed, rest and feed in these areas and flightless young birds may be hidden in dune plants or well camouflaged on the open sand (see photo). Reducing foot traffic decreases erosion and protects plants and wildlife from trampling and disturbance. Dunes grass traps sand, so reducing trampling helps protect the dunes.



Flightless tern chick
Julie McKnight/
Environment Canada

¹ Natural Resources Canada (http://gsc.nrcan.gc.ca/coast/index_e.php)



Reduce the number of access paths to the beach.

Work with neighbours towards sharing a single boardwalk or trail for the beach.



Choose a simple, non-permanent path to access the beach.

Boardwalk or trail? A simple, well-marked trail doesn't require much maintenance and can work well if the beach is accessed by your family and a few guests. Boardwalks require regular maintenance, but may be the best choice for providing beach access to people in wheelchairs or larger groups (e.g., multiple families and guests). If a boardwalk is needed, choose a non-permanent design that can be removed in sections. Removing and storing sections of boardwalk before fall and winter storms will increase their life and allow your dunes to move and change naturally over time. A good source of information on design and materials for boardwalks or trails through dunes is the British Trust for Conservation Volunteers' (BTCV) "Sand Dunes: A Practical Handbook" (see Resources section of guide).



Place your boardwalk or trail to reduce unnatural dune erosion and minimize disturbance to sensitive plants and wildlife.

Poor placement of access paths can funnel high water through gaps in dunes and can lead to increased flooding of the backshore and accelerated dune erosion. Direct the end of your access boardwalk or trail away from prevailing winds and waves to avoid creating unnatural channels that can funnel high water and winds.² Take advantage of natural 'anchors', like boulders, to support the end of your boardwalk and reduce dune erosion. Poor placement can also lead beachgoers directly into sensitive plant or wildlife areas and damage plants along dunes. Contact Bird Studies Canada for more information about beach-nesting birds in Nova Scotia (see Resources section of guide).



Ensure your septic system is installed and working properly.

Consult Nova Scotia Environment for regulations concerning septic tanks. You may be eligible for a free assessment (see Resources section of guide).

² "Sand Dunes: A Practical Handbook" (BTCV)



Reduce night lighting.

Unshielded and bright lights can cause light pollution. Light pollution reduces access and enjoyment of the night sky, and can disrupt natural patterns in wildlife (see Resources section of guide).



Avoid attracting predators by reducing potential food sources.

1) If composting on site, use a secured and covered compost bin and minimize odors that can entice predators to the area; 2) safely dispose of garbage and, when possible, remove marine waste that washes up on the beach; 3) use bird feeders that have enclosed seed dispensers; and 4) do not feed other wildlife.



Leave natural debris and dismantle driftwood structures on the beach.

Seaweed and driftwood on the beach trap sand for young dunes and provide habitat for the invertebrates that birds like to eat. Human-made driftwood structures, including forts and posts, create unnatural perches on the beach that predatory birds use to spot and kill wildlife.



Protect native plants.

Long-term health of dunes, including their stability, depends on the presence of native plants. Some exotic (non-native) plants can compete with and even choke out native species. If landscaping on your property, choose native plants that are adapted to shifting sands and salt spray.



Walk on wet sand May through August.

Terns, Piping Plovers, and Spotted Sandpipers lay their well-camouflaged eggs on the dry open sand between the high tide mark and dunes and are, therefore, vulnerable to foot traffic. See illustration below and learn more about beach birds in the Resources section of this guide.

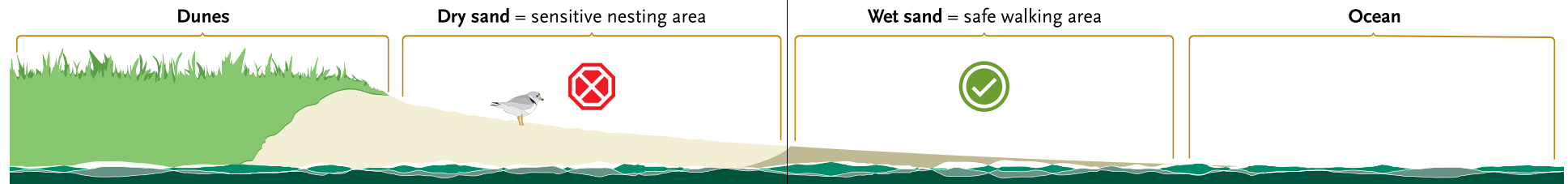


Illustration: Stephen Sharkey-Chouinard



Carefully time property maintenance.

Conduct maintenance from September through March when most coastal birds have finished breeding (see Resources section of guide).



Do not drive motorized vehicles on beaches and dunes and report violations.

Fines for driving on a beach or dunes in Nova Scotia can be up to \$2000. Vehicles harm the dune structure, plants and wildlife. Vehicles have crushed Piping Plover eggs, chicks and adults. Report violations to NS Department of Natural Resources hotline: 1 (800) 565-2224.



Vehicle Damage to Dunes
Photo: Bird Studies Canada



Check first before setting off fireworks or lighting bonfires on the beach.

From May through August, avoid explosive noises from fireworks and beach parties that may cause Piping Plovers and other birds to abandon their breeding sites. Some beach sites require a permit for campfires and fireworks. Contact your local Department of Natural Resources office to find out whether these activities are both safe and legal on your beach (find office contacts at www.gov.ns.ca/natr/staffdir/offices.asp).



Keep pets under control: respect leash regulations and keep cats indoors.

Harassment of wildlife is illegal in Nova Scotia. Report problems to the NS Department of Natural Resources hotline: 1(800) 565-2224. Roaming cats can kill birds and other wildlife. See “Regulations” in the Resources section of this guide.



Walk around rather than through nesting and feeding wildlife.

Hundreds of thousands of birds depend on beaches and mudflats for resting and feeding during their migration to and from northern breeding and southern wintering grounds. Many shorebird species are in decline. Causing birds to fly can reduce their valuable energy reserves. Learn more about beach bird life in the Resources section.

Marine mammals, in particular harbour and grey seals, use beaches as places to rest. Seals can bite and should not be approached, moved or fed. Report visibly injured or dead marine mammals to the Marine Animal Response Society hotline (1-866-567-6277) and visit their web site for more tips (www.marineanimals.ca).



Report oil or other pollution.

Report incidents to the Environmental Emergencies Reporting Centre: 1 (800) 565-1633. Check your beach regularly for oiled birds by conducting Beached Bird Surveys (see www.birdscanada.org/volunteer/acbeachbird).



Record the presence or absence of plants and wildlife during the year.

To help you track changes on your land, keep a list of the plants and wildlife that visit your beach during different times of year. Use the Resources section of this guide, field guides, or ask knowledgeable experts if something appears that is unfamiliar to you.



Report Piping Plovers and other interesting observations.

Send your observations or questions to nsplovers@gmail.com and sightings@speciesatrisk.ca.



Organize other beach community members in stewardship activities.

Help ensure the long-term health of your beach and dunes. Form a beach stewardship group made up of other landowners or caretakers. Consider becoming a Guardian at your beach (contact nsplovers@gmail.com).



Contact us to discuss your ideas for beach and dune stewardship at nsplovers@gmail.com.



A walk on the beach with friends.
Photo: Linda Ross

Profiles of Beach Stewards in Nova Scotia



May (Doiron) Bouchard

Pomquet Beach, Antigonish Co.

“Pomquet Beach would not be the same if those little birds weren’t scurrying along in front of walkers at the water’s edge.”

Pomquet Beach is embraced by the passionate Acadian community of Pomquet founded by

five families, one of which was the Doiron family. May (Doiron) Bouchard recalls how each family would take turns bringing their cows to Pomquet Beach to forage on beach grasses and berries. The weekend tradition was a lobster boil picnic on the beach. In 1981 the families cooperated to sell their land to the provincial government, which led to the future establishment of Pomquet Provincial Park and the resulting protection for the plants and wildlife. The Piping Plover is a symbol of hope to the community and has been adopted as the school mascot. Though the beach is owned and managed by the Province through the Department of Natural Resources, the community continues to have a strong sense of ownership and pride for its natural treasures: “Ça nous appartient.”



Shirley & Bert MacKenna
Crow Neck Beach, Shelburne Co.

“The Piping Plovers have enough natural enemies – they don’t need human enemies.”

Located on arguably one of the wildest, most remote peninsulas of Southwest Nova Scotia,

Shirley and Bert truly love their property on Crow Neck and have even come to love the fog! They have become stewards of their beach and dunes, and Shirley admits that their presence has made “a huge difference” for the plovers. On his walks, Bert always collects trash on the beach, which helps control predator populations (e.g., crows and skunks). Shirley notes a large decrease in the number of off-highway vehicles trespassing and driving illegally on the beach. She also sees more people showing respect for the beach. They recommend to other landowners: “Be aware and do what we’ve done. Look at your options.”



Natasha Poirier
Fox Bar Beach, Shelburne Co.

“They don’t give up and neither should we in protecting them.”

Natasha has owned her beautiful land at Fox Bar for seven years. Natasha has been an active volunteer Piping Plover Guardian for over

five years, volunteering her time to help monitor breeding Piping Plovers and share information with her neighbours and other beach goers. Driven by a sense of responsibility, Natasha wants to see the plovers thrive at Fox Bar until they are ready to leave for their long migration south. In recent years, she has noticed that people are more respectful when they visit the beach. She recommends: “Be cautious and show respect for the environment and wildlife. Think about what you wouldn’t want done to you and then reciprocate.”



Wild Roses
Photo: Andy Dean

RESOURCES ON BEACHES & DUNES

Valuable Places

Beaches and dunes are special features of Nova Scotia’s coast that support livelihoods and perform essential functions for human, plant and wildlife communities. Beaches have significance for diverse aspects of our society, including:

- Recreation: Walking, swimming, sunbathing, beachcombing, surfing, kite boarding, birding, paddling
- Fisheries: Clamming, Irish mossaing
- Culture: Art, spiritual retreats, vistas and viewsapes, traditional coastal access
- Economy: Tourism, local businesses, birding
- Ecological Services: Flood barriers, biodiversity, erosion control



Surfers
Photo: Bird Studies Canada

The Ecology Action Centre explores the values and other important aspects of beaches in a series of reports available on their web site.

Interested in Learning More? Visit www.ecologyaction.ca/content/coastal

Dynamic Landscapes

Beaches and dunes are dynamic landscapes that are constantly adapting to changing environmental conditions. Beaches consist of deposits of sand and gravel (sediment) supplied from cliffs, shores and sea floor by waves, ocean currents, wind and occasionally sea ice. Dunes develop where sand is abundant and winds are strong enough to blow sand on and along the shore. Beaches and dunes are interconnected with the land behind them. Barrachois (brackish ponds) and salt marshes are common features behind beaches and dunes. These coastal wetlands are essential nurseries for fish and wildlife.

We are fortunate in Nova Scotia to have different types of sandy beaches, such as sand spits and barrier beaches. The natural processes that shape beaches change over the years and even between seasons. For example, beach width changes seasonally, often narrowing in winter when storms erode sediment and widening during summer when 'constructive' waves transport sand back onshore. Over time, a sandy beach can change to gravel, making your favourite swimming beach rougher on your feet. The sand may not have disappeared; rather, it may be 'in storage' where you cannot see it. Sand can be stored underwater in offshore sand bars or in dunes and may return to the beach over time given the right wave conditions.

Much of Nova Scotia's coast is moving landward, or 'sinking', due to local geologic forces and global sea level rise. Exposed tree stumps in the lower beach or nearshore, called "drowned forests," are living examples of shorelines

that are moving landward (see photo on left).

Where abundant sediment is supplied to a shore it can build seaward, despite rising sea levels, and provide a natural defense for land owners against the sea. Sediment from a shore cliff, bank or river supply many beaches and natural pathways must be maintained to ensure the sediment reaches the beach.

Natural Resources Canada's web site explores the dynamics of Nova Scotia's coast.

This tree stump is now below the high water mark.
Photo: Natural Resources Canada



Mixed flock of resting shorebirds.
Photo: Hans Toom

Productive Habitats

Nova Scotia's beaches and dunes support diverse life from hardy plants to nesting birds and loafing marine mammals. Most beach-dependent plants and wildlife have special adaptations that allow them to thrive on shifting sands. Many more drop by during different stages of the year and life cycle. This section includes information and species profiles about:

Common plants that grow on:

- Open sand of the beach
- Dunes
- Salt marsh edges

Common wildlife that are:

- Breeding on open sand of beaches
- Breeding on dunes and along salt marsh edges
- Breeding in burrows in dunes
- Migrants found on beaches and salt marsh edges
- Winter residents found on beaches and dunes
- Visitors on beaches and dunes

Interested in Learning More? Visit www.gsc.nrcan.gc.ca/coast

Common Plants

■ = flowering period, as described in *Roland's Flora of Nova Scotia*

| | J | F | M | A | M | J | J | A | S | O | N | D |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Open sand of the beach | | | | | | | | | | | | |
| Seabeach sandwort <i>Honckenya peploides</i> | | | | | ■ | ■ | ■ | ■ | ■ | | | |
| Dusty miller* <i>Artemisia stelleriana</i> | | | | | | | | ■ | | | | |
| Sea-rocket <i>Cakile edentula</i> | | | | | | ■ | ■ | ■ | | | | |
| Dunes | | | | | | | | | | | | |
| Beach grass (marram) <i>Ammophila breviligulata</i> | | | | | | ■ | ■ | ■ | ■ | | | |
| American dune grass <i>Leymus mollis</i> | | | | | ■ | ■ | | | | | | |
| Beach pea <i>Lathyrus maritimus</i> | | | | | | ■ | ■ | ■ | | | | |
| Bayberry <i>Morella pensylvanica</i> | | | | | ■ | | | | | | | |
| Common wild rose <i>Rosa virginiana</i> | | | | | | ■ | | | | | | |
| Wild morning glory <i>Calystegia sepium</i> | | | | | | ■ | ■ | | | | | |
| Seaside goldenrod <i>Solidago sempervirens</i> | | | | | | ■ | ■ | ■ | | | | |
| Salt marsh edges | | | | | | | | | | | | |
| Sea-milkwort <i>Glaux maritima</i> | | | | | ■ | ■ | | | | | | |
| Cord grass <i>Spartina species</i> | | | | | | | ■ | ■ | | | | |
| Glasswort <i>Salicornia species</i> | | | | | | | ■ | ■ | ■ | | | |
| Sea-blight <i>Suaeda species</i> | | | | | | | ■ | ■ | ■ | | | |

*Exotic species



Beach grass (marram)
Photo: Bird Studies
Canada

Beach grass (marram) (*Ammophila breviligulata*)

What? Grass, 20-60 cm tall

When? Year-round, flowers July to September

Where? Dunes

Value-added: Helps stabilize dunes, which act as flood barriers.

Stewardship tip: Beach grass can survive under a meter of sand, but cannot tolerate intense recreational activities. Minimize foot traffic and keep vehicles off dunes.



Sea-Rocket
Photo: Bird Studies
Canada

Sea-rocket (*Cakile edentula*)

What? Herbaceous plant, 1-2 ft tall, with purplish pink flowers

When? Year-round, flowers July to September

Where? Open sand

Value-added: Provides cover for young Piping Plover chicks; seeds are food source for songbirds.

Stewardship tip: This plant grows well in areas with moving sand. Avoid permanent structures on beaches that may restrict sand movement.



Piping Plover chick among sea-rocket
Photo: Hans Toom

Wildlife

The following information on wildlife is compiled from a variety of sources, including: Susann Myers; *The Birds of Nova Scotia* by R.W. Tufts, *Nova Scotia Birds* by J. Domm, and NS Department of Natural Resources.

 =Breeding activity  =Feeding and resting

| | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Breeding on open sand of the beach | | | | | | | | | | | | |
| Common Tern | | | | | | | | | | | | |
| Arctic Tern | | | | | | | | | | | | |
| Spotted Sandpiper | | | | | | | | | | | | |
| Piping Plover | | | | | | | | | | | | |



Piping Plover family
Photo: Linda Ross

Piping Plover (*Charadrius melodus melodus*)

What? Migratory shorebird and endangered species in Canada and Nova Scotia

When? Mid-April - September

Where? Breeds and forages on open sand.

Value-added: Successfully breeding Piping Plovers on your beach can indicate a healthy beach. Plovers feed on sand flies that can annoy beach goers.

Stewardship tip: Eggs and flightless young are sensitive to disturbance. Follow actions outlined in this guide to protect their breeding and foraging habitats.

Nova Scotia supports about 40 pairs of breeding Piping Plovers – well below the recommended target of 60 pairs.

| | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Breeding in dunes and salt marsh edges | | | | | | | | | | | | |
| Willet | | | | | | | | | | | | |
| Nelson's Sharp-tailed Sparrow | | | | | | | | | | | | |
| Savannah Sparrow | | | | | | | | | | | | |
| Song Sparrow | | | | | | | | | | | | |



Nelson's Sharp-tailed Sparrow
Photo: Hans Toom

Nelson's Sharp-tailed Sparrow (*Ammodramus nelsoni*)

What? Migratory sparrow and Partners in Flight "Watch List Species"

When? June-October

Where? Dunes and salt marsh edges.

Value-added: Eats insects on and around your land; its unique 'hissing' song will provide great enjoyment.

Stewardship tip: Set aside trample-free areas in salt marsh and dunes May through August to reduce disturbance during breeding season.



Song Sparrows may hide their nests in grasses or shrubs in the dunes.
Photo: Hans Toom

| | J | F | M | A | M | J | J | A | S | O | N | D |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Breeding in burrows in dunes | | | | | | | | | | | | |
| Bank Swallow | | | | | | | | | | | | |
| Red fox | | | | | | | | | | | | |



Bank Swallow
Photo: Hans Toom

Bank Swallow (*Riparia riparia*)

What? Migratory bird in decline and Partners in Flight “Special Stewardship Species”

When? May-October

Where? Nests in burrows in cliff faces of dunes.

Value-added: Eats pest insects, like mosquitoes.

Stewardship tip: Set aside trample-free zones that protect dunes and dune cliff faces from disturbance.



Red Fox
Photo: Hans Toom

Red Fox (*Vulpes vulpes*)

What? Resident mammal

When? Year-round (raises young April until fall)

Where? Dens in dunes.

Value-added: A healthy fox population is an important part of a balanced ecosystem and keeps small mammals under control.

Stewardship tip: Maintain healthy populations by keeping garbage covered and not feeding wildlife. Though foxes are natural predators, their populations may become out of balance if food is readily available.

| | J | F | M | A | M | J | J | A | S | O | N | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Migrants found on beaches and salt marsh edges | | | | | | | | | | | | |
| Great Blue Heron | | | | | | | | | | | | |
| Semipalmated Plover | | | | | | | | | | | | |
| Black-bellied Plover | | | | | | | | | | | | |
| Greater Yellowlegs | | | | | | | | | | | | |
| Whimbrel | | | | | | | | | | | | |
| Ruddy Turnstone | | | | | | | | | | | | |
| Sanderling | | | | | | | | | | | | |
| Dunlin | | | | | | | | | | | | |
| Semipalmated Sandpiper | | | | | | | | | | | | |
| Least Sandpiper | | | | | | | | | | | | |
| Short-billed Dowitcher | | | | | | | | | | | | |



Sanderling with fall/winter plumage
Photo: Hans Toom

Sanderling (*Calidris alba*)

What? Migratory shorebird in decline

When? August-October (stragglers possible in winter)

Where? Feeds and rests on open sand and water edge.

Value-added: Shorebird migration, a natural spectacle, is enjoyed by many.

Stewardship tip: Walk around rather than through flocks of shorebirds. Sanderlings may spend winters on NS beaches. Keep an eye out for them year-round and share sightings with others.



Sanderling with spring/summer plumage
Photo: Hans Toom

Environment Canada’s Canadian Shorebird Conservation Plan outlines the threats and declines facing many shorebird species, including Sanderling.

Interested in Learning More?
Visit www.cws-scf.ec.gc.ca/mbc-com

| | J | F | M | A | M | J | J | A | S | O | N | D |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Winter residents of beaches and dunes | | | | | | | | | | | | |
| Purple Sandpiper* | | | | | | | | | | | | |
| Savannah "Ipswich" Sparrow | | | | | | | | | | | | |
| Snow Bunting | | | | | | | | | | | | |
| Lapland Longspur | | | | | | | | | | | | |

*Found mostly on rocky shores



Snow Bunting
Photo: Hans Toom

Snow Bunting (*Plectrophenax nivalis*)

What? Migratory songbird and Partners in Flight “Special Stewardship Species”

When? October-March

Where? Feeds and rests in dunes and on open sand.

Value-added: One of the few songbirds found on our beaches and dunes in winter.

Stewardship tip: Protect dunes and dune plants that buntings depend on for cover.

| | J | F | M | A | M | J | J | A | S | O | N | D |
|--------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Visitors on beaches and dunes | | | | | | | | | | | | |
| American Crow | | | | | | | | | | | | |
| Herring Gull | | | | | | | | | | | | |
| Great Black-backed Gull | | | | | | | | | | | | |
| White-tailed deer | | | | | | | | | | | | |
| Harbour seal* | | | | | | | | | | | | |
| Grey seal* | | | | | | | | | | | | |

*Seal pups more commonly seen during these periods

Internet Resources

Boardwalks and Dune Management

British Trust for Conservation Volunteers “Sand Dunes: A Practical Handbook”
(<http://handbooks.btcv.org.uk/handbooks/index/book/137>)

Sustainable Living on the Coast

Living By Water (www.livingbywater.ca)

Bluenose Coastal Action’s Watershed Wisdom Guide (www.coastalaction.org)

Green Shores (www.greenshores.ca)

The Lake Huron Centre for Coastal Conservation (www.lakehuron.ca)

Starry Night Lights - Light Pollution (www.starrynightlights.com/lpIndex.html)

Storm Impacts, Coastal Change and Sea Level Rise

Natural Resources Canada (http://gsc.nrcan.gc.ca/coast/index_e.php)
and (<http://atlas.nrcan.gc.ca/site/english/maps/climatechange/potentialimpacts/coastalsensitivitysealevelrise>)

Nova Scotia Regulations Pertaining to Beaches & Dunes

NS Beaches Act (www.gov.ns.ca/legislature/legc/statutes/beaches.htm)

NS Wildlife Act (www.gov.ns.ca/legislature/legc/statutes/wildlife.htm)

NS Off Highway Vehicles Act

(www.gov.ns.ca/legislature/legc/statutes/offhighw.htm)

NS Environment Act (www.gov.ns.ca/legislature/legc/statutes/envromnt.htm)

See also Ecology Action Centre’s “Navigating the Maze,” a guide to regulatory agencies and regulations for coastal Nova Scotia.

(www.ecologyaction.ca/content/coastal-issues-committee-publications)

Wildlife and Plant Resources

Bird Studies Canada - NS Piping Plover Conservation Program
(www.birdscanada.org/volunteer/nsplover)

NS Department of Natural Resources (www.gov.ns.ca/natr/wildlife)

Environment Canada Species at Risk Public Registry (www.sararegistry.gc.ca)

Marine Animal Response Society (www.marineanimals.ca)

Cats Indoors (www.abcbirds.org/abcprograms/policy/cats)

Nova Scotia Wild Flora Society (www.nswildflora.ca)

Dock Resources

NS Department of Natural Resources

(www.gov.ns.ca/natr/land/policybeforeyoubuild.htm)

Department of Fisheries and Oceans “Dock Primer”

(www.dfo-mpo.gc.ca/regions/central/pub/index-eng.htm)

Septic System Resources

Clean Nova Scotia (www.clean.ns.ca)

NS Environment Wastewater On-site Sewage Disposal Systems

(www.gov.ns.ca/nse/water/wastewater.asp)

Educational Resources

The Living Beach by Silver Donald Cameron

(www.silverdonaldcameron.ca/livingbeach.html)

Nova Scotia Birds by Jeffrey C. Domm

(www.formac.ca/show_category.php?id=34)

Beach and Dune Habitat Stewardship Partners

Canadian Parks & Wilderness Society (www.cpawsns.org)

Cape Sable Important Bird Area

Ecology Action Centre (www.ecologyaction.ca)

Environment Canada’s Canadian Wildlife Service (www.cws-scf.ec.gc.ca)

Natural Resources Canada-Atlantic

(http://gsc.nrcan.gc.ca/org/atlantic/nscoast_e.php)

Nature Conservancy Canada (www.natureconservancy.ca)

Nova Scotia Department of Natural Resources (www.gov.ns.ca/natr)

Nova Scotia Nature Trust (www.nsnat.ca)

Parks Canada Agency (www.pc.gc.ca)



Stewardship Tips

- Keep houses and other built structures safe from flooding and wave damage by building well back from beaches and dunes and preferably on higher ground.
- Keep shorelines “soft.”
- Avoid building docks.
- Set aside foot traffic-free zones on dunes and beaches and always use a boardwalk or established path when accessing the beach.
- Reduce the number of access paths to the beach.
- Choose a simple, non-permanent path to access the beach.
- Place your boardwalk or trail to reduce unnatural dune erosion and minimize disturbance to sensitive plants and wildlife.
- Ensure your septic system is installed and working properly.
- Reduce night lighting.
- Avoid attracting predators by reducing potential food sources.
- Leave natural debris and dismantle driftwood structures on the beach.
- Protect native plants.

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-    Walk on wet sand May through August.
 -    Carefully time property maintenance.
 -    Do not drive motorized vehicles on dunes and beaches and report violations.
 -    Check first before setting off fireworks or lighting bonfires on the beach.
 -    Keep pets under control: respect leash regulations and keep cats indoors.
 -    Walk around rather than through nesting and feeding wildlife.
 -    Report oil or other pollution.
 -    Record the presence or absence of plants and wildlife during the year.
 -    Report Piping Plovers and other interesting observations.
 -    Organize other beach community members in stewardship activities.
 -    Contact us to discuss your ideas for beach and dune stewardship at nsplovers@gmail.com.



Photo: Andy Dean



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ÉTUDES D'OISEAUX **CANADA**



Shell Environmental Fund
411 million and growing!

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Contact Us: www.birdscanada.org • nsplovers@gmail.com • 1 (888) 448-2473