

Land Stewards

Number 3, July 2000



A Newsletter for Private Land Owners Protecting Natural Areas in Nova Scotia

INSIDE:

Lands & Legacies Update	2
Introduction to the Nova Scotia Nature Trust	2
Upcoming Walks	3
New Donations	3
New Easements in Progress	3
Woodland Wisdom	4
Nova Scotia's Forests - Then and Now	5
Plover Report	5
Sweet Pepperbush	6
Nationally rare plants being monitored by landowners	7
Stewardship Agreement Holders	8



NOVA SCOTIA NATURE TRUST

Lands and Legacies Update

The second year of the Nova Scotia Nature Trust's five-year province-wide "Lands & Legacies" project wrapped up this Spring. We've had a busy year! Fourteen new sites were identified, including two Piping Plover beaches, seven old forest sites, and five coastal plain flora sites.

Twenty-six landowners of two provincially significant Piping Plover nesting beaches on Cape Sable Island, Nova Scotia, were contacted by the Nova Scotia Nature Trust. The majority of these landowners were visited, and made aware of the plight of this nationally endangered shorebird. Landowner response was very positive, with six landowners entering into Stewardship Agreements with the Trust, and two receiving Plover Steward Awards.



Douglas and Eva Stoddart receiving a Stewardship Award

Thirty-eight landowners in seven regions with outstanding forests were visited, including French River and Indian River in northern Cape Breton; Island Point, on the Bras D'or Lakes, Wentzell, Dauphinees Mill and Houghton Lakes, Lunenburg County; and Big Indian Lake, Halifax County. We spent a good deal of time in the woods with landowners, and we have more visits to do yet. Many expressed concern for Nova Scotia's forests and wildlife habi-

tat, and are doing their own part to be good stewards of the land.

We had great hopes of contacting more landowners of significant old forests. Unfortunately, clearcutting is happening at such a phenomenal rate across the province that many of our prospective sites had been cut within the past 10 years. With the disappearance of old growth forests, we are witnessing the loss of a vital part of the province's natural heritage, from healthy salmon rivers, to habitat for flying squirrels, owls, wood ducks, and many many others.

Five new sites with coastal plain plants were selected for landowner outreach work last summer. In total, thirty-seven landowners were contacted. This included Baccaro Bog, with the endangered Thread-leaved Sundew; Barrington Lake, with a rare Spikerush and many uncommon Bladderworts; and Pretty Mary.

Mudflat and Mill Lakes, with the nationally threatened Sweet Pepperbush. We spent a great afternoon canoeing on Barrington Lake with Lillian Perry, and another afternoon learning about local lore from the Luxtons on Mill Lake. Many thanks to Jack Duggan and to Barbara and Gordon Cantley for helping spread the word about the Sweet Pepperbush and for keeping an eye on the plants.

We were very pleased with the reception we were given by landowners, and by the good sense of stewardship adopted by many. Thank you!



Lillian Perry and Minga O'Brien, Barrington Lake, July 1999.

Introduction to the Nova Scotia Nature Trust

The Nova Scotia Nature Trust works with private landowners to protect significant natural areas throughout the province. The Nature Trust was incorporated in 1994 as a non-government charitable organization, and a designated conservation organization under the provincial Conservation Easements Act of 1992. To achieve our goal of protecting natural areas in Nova Scotia, the Nature Trust pursues land ownership, conservation easements, and cooperative agreements with landowners.

Though still a young organization, the Nova Scotia Nature Trust has already made important progress. We have acquired several properties through generous donations from landowners. These protected areas range from woodlands and islands to coastal and lakeshore properties. They preserve unique and significant natural features including old forests, wetlands and rare plant communities.

Upcoming Walks

Ellenwood Lake Provincial Park – Join the Nova Scotia Wild Flora Society with enthusiastic naturalist Carl Munden for a guided walk of this lovely area to identify the interesting and rare coastal plain plants in the park. **Saturday, August 5 @ 1 PM.** Inquire at the gatehouse for the meeting place.

Pleasant River/Shingle Lake – Please join noted botanist Nick Hill for a walk in the Pleasant River area to see several rare coastal plain plants, including Long's Bulrush, Goldencrest, and Swamp Milkweed. Cosponsored by the Blomidon Field Naturalists and the NS Nature Trust. **Saturday, August 5 @ 10 AM.** Meet at the church at the corner of the New Elm Rd. and Highway 208.

Wilson Lake Reserve – Local naturalist Carol Jacquard will be leading a walk along the shores of Wilson Lake to help interested landowners identify the rare and beautiful coastal plain plants that may be growing on their shoreline. Cosponsored by the NS Wild Flora Society and the NS Nature Trust. **Sunday,**

August 6 @ 10 AM. Meet at the carpool parking lot at Exit 33 off Hwy 103.

Tusket River Nature Reserve – Biologist Dave MacKinnon of the Department of Environment's Protected Areas Division will lead a short walk for all ages to the Tusket River Nature Reserve. Come learn about the rare and endangered coastal plain plants left behind after the last ice age. **Saturday, August 12 @ 1 PM.** Meet at the Ultramar station, Exit 33 (Tusket) off Hwy 103.

Birds of Cape Sable – Join local naturalist Murray Newell to see the shorebirds along Southside and between The Hawk and Cape Light. Here's your opportunity to distinguish plovers from sandpipers and rails from herons! **Sunday, August 20 @ 7:30 AM.** Meet at Tim Hortons, Barrington Passage.

Panuke Lake Old Growth – Come join biologist Dave MacKinnon and the Nova Scotia Nature Trust for a guided walk through the lush old growth spruce forests of the Panuke Lake Nature Reserve. **Sunday, August 27 @ 1 PM.** Meet outside the Sobeys in Tantallon (Exit 5 off Hwy 103).

New Donations

Several new donations of land to the Nova Scotia Nature Trust have occurred over the past year. These include:

- Two hundred acres of woodlands on Aylesford Mountain, donated by Mildred Clem. This property has some older forests, mixed forests, as well as a ravine and a brook.
- An 11-acre property situated on one of the last undeveloped headlands on the

south shore and a highly scenic area enjoyed by many Nova Scotians. This property was given jointly to the NS Nature Trust and the Kingsburg Coastal Conservancy.

- A spectacularly scenic 40-acre property on Aspy Bay, Cape Breton. The property includes a rugged headland, a barrier beach and pond, as well as woodlands.

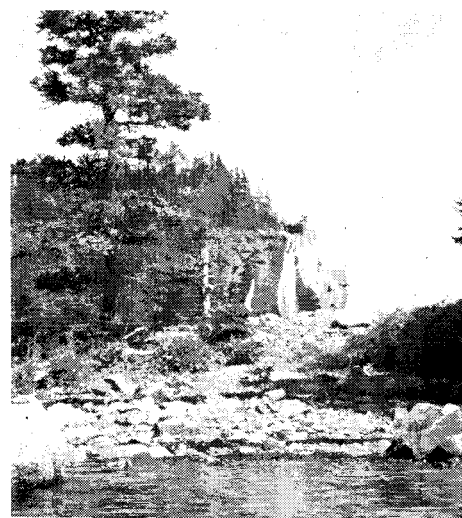


Gaff Point, Lunenburg County



Yellow Head, Aspy Bay

New Easements in Progress



- Martin Rudy Haase, founder of "Friends of Nature", is donating a conservation easement for four islands at the mouth of Ship Harbour: Ship Rock Island, Upper Tickle Island, Lower Tickle Island, and Moose Island. The islands total approximately 40 acres in size, are covered by spruce/fir forests, and will remain undeveloped.

Woodland Wisdom

Did you know tropical birds visit your woodland every year?

This may come as a surprise to you, but many of the birds that nest in NS during the summer are actually tropical species.

A few examples are Hummingbirds, Warblers, and Falcons. Many of these birds are under increasing stress because their wintering areas in the south and their nesting areas in the north are being cut down.

Birds and other animals that require older forests, such as barred owls, martens, and salamanders, are the ones facing the most stress and some populations have been greatly reduced.

Your woodlot may provide habitat for rare orchids...

Many species of orchids grow in NS!

Most species are uncommon because they require very specific habitat. Often, rich moist shady areas, found in



photo by Bob Bancroft

hemlock groves or sugar maple and other hardwood forests, contain many interesting plants.

Many of these plants are threatened because the forest types where they live are becoming rarer each year.

Perhaps you have some of these plants and animals on your woodlot.

Do you want to protect these plants and animals?

One way to begin protecting these sites is to get more information on things you can do to help.

True, old growth forests are now exceedingly rare in Nova Scotia. However there are still a number of areas - albeit threatened - that have many characteristics of old growth forests, but aren't quite there yet. If left alone, they too can once again become old growth. Alternatively, small changes in the way you harvest can make a big difference to the plants and animals living on your woodlot, without drastically affecting your use of the area.

The following features indicate good habitat for animals and plants dependent on older forests:



photo by Bob Bancroft

- cool shaded forest floor
- many big trees, alive and dead
- nesting holes in trees
- large sized tree trunks lying on the forest floor
- presence of long-lived trees, such as hemlock, white pine, red spruce, sugar maple and yellow birch



Do you have these features on your woodlot?

If you want to know how to protect them, please call the Nova Scotia Nature Trust today!



Over the past 300 years, most of Nova Scotia has been logged and/or cleared for agriculture. Consequently, our forests are generally young, and lack many of the features of older forests. They are also a lot shorter than they once were. Prior to clearing and settlement by Europeans, massive white pines dominated the forests of this province, reaching heights of 30 metres (100 feet) in some places, even 45 metres (150 feet) in a few particularly fertile sites. If you consider that a one-story apartment is roughly 3 metres in height, 30 metres is equivalent to an apartment building ten-stories high! It's difficult to believe, but there were once pine trees in Nova Scotia as high as a fifteen story apartment building.

The Table below indicates the size that many of our native trees can attain.

Tree species	Height	Diameter (or Width)
White Ash	25m*	1.5m**
American Beech	25m	1.0m
White Birch	25m	0.4m
Yellow Birch	25m	0.6m
Eastern Hemlock	30m	1.2m
Red Maple	25m	0.6m
Sugar Maple	30m	0.75m
Red Oak	30m	1.2m
Red Pine	25m	0.75m
White Pine	45m	1.2m
Black Spruce	30m	0.6m
Red Spruce	35m	0.6m
White Spruce	25m	0.6m

* for comparison, 3 metres in height = roughly one story

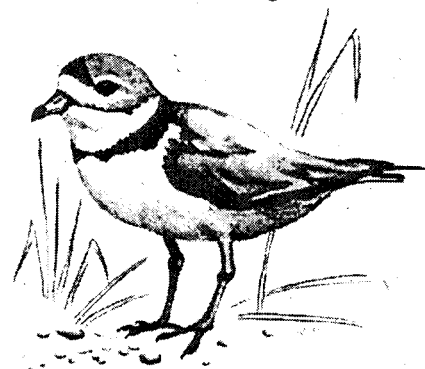
** for comparison, 1m in width = roughly five times the width of this page

Plover Report

Landowners along the Hawk and Southside beaches on Cape Sable Island, Shelburne County, were visited last summer and fall. Both these beaches are used by Piping Plovers for nesting and rearing young. These small shorebirds lay their eggs directly on the sand on the upper limits of sandy beaches - the same sandy beaches popular with recreationalists, beach goers, and developers. As a direct result of these pressures and competition for space, Piping Plover populations have plunged to an all time low across their range.

In all, twenty-five landowners from Cape Sable Island were contacted. We had many friendly and interesting visits: from Leslie and Lois Smith, with a budgie bird sitting on Leslie's head and Lois with her keen knowledge of local history, to Roxanna and Dennard Nickerson and their 'wildlife' park. We were delighted to learn more about the history and wildlife of this unique area of the province.

Six landowners opted to enter into voluntary Stewardship Agreements with the Trust, and two received Plover Steward Awards. For those who may have forgotten, a Stewardship Agreement is a verbal, non-binding agreement between a landowner and the Nature Trust, whereby the landowner agrees to continue to do no damage to the significant natural area, to notify the Trust if they decide to sell the property.



Piping Plover *Charadrius melodus*

(continued on page 7)

Sweet Pepperbush

Many landowners visited last summer were pleased to find out they have a nationally threatened shrub residing along their lakeshore. For many, the sweet scent of the Sweet Pepperbush flowers was a familiar fragrance associated with 'summers on the lake'.

Unbeknownst to them, they were having a unique experience for cottagers in Nova Scotia. In fact, Sweet Pepperbush - formally known as *Clethra alnifolia* - can be found on a very small handful of lakes in southwestern Nova Scotia, including Belliveau Lake, Digby County, Pretty Mary, Mill and Mudflat Lakes in Annapolis County, and Canoe Lake, Yarmouth County.



Barabara and Gordon Cantley, of Pretty Mary Lake, receiving a Stewardship Award from Karen Potter, NSNT

Sweet Pepperbush was only discovered on Pretty Mary, Mill and Mudflat Lakes as recently as two years ago, when Lesley Rogers, formerly with the Nova Scotia Nature Trust, was paddling about in a canoe on Mill Lake, enjoying a relaxing day off. Towards the middle of the lake, near a small island, she detected a sweet scent, and paddled over to the island to investigate. The small island was covered in Sweet Pepperbush shrubs in flower. She had an inkling there was something unusual about the shrubs, and brought a small sample into the Museum of Natural History, where



photo by Oliver Maas

it was confirmed that she had discovered a previously unknown population of Sweet Pepperbush in Nova Scotia. Follow-up field work led to further discoveries of the shrub on Pretty Mary and Mudflat Lakes. In fact the latter, Mudflat Lake, which is less developed than Pretty Mary, has the greatest abundance of Sweet Pepperbush, with a nearly continuous distribution of the shrubs around the perimeter of the Lake.

Sweet Pepperbush belongs to a group of plants known as the coastal plain flora, whose origins began in Nova Scotia during the last ice age. With millions of tons of water locked up in ice, sea levels were much lower, and a land bridge exposed between southern Nova Scotia and New England. Coastal plain plants spread across the land bridge, and by the time the glaciers melted and sea levels rose once more, they had become established in Nova Scotia. Today, they hang onto existence along the shores of lakes and rivers, in bogs, and elsewhere.

Remaining populations are vulnerable to disruptive activities like land clearing for cottages, docks and artificial beaches. The more fragile coastal plain plants can be destroyed by trampling and by ATV (all-terrain vehicles) use along exposed shorelines.

Due to its very limited distribution in Canada, and the threats to its ongoing survival, the Sweet Pepperbush was recently listed as "Vulnerable" by the provincial Endangered Species Act.

What you can do to help protect the Sweet Pepperbush:

- > Leave your shoreline intact, and if that's not possible, try to restore shoreline habitat by letting trees and shrubs regenerate
- > Build your cottage away from the lakeshore
- > Show others what Sweet Pepperbush looks like, and what threatens it

How to identify Sweet Pepperbush:

One of the easiest ways to distinguish this shrub from other similar-looking shrubs is by the dried out, brownish-gray flower stalks standing erect on the plant since the previous year. As the summer progresses, these old stalks are replaced by fresh fragrant clusters of white flowers. The leaves are bright green, toothed around the edges, and pointed at the tip.



Nationally rare plants being monitored by landowners

May 2000

Donald Sam

The group of plants known as 'coastal plain flora' has many species which are considered to be at risk within Canada. Notable coastal plain plants include Plymouth gentian, Pink coreopsis, Virginia meadow beauty, Panic grass, and Dwarf chain fern. In south west Nova Scotia, the gently sloping cobble lakeshores of many local lakes, such as Wilson's, Bennetts, and Gillfillan offer perfect conditions for these plants. However, activities such as lakeshore development, beach clearing, ATV riding along lakeshores, damming and illegal dumping threaten the survival of these distinctive lakeshore flowers.

The Nature Trust's "Coastal Plain Stewards" project has landowners monitoring the health of plant populations during the flowering season (July - August) on various lakes. Last summer, Nature Trust staff instructed local landowners on how to monitor rare plants on their own property. Information gained from this project will help conserve the region's unique coastal plain flora.

"I don't know where to step, now that I can recognise some of the rare plants on my beach," said one landowner, following the demonstration session. "I feel honoured to have these plants in my

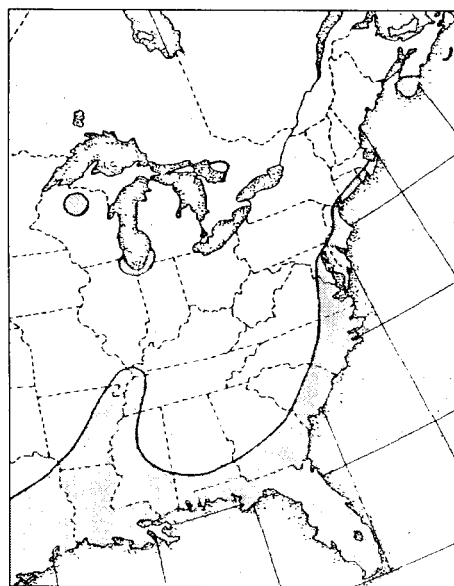
backyard," commented another, "and I'm going to do my best to make sure they have a place to grow."

To date, landowners are monitoring plants on Gillfillan, Wilson's and Barrington Lakes. The Trust is seeking additional monitors for these lakes, plus others in the Tusket River area. Those interested in contributing to the project can contact the Nova Scotia Nature Trust at 425-5263.



Newly trained coastal plain monitors: L-R: Lillian Perry, Joanna Newell, and Judy and Roland Frotten

Distribution of Atlantic coastal plain species in North America, including Nova Scotia, Sable Island, part of Wisconsin and an area around Lake Michigan.



Plover Report (continued from page 5)

and to notify the Trust if use of the property changes (with the potential for negative effects to the natural area).

Plover Steward Awards were presented to those landowners who do not own a portion of a Piping Plover beach, but live in the neighborhood, and who make their best effort not to disturb the plovers during their nesting season, nor when the chicks are young and vulnerable to dogs, ATVs and other threats. We also hope that the Plover Stewards will encourage others to be careful and respectful around the plovers.

A number of landowners mentioned that the exclosure cages around plover nests were drawing unwanted attention to the plovers. Overzealous observers have been seen ducking under the warning tape and walking right up to the cages, within a meter of the plover nests. Given that female plovers have been

observed flushing from their nests at distances as great as 300 metres, close-up observation is likely causing considerable distress to the nesting plovers. Please be sure to keep a good distance from the plover exclosures, and let others know they should be doing the same. Let's give these birds a chance!



Leslie and Lois Smith
Cape Sable Island

Stewardship Agreement Holders

Annapolis County

- * Sharron & Daniel Bonner
- * Gordon & Barbara Cantley
- * Jack Duggan
- * Ellis & Rita Fancy
- * Allister & Helen Hirtle
- * Joseph & Piroska Kerekes
- * William & Joan Newcombe
- * Deirdre & Dave Reynolds

Colchester County

- * Warren & Edith Hingley

Digby County

- * Earl Chandler
- * Harold and Doris Deveau
- * James & Ruth Deveau
- * Herbert Dugas
- * George and Estelle Saulnier
- * Frank and Eva Stanton
- * Stanley and Dianne Stanton
- * Lovett, Mary & Sheila Theriault

Hants County

- * Royce Deal
- * David & Arthur Fenton
- * Roy Freake
- * Carl & Marina Hamilton
- * Winston Hamilton
- * The Harvey Family
(Grand Elm Farms)
- * Frank Hennigar
- * Elizabeth & William Hilchie

- * Helen Hopkins
- * Allen Lawrence
- * James & Mary Leggate
- * Patricia & Gerard Martell
- * Doris McClare
- * Shawn D. McCulloch
- * Elizabeth & Louise Miller
- * Grace-Laffin Morehouse Cook
- * Laurence Parker
- * Ross Parker
- * David J. Poole
- * Glen Singer
- * Clarence & Doris Sterling
- * Patrick Stewart
- * Ruth Tomlinson
- * Eef & Jozina Vroegh
- * Annie Whalen
- * Frank Woolaver
- * Kenneth & Carla Zwicker
- * Russell Zwicker

Kings County

- * Bill Rupka
- * Darrell Steele
- * Don & Linda Sawler

Pictou County

- * Lawrence & Margaret Thompson
- * Warren and Edith Hingley
- * Joseph and Gertrude Anderson
- * Donald and Kaye Horne
- * Edith Parks

Queens County

- * Richard Allen

Shelburne County

- * Stanley Sutherland
- * Barbara and Bill Lowe
- * Roxanne & Dennard Nickerson
- * Douglas & Eva Stoddart
- * Bessie Cunningham
- * Olive & George Marland
- * Leslie & Lois Smith
- * Frederick & Helen Nickerson
- * McLean Nickerson
- * Regina Atwood

Victoria County

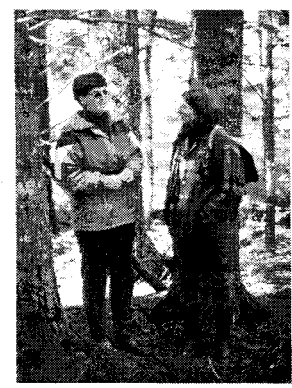
- * Dollie Buchanan

Yarmouth County

- * William Cook
- * Glendon & Katherine Gavel
- * James and Lise Mood
- * Rodger and Debbie Sullivan
- * Roland & Judy Frotten
- * Jeannine and Claudette d'Eon
- * Ronald & Marlene White
- * Dieter & Jutta Mayerhofer
- * Christian & Susanne Scheinecker



Deanna Schofield presenting a Stewardship Award to a Hants County landowner.



Landowner Mary Cochrane with Minga O'Brien, of the NSNT, discussing a conservation easement.



Guided walk for owners of lakeshore properties with coastal plain plants, Gillfillan Lake.

Thank You to Our Sponsors

The Kendall Foundation
George Cedric Metcalfe
Charitable Foundation
The McLean Foundation
Davis Conservation
Foundation

Environment Canada Environnement Canada



NOVA SCOTIA NATURE TRUST

P.O. Box 2202, Halifax, Nova Scotia B3J 3C4

Tel (902) 425-5263 Fax (902) 429-5263