

ISLAND
NATURE TRUST

Conservation Guardian Volunteer Manual

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1.0 Purpose

1.1 Brief History of Island Nature Trust

Island Nature Trust (INT) was incorporated in 1979 to conserve natural ecosystems in PEI. INT acquires land through donation and purchase, protects it under legislation that prevents development, and manages it to sustain healthy, robust natural environments. INT's vision is **a future where P.E.I. has a network of protected, robust natural areas championed by knowledgeable, engaged Islanders**

INT now owns or leases over 4,000 acres, including off-shore islands, hardwood, softwood and mixed-wood forests, wetlands and coastal shores. INT also assists private landowners who wish to conserve and protect their own land, monitors and protects species-at-risk on the Island, and delivers numerous nature education programs to children and adults.

The work of INT is founded upon and guided by the following core values:

- I. **Care and responsibility for the land:** We are committed to environmentally and socially responsible management of natural areas in PEI
- II. **Integrity and respect:** We are dedicated to integrity and respect in all dealings with staff, members, clients and partners
- III. **Excellence:** We are a professional, science-based, strategic-minded organization that is committed to excellence, efficiency and safety in all activities
- IV. **Collaboration:** We work in good faith to achieve common goals through discussion and cooperation. Our approach to decision-making is transparent, consultative and fiscally responsible

INT operates through its own fund-raising initiatives which range from an annual fundraising dinner, to applications for specific project-based funding, to government and non-government sources. INT operates as a not-for-profit organization.

1.2 Our Approach to Stewardship

At INT, we strive to be exemplary stewards of the land we own. The stewardship we practice includes restoration of lands impacted by past human use (for example, through planting of native trees and shrubs, removal of invasive species and remnants of past habitation) and engagement of community members as champions of these lands.

Appropriate use of natural areas by local communities is encouraged and sometimes includes provision and maintenance of trails, allowances for fishing, hunting and trapping, and traditional gathering of natural materials for non-commercial purposes. We continue to seek

mechanisms to engage residents in natural areas management, as we believe that people must personally connect with the land to know and cherish it.

The Stewardship Process

1. **Land Acquisition:** INT, specifically our Executive Director, works on acquiring land. INT staff complete a baseline documentation report outlining the state of the land and information on its natural features.
2. **Legal Designation and Management Plan:** Once a property is acquired, it is protected under the *PEI Natural Areas Protection Act (NAPA)*. The NAPA designation process involves the development of a management plan for the property, which includes general guidelines for management, and a list of prohibited activities.
3. **Monitoring:** Monitoring occurs at least once per year at each natural area to assess the use, changes, conditions, and threats in the natural area.
4. **Restoration:** Restoration occurs in natural areas where ecological integrity has been compromised and the land must be returned to a more natural state.

Monitoring is a crucial part of managing and conserving INT's network of natural areas. Reports submitted to INT help to document changes in natural areas over time and inform and prioritize future management activities in INT natural areas.

INT staff and Conservation Guardian volunteers work together to protect INT's natural areas, and each person's involvement and commitment is important.

INT's Stewardship Team

Executive Director: Works on land acquisition, supports and supervises the Stewardship Coordinator, and addresses any legal issues.

Land Management Committee: A committee made up of board members and individuals experienced in environmental management. The committee advises and approves the overall stewardship and management in natural areas.

Stewardship Coordinator: The main contact for Conservation Guardians, responsible for the day to day management, planning, and conservation of natural areas.

Stewardship Technicians: Works with the Stewardship Coordinator, Executive Director, and Conservation Guardians to carry out stewardship activities in natural areas.

Conservation Guardians: The eyes and ears on the ground and the local experts for their natural area.

1.3 The Conservation Guardian Program

Island Nature Trust's Conservation Guardian Program was originally initiated in the 1990s, but over time, and without dedicated funding and staff, the program became inactive. In 2016, The Trust received funding to reinvigorate the Conservation Guardian program. Since then, INT has been working to connect with volunteers across the Island who are passionate about nature conservation and are looking for ways to contribute to our work.

After a property has been acquired by INT and protected under NAPA, regular monitoring must be done to ensure that the natural features for which the property was protected remain intact and to mitigate any risks to these features. Restrictions on land use (e.g. cutting wood, garbage dumping, use of all-terrain vehicles), special land requirements (e.g. protection of a specific plant or animal), preventing vandalism, and checking trail and signage conditions are the most common reasons why monitoring is done. INT receives consistent information on a natural area's condition from the people who are most familiar with it - volunteer Conservation Guardians like you! With this information, INT is able to make effective plans of action for management of the natural area. Through INT's stewardship program, volunteer Conservation Guardians have opportunities to develop their skills, meet new people, and assist with and participate in stewardship events.

Stewardship is not only about monitoring, it is also about cherishing the land, connecting others to nature, and enhancing the quality of life for future generations. The Mi'kmaq people have a term, Netukulimk, which means to be physically and spiritually nourished by the land while also working to protect it so it may provide for future generations. With Netukulimk, everything is interconnected and interdependent. Thus, any changes or activities must be carefully considered to understand how such changes will impact the surrounding environment.

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At INT, we have adopted a Netukulimk approach and try to weigh our options carefully when making management decisions to ensure we are not compromising ecosystems or ecosystem functioning for future generations.

Restoration may also be needed in some properties where ecological integrity has been compromised. For instance, some INT natural areas contain plantations. Plantations are essentially tree monocultures, which provide minimal habitat for wildlife. In plantations, we often will work to restore our native Acadian forest by creating small patch cuts where we plant native tree and shrub species. Our restoration efforts are always monitored in subsequent years to measure success. Conservation Guardians may also be involved with monitoring restoration efforts.

2.0 Conservation Guardian Responsibilities

2.1 Responsibilities

The main responsibility of a Conservation Guardian is monitoring. This means visiting their chosen or assigned INT Natural Area at least once per year to examine it for changes, and then noting those changes on the INT Conservation Guardian Report Form and/or notifying the Stewardship Coordinator of the changes through written or verbal communication. Essentially, Conservation Guardians are the eyes and ears on the ground for INT.

Conservation Guardians are responsible for:

- Reading the Conservation Guardian Manual and making sure they understand the terms of their volunteer position
- Following stewardship policies and procedures
- Maintaining communication with INT's Stewardship Coordinator (NOTE: members of stewardship groups may have a group leader who is in contact with the Stewardship Coordinator on behalf of the group)
- Completing Conservation Guardian Report Form for each visit **or** relaying details of property visits to the Stewardship Coordinator through written or verbal communication
- Representing the mission and mandate of Island Nature Trust through stewardship duties and/or at public events

If they wish, and depending on skills, availability and/or preference, Guardians may engage in:

- Carrying out natural area maintenance work identified in management plan and approved by the Stewardship Coordinator
- Recruiting new INT Conservation Guardian volunteers

2.2 Time Commitment

Time commitment will vary from Guardian to Guardian. INT asks that Guardians commit to visiting their natural area(s) at least once per year during the day for monitoring. However, Guardians are encouraged to visit their natural area(s) as often as they wish.

2.3 Skills Required

- Good physical condition
- Good observation skills
- Some knowledge of local wildlife and plant species (training can be provided)
- The ability to read maps is useful, but not required (training can be provided)

3.0 Natural Area Monitoring

Purpose: Regular monitoring of INT's natural areas is completed to assess the changes, conditions of signage and trails (where applicable), and threats in the natural areas.

Scope: Monitoring can be done by Conservation Guardians and INT board members and staff. Monitoring reports are reviewed by the Stewardship Coordinator and/or the Executive Director.

Contact: Stewardship Coordinator, email: land@islandnaturetrust.ca

Essential Documents: Monitoring form template, previous monitoring reports (if applicable), briefing document prepared by INT staff with information on the natural area, maps of natural areas including trails and landmarks

3.1 Monitoring Process

1. Receive monitoring form from Stewardship Coordinator
2. Review the appropriate natural area summary, species list, management plan, and previous monitoring reports (if applicable)
3. Plan a trip and timeline (Please note: your initial property visit should be with INT staff)
 - Choose a time when natural area features are most visible and accessible (usually spring, summer, or early fall)
 - **Note:** Some natural areas require special consideration and may require more than one visit per year and/or at different times of year. For example, natural areas with a high risk of vandalism, or natural areas with high volumes of public use may require extra care.
4. Prepare for your natural area visit. Review safety guidelines, the monitoring form in Appendix A and monitoring checklist in Appendix B.

Materials needed:

- Notepad and pencil
- Camera (if available)
- Global positioning system (GPS) unit (if available)
- Map and compass
- Safety equipment
- Cell phone

5. Visit the natural area with monitoring form (or just take notes if you prefer) and collect information and photos. Please refer to the monitoring form in Appendix A for more information on important details to collect.

5.1 Inspect property boundaries for any threats or violations

5.2 Inspect the interior of the natural area

Collect information on:

- Plant and wildlife species observed
- Human use of the natural area
- Potential threats
- Condition of trails (where applicable)
- Condition of signage (where applicable)

Take GPS coordinates (or detailed location information) of:

- Major disturbances (e.g. garbage dumping, vehicle access points, etc.)
- Invasive species locations
- Species at risk occurrences
- Other points of interest

Note: It's best not to fill out the monitoring form in the field. Instead write down observations in a notepad and transfer the information to the form after.

6. Send monitoring forms to the Stewardship Coordinator

- If available, include photos and GPS points

4.0 Stewardship Training

Conservation Guardians will have an initial training session with the Stewardship Coordinator to orient the Guardians on the mission and practices of INT, and the process of natural area monitoring. Conservation Guardians will also be provided with a variety of resources, including: species at risk fact sheets and invasive species fact sheets.

Additional workshops and training sessions are often offered to Conservation Guardians for useful skills such as plant identification, bird identification, nature photography, etc. Information on these training events will be distributed by the Stewardship Coordinator via email or telephone. If you have any specific requests for training, please contact the Stewardship Coordinator.

5.0 Useful Apps

The following applications can be downloaded to smart phones and tablets from your device's app store.

App	Description	Cost
Merlin	Merlin is an ornithological app from Cornell Lab that provides simple descriptions and instructions when trying to identify a bird. There are two options for identifying birds: answer 5 questions about a bird and Merlin will come up with a list of possible matches; or, snap a photo of a bird, or pull one from the camera roll and Merlin Photo ID will offer a short list of possible matches. The Explore Birds option (on the bottom of the start page) allows users to explore various species and includes ID information as well as sounds and range maps.	Free
iNaturalist	iNaturalist allows users to explore and share your observations from the natural world. Users can upload photos of plants, animals, fungi, etc. and the app will auto-identify the species. Other users can also identify sightings. If you are using iNaturalist when monitoring INT properties, please let the Stewardship Coordinator know and they will add you to the Island Nature Trust Natural Areas project.	Free
Google Maps	Google Maps is a web mapping service, which offers satellite imagery, street maps, and route planning. INT has developed a shareable Google map containing all INT properties. The map was developed to help Conservation Guardians navigate the properties they monitor and to help them explore other INT natural areas, if they wish to. This map is available by contacting INT's Stewardship Coordinator.	Free, but data may be needed

6.0 Safety and Liability

6.1 Personal Safety

6.1.1 Plants and Insects

There are several plants and insects that could be present in Island Nature Trust Natural Areas that Conservation Guardians should be aware of for their personal safety. Please take extra precautions to avoid these plants.



Figure 1. Poison Ivy
Common in coastal areas



Figure 2. Stinging Nettle
Common on river banks



Figure 3. Cow Parsnip
Ubiquitous

Poison Ivy (*Toxicodendron radicans*)

- **Identification:** Shiny, alternate leaves, made up of three leaflets. Stalk of the central leaflet is much longer than the stalks of the two side leaflets. Leaf margins may be smooth or toothed with very prominent veins. Leaves are reddish when they emerge in spring and change to dark green in summer. In fall, they turn yellow, red or orange. Plants can vary greatly in size.
- **Habitat:** Grows in many habitats, including: cliff bases, coastal areas, along rivers and lakes, borders of woods, in fallow fields, and along roadsides.
- **Treatment:** Wash all exposed regions as soon as possible with cold water. Wash all contaminated clothing and objects several times in hot, soapy water.

Stinging Nettle (*Urtica dioica*)

- **Identification:** Leaves are opposite, elliptic to lance shaped, 3 to 6 inches long and ½ to 1½ inches wide, with a long taper to the sharply pointed tip, the base tapering to rounded. The leaf stalk is sparsely covered with bristly, stinging hairs with a pair of small, lance-like leafy appendages (stipules) attached at the leaf node, sometimes with smaller leaves in the axils. Flowers are tiny and indistinct, creamy green to pinkish, clustered in the leaf axils typically along the entire stem.
- **Habitat:** Typically grows in the understory of wet areas, but also can grow in meadows.

- Treatment: Anti-itch creams can provide some relief. The plant tissues of spotted jewelweed (*Impatiens capensis*) when crushed and applied to the affected area can also provide relief in the field. These two plants are often growing side by side.

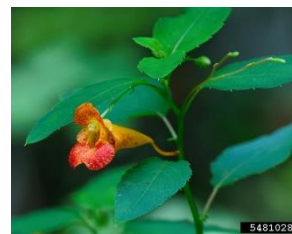


Figure 4. Spotted Jewelweed

Cow Parsnip (*Heracleum maximum*)

- Identification: Umbel-shaped flower head comprised of small white flowers. Palmate-shaped, compound leaves. Stems are 1 - 2 inches across. This plant is often confused with the invasive giant hogweed. The main different between the two species is size. Giant hogweed grows to 5 m tall, while cow parsnip only grows to 2.5 m. Both cow parsnip and giant hogweed produce a sap that can cause skin irritation, blistering and burning upon contact.
- Habitat: Woodlands, borders of woodlands, woodland openings, meadows in wooded areas, floodplains, and partially shaded roadsides.
- Treatment: If you come into contact with the sap, treat it like a regular burn. Apply a cold compress to relieve the pain, and try to keep blisters intact as long as possible to protect the tender skin underneath. Anti-itch creams can also provide some relief.

Ticks

Ticks are another safety hazard that may be present in our natural areas. Black legged ticks (formerly known as deer ticks) have been detected across PEI, with areas closer to NB and NS (e.g. Egmont Bay, Wood Islands) considered to be high tick density areas. Black legged ticks carry bacteria that cause Lyme disease. There is an incubation period of 24 to 36 hours for the bacteria to cause an infection, so as long as the tick is removed before that period is over you will likely not get Lyme disease.



Figure 5. Black legged tick (Photo by Alexandra Foley-Eby)

Prevention is the best way to avoid being infected by a tick. Here are some tips for avoiding tick bites:

- Cover up exposed skin when outdoors in long grass or wooded areas and wear light-coloured clothing
- Conduct a full-body check for ticks after you have been outdoors

If you find a tick attached to you, carefully remove the tick, keep it in a plastic bag, wash the affected area, and see your doctor. Bring the tick with you so it can be tested for Lyme.

6.1.2 Safety Checklist

Planning

- ☐ Arrange for a companion to come with me
- ☐ While many of our natural areas are closed to hunting and trapping, some are not. Hunters and trappers are required to ask permission before harvesting from Island Nature Trust properties, but there have been situations in the past where this rule was not followed, therefore Conservation Guardians should be aware that there are various hunting seasons throughout the year. Although the dates of these seasons change, the months are often the same.

For example:

Ruffed Grouse can be hunted from September to December

Gray Partridge can be hunted from October to November

Snowshoe Hare can be hunted from October to March

Fox can be hunted and trapped from November to January

Raccoon can be hunted and trapped from October to March

Coyote can be hunted from October to March and trapped from November to late February

Red Squirrel can be hunted and trapped all year

Preparing

- ☐ Dress for the weather and comfort and take a first aid kit (see the Monitoring Checklist in Appendix B)
- ☐ Check the weather report before you leave and reschedule your trip if bad weather is expected
- ☐ Leave home early enough so that you are back before nightfall
- ☐ Before embarking, leave detailed instructions with a family member or friend and let them know when you expect to return

During

- ☐ Watch where you are walking - uneven ground and tree roots can trip you and cause injury
- ☐ Be on the alert for insect nests and large mammals (i.e. coyotes)
- ☐ Do not confront individuals you catch violating the natural area! Discreetly note the nature of the activity and the results, and then contact Island Nature Trust when you return home.

If you feel uncomfortable for any reason, trust your instincts and leave!

7.0 Code of Conduct

We ask our volunteers to:

- Act as positive ambassadors of Island Nature Trust at all times
- Never do anything to put the credibility and reputation of Island Nature Trust at risk at any time
- Refrain from any actions that could endanger Island Nature Trust staff or members of the public
- Treat all Island Nature Trust staff, board of directors and volunteers with respect

Appendix A - Monitoring Report Form

Natural Area Name: _____

Conservation Guardian(s) Name: _____

Additional Individuals Present: _____

Date of Visit: _____

Start Time: _____ **End Time:** _____

Plants Observed (Please note rare or invasive plants observed and include abundance and location):

Animals Observed (Note species observed or signs of activity):

Signs of Use and Activity:

Vehicle use	<input type="checkbox"/>	Camping	<input type="checkbox"/>	Fishing	<input type="checkbox"/>
Hunting	<input type="checkbox"/>	Hiking	<input type="checkbox"/>	Vandalism	<input type="checkbox"/>

Comments: _____

Number of other people using Natural Area: _____

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Actions Required:

Garbage removal

☐

Replace signage

☐

Invasive species removal

☐

Access control

☐

Comments: _____

Additional Observations or Concerns:

Thank you! You are making a real difference to the natural areas of PEI!

Please return this form to INT's Stewardship Coordinator

Email: land@islandnaturetrust.ca

Fax: 902-628-6331

Mail: P.O. Box 265, Charlottetown, PEI, C1A 7K4

In-person: Ravenwood Building, 15 Crown Drive, Charlottetown

This form is also available online: <https://goo.gl/forms/xa3LjwJWJdjVMrTD3>

Appendix B - Monitoring Checklist

Check

- ☐ Walk the property's boundaries to check for encroachments (e.g. tree harvesting, dumping, construction, digging or planting)
- ☐ Check the interior of the property, especially areas with public access (e.g. trail, picnic areas) and areas with significant or rare features.
- ☐ Check structures (i.e. signs, boardwalks) for signs of damage

Compare

- ☐ Compare the property's current condition with the previous property report and note any changes resulting from natural (e.g. insect infestation, storms, floods) and manmade (e.g. construction, tree harvests, digging) causes. These changes should be documented either with photographs or a detailed written description, and the location noted

Observe

- ☐ Look for things that suggest change, such as:
 - New roads or worn tire paths
 - Piles of saw logs, slash, or stumps
 - New culverts or piping
 - Piles of fresh dirt or fresh ditches
 - New flagging for boundaries
 - Evidence of ATVs, horses, bikes, or camping
 - Evidence of hunting, fishing, trapping or aquaculture
 - Dumping
 - New structures
 - Diseased or dying wildlife (plants and animals)
 - Vandalism
 - Litter
- ☐ Certain areas you can observe from a distance (open fields, steep hills, and road frontage), but others require closer inspection:
 - Boundaries (e.g. tree harvesting, dumping, digging, etc. by neighbours or others)
 - Parts of the property interior that are affected by restrictions, have made its conservation significant or are affected by the Management Plan (e.g. riverfront/shorelines, wetlands, sites where rare species are found)
 - Areas of public access (e.g. parking areas, trails, picnic spots)
 - Structures for vandalism and damage (e.g. signs, boardwalks)

Monitoring Form

- ☐ The monitoring form has a number of questions about the property's conditions. To help accurately convey these conditions you may want to:
 - Take photographs and note photo points on a map or drawing (if possible take photos from the same point each year)
 - Make some measurements if appropriate (e.g. the size of a problem area)
 - Makes counts when necessary (e.g. rare plants, number of cut trees)
 - If you notice a change, note any obvious evidence at the scene that might indicate who/what is responsible
 - Note locations by taking a GPS point and/or marking them on a map or drawing