

## SECTION D: PREPARING A MANAGEMENT /STEWARDSHIP PLAN

Now that you own the property...how will you manage it? All your properties will require at least some responsible management. Some, such as those with the potential of high public use, will require management that is more intensive. Preparing a management plan can be less complicated than one might think. Summer students or volunteers with an environmental science, ecology or biology background can be utilized as long as they have sufficient knowledge and training in species identification, community classification and mapping.

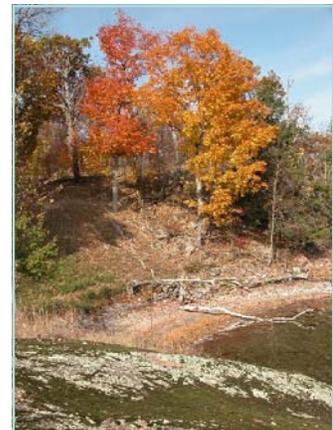
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The management plan will set out how the trust makes decisions so it is important that it be done properly. It is essential that a clear description of the land's ecological values be recorded at the time of acquisition or at least within six months of securing the property. When a property is secured, some activities usually require immediate attention. These can include boundary definition (eg. fencing) access control, or any number of other pressing management needs. These activities can be carried out while a management plan is being prepared. Eventually, you should consider undertaking a full feature inventory of the site and

amend your management recommendations to reflect what you have found.

Often, the natural heritage information about your property already exists. Information on its natural heritage significance can usually be found at a local conservation authority office, the Ministry of Natural Resources, federal offices, in a municipal official plan, colleges and universities or even from your local naturalist club. This information can be confirmed by visiting the property with a biologist or ecologist. Also, do not forget to consult individuals who know the site, such as neighbours or local naturalists.

Management plans should take a holistic approach, taking into account the lands that surround them. They should include a description of how the property fits into the larger landscape. This can be determined by looking at aerial photos, Ontario Base Maps, walking around the perimeter of the property, traveling adjacent roadsides or finding a high viewpoint from which you can see surrounding properties. Your goal is to enhance the significance of your property by managing it in context or a larger landscape (i.e. expanding the size and connectivity of significant woodlots, improving riparian habitats along a stream, etc.).



Deciding what to include in your management options is difficult and is dependant on a number of different factors. Management planning decisions sometimes will entail controversial decisions on what activities will be allowed. These can often be guided by the policies and principles of the land trust (e.g. your land trust will not allow hunting on the property). More importantly, it will be guided by the ecological importance of the site. The size and diversity of the site and the level of information available will determine how detailed the plan is. This is discussed further under Management Strategies.

The following planning process for developing a Management Plan was taken from the Ontario Land Trust Alliance's 2003 Securement Manual. A more detailed list of site planning and management steps can be found in the Nature Conservancy of Canada's Stewardship Manual and the Conservation Planning Training Manual prepared by the Centre for Land and Water Stewardship, University of Guelph, and the Credit Valley Conservation.

## Management Planning Process

### **Step 1: Gather and assess information in terms of impacts and threats**

Assemble all biological and physical information on the property and identify linkages to the surrounding landscape. An area is protected because of features or overriding considerations such as the presence of an endangered species or the presence of a particularly representative or rare habitat. Step 1 ends with taking the available biophysical information and determining the property's most significant features. By identifying what is most significant you can best focus your management activities, priorities and set goals. Map the areas most sensitive to human impacts and flag actions to protect these sensitive areas. Significant and sensitive features may often be the same.

The Ecological Land Classification for Southern Ontario is a tool most often used by individuals and groups preparing inventories and management plans. The Ecological Land Classification System for Southern Ontario is a detailed scientific approach to describing the vegetation communities of southern Ontario. It provides a more standardized framework and terminology than just using your own judgment. It is a nested system of community classification: system – community class – community series – ecosite – vegetation type, each level providing a more detailed description.

### **Step 2: Set working goals and objectives**

*Do not confuse conservation tools with goals. For example, community involvement is almost always essential but it should not be your main goal – your trust likely exists to protect a specific landscape, habitat or species. That is your goal. Working with the community is the tool you might use to accomplish that goal.*

A goal may be to maintain natural processes and habitats based on pre-European settlement conditions to preserve important habitats. On the other hand, management may focus on protecting one species. Alternatively, the site may be used primarily for environmental education to heighten awareness and protect the surrounding ecosystem. A clear purpose is essential.

Have clear goals and know your tools. Do not confuse conservation tools with goals. For example, community involvement is almost always essential but it should not be your main goal – your trust likely exists to protect a specific landscape, habitat or species. That is your goal. Working with the community is the tool you might use to accomplish that goal.

In Step 1, impacts and threats are identified. However, after a goal(s) are set, the impacts and threats should be revisited. What might have been a problem before may be less of an issue after a goal is set.

Objectives are action-oriented to meet your goal. For example, an objective may be to carry out a prescribed burn of remnant tallgrass prairie or to reforest part of a woodland block to create more interior habitat in time.

### **Step 3: Determine strategies and actions**

How are you going to meet your objectives? Devise and implement strategies or actions on the ground. In the case of a prescribed burn, an appropriate strategy would involve contacting the MNR prescribed burn team, as well as the local fire department and neighbours, obtaining the required permits, scheduling the event, setting in place an emergency plan, and conducting the burn on the appropriate day using qualified personnel. In most cases, volunteers will carry out less dangerous but essential tasks such as monitoring or trail maintenance.

### **Step 4: Monitor and report**

Lastly, how will you monitor your success in implementing actions and monitor the ecological health of the property? To monitor your success in implementing actions you need to know if you have effectively met your objectives. You may find you can do more, or that you cannot accomplish the set objectives. When monitoring the ecological health of the property you are determining the health of your property. By monitoring both you can judge how effective your actions are. It is important to keep records and to include the results of monitoring within the management plan or as a follow-up document. Monitoring is complete when you have revised your working goals and objectives and carried out the next round of management activities based on previous work. Keeping a good record of the planning process will be very helpful in developing a sound management plan.

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The following identifies the components that you should include in your management / stewardship plans.

#### Location:

County/region, municipality/town, adjacent or nearest road, road at any access point, lot/concession, property role number (latitude and longitude or NTS map sheet/UTM)

*(Example: This property is described as Parts of Lots 15 and 16, Concession 3, in the Town of the Blue Mountains (formerly Township of Collingwood), County of Grey)*

#### Size:

Acres and/or hectares

*(Example: The property is 4.15 hectares or 10.25 acres)*

### Description:

A brief textual description of the site and its natural and cultural features, topography, vegetation, physiography, soils, interesting or significant species or features, accessibility, use, etc.

*(Example: This property is found within the Town of Blue Mountains in the northeastern region of Southern Ontario. Major centres in the area include Craigeleith 2-3 km to the north and Collingwood 8 km to the east. Access to the site is gained from Highway 26. The property is part of a life science Area of Natural and Scientific Interest (ANSI) known as the Blue Mountain Slopes Life Science ANSI. The Blue Mountains Slopes Life Science ANSI provides one of the best examples of north-facing Niagara Escarpment shale slope and shale valley slope features. Examples of dry successional forests, as well as Red Oak forests are found in this area. Open bluffs and White cedar-dominated shale slopes are of significance in the area. A wide range of physiographic features, climates, vegetative types, flora and fauna are found in this area.)*

### Background:

The management issues that need to be addressed, such as the state of current knowledge, effectiveness of current management, use of the property by visitors, plant poaching, state of repair of fences, boardwalks, trails, parking, adequate signage or interpretive signage information, surrounding land uses or infrastructure. A statement on possible future securement of adjacent land may be appropriate, notably when the ecological site extends beyond the existing property boundary.

*(Example: This property was part of the land trust's acquisition list and was acquired in 1999. It forms part of a larger area acquisition plan. Efforts should be made to secure all adjacent properties. Thicket communities to the west were at one point cleared for either agricultural crops or pasture. Prolific growth in the area is allowing them to naturally regenerate into their former forest communities.)*

### Environmental Information or Habitat Type:

A description of the habitats or vegetation types found on the property, this can be expressed either as a percentage of the overall site or in acres/hectare. A simple approach to describing habitats may be desirable, such as that adapted from the publication entitled "Ecological Land Classification for Southern Ontario" available from Ontario Nature.

#### Aquatic

- Open water (lake, river or stream)
- Wetland
- Marsh (or meadow-marsh)
- Swamp (thicket, deciduous, conifer)
- Fen
- Bog

#### Terrestrial

- Shoreline (beach/bar, sand dune, bluff, rock shore)
- Cliff, talus, crevice, cave
- Rockland or alvar
- Sand barren

- Tall grass prairie or savannah
- Cultural grassland (field, crop), thicket, savannahs
- Forest (conifer, mixed, deciduous)
- Plantation forest

*(Example: The thicket community in the lowland area is dominated with an assortment of young trees and shrubs including Hawthorne, Apple, Willow, Alternate-leaved Dogwood and Sugar Maple. Mature White Elm, White Ash, and Eastern White Cedar are also found within the community, but do not form a canopy. The lack of canopy supports the dense understorey and groundcover. Poison Ivy is prevalent in this area. This area is not well drained and remains saturated through the spring and summer. The upland forest is a mature Sugar Maple Forest with a semi-closed canopy. Unlike the transitional community to the east, the understorey of this forest is low with patchy groundcover. In addition to Sugar maple, Ironwood, White Ash and American Beech are also found in the canopy. This community is part of a much larger forest extending into the adjacent properties to the north, south and west of the property.)*

#### Physiography:

A summary of the physiography or geology of the site expressed, where appropriate, either as a percentage of the overall site or as acres/hectares. A simplified approach to physiography may be desirable, such as that used to characterize physiographic regions and features (in Chapman and Putnam, 1984)

#### Natural Heritage Feature Description:

- Wetland (provincially significant, regionally significant, unevaluated)
- Area of Natural and Scientific Interest (ANSI, provincial or regional)
- Environmentally/ecologically sensitive/significant area (ESA; municipal, CA)
- Threatened or endangered species habitat
- Significant wildlife habitat (e.g. avifauna, herpetofauna, etc; concentrations of wildlife; areas important for wildlife movement, feeding, breeding, hibernation, etc; and, habitat of other species-of-concern or species-at-risk, that are not “threatened” or “endangered” species)
- Significant woodland ( a woodland that is ecologically important because of its features or functions, or contributes to the quality or diversity of an area)
- Significant valley land (a valley land that is ecologically important because of its features or functions, or contributes to the quality or diversity of an area)
- Fish habitat (presence of permanent or intermittent water in lakes, ponds, streams or rivers)

*(Example: Large natural areas and variable landscapes in the Grey Section of the escarpment allow for a wide diversity of fauna in the region. Common breeding birds in the broadleaf forests of the Grey Section include the Yellow-bellied Sapsucker, Veery, Black-throated Blue Warbler and Chestnut-sided Warbler (Riley et. al., 1996). A wide range of bird life was reported in the lowland thicket in the spring although no specific species were identified. Deer tracks were observed also on the property during the summer. It would therefore seem that the development of a rural estate subdivision in the area has not frightened wildlife from the area and the property should be maintained as a natural area to maintain this phenomenon. No significant aquatic species are reported on the property.)*

Cultural Heritage Feature or Area:

The provision of public access, the presence of trails, the presence of interpretive materials, and use of the site by the public, students or others, the presence of buildings (historic or not) and other cultural features (dams, etc.).

*(Example: Trail structures on this property include a boardwalk over a seasonally wet area and signage at the entrance to Scandia Road. Split rail fencing, in good condition, is found along the eastern boundary of the property following a laneway to a neighbouring house. Nine-strand wire fencing is located along part of the southern boundary and is bisecting the property between the thicket to the east and the transitional forest to the west. A “no trespassing” sign is attached to the wire fence on the southern boundary).*

Regional Context and Current Land Uses:

*(Example: This property is found within the Town of the Blue Mountains (formerly the Township of Collingwood) in the northeastern region of Southern Ontario. Major centres in the area include Craigeith 2-3 km to the north and Collingwood 8 km to the east. The Niagara Escarpment is located within 500 m of the property to the northeast. This part of the Niagara Escarpment is designated as the “Grey Section”. A wide range of physiographic features, climates, vegetative types, flora and fauna are found in this section. Several relatively large intact natural areas also help to maintain the assortment of flora and fauna in the area (Riley et. al, 1996). Although the property is not found within the boundaries of any recognized areas of Natural and Scientific Interest (ANSI), provincially significant Crevice Caves of the Blue Mountains and Blue Mountains Moraines, Earth Science ANSIs are located directly to the south of the property and the provincially significant Blue Mountains Slopes Life Science ANSI is located to the northwest of the property. This property is situated in an area of rural estate homes close to an extensive downhill ski slope development to the northeast along the face of the Niagara Escarpment. Agricultural land is still found to the south and southeast of the property. Property west of this property remains wooded. Several residential structures are located in close proximity to the property boundaries of this property. This property is currently vacant with no hydro, telephone, water or septic services. Fire and Police protection are obtained through the Township of Collingwood and Grey County.)*

Land-Use Designation:

The Official Plan for the county/region and municipality/town includes a land-use designation for the site.

*(Example: This property is within the Escarpment Recreation Area of the Niagara Escarpment Plan (NEP). The NEP is a set of planning objectives and policies, which aims to strike a balance between development and preservation of the Escarpment. The Escarpment Recreation Area designation is to provide areas where new recreational and associated development can be concentrated around established, identified or proven downhill ski centres. They also provide restricted development around the core natural areas of the Escarpment. This property is not located within the boundaries of any Areas of Natural and Scientific Interest (ANSI) or provincially significant wetlands identified by the Ministry of Natural Resources. It is also not within any regionally identified Environmentally Sensitive Areas (ESA).)*

## Maps and Aerial Photos:

Maps and aerial photos are essential to a management plan. These can include satellite imagery, GIS maps and lot and concession maps. A map identifying different zones will delineate the boundaries for each zone (i.e. wetland, forest, etc.) and these zones will accompany the goals and objectives of the management plan.

## **Management Strategy**

This section identifies the major items to be addressed through management recommendations (e.g. land-use conflicts, invasive species, natural disturbances, rehabilitation, visitor control, etc.). What approaches or recommendations will be taken to manage the property? This is an important section as it will guide what activities happen on the property over the next three, five, ten or twenty years. List both the short-term and long-term goals for the property. This can be done using input from the volunteer property management teams, the Board of Directors and local neighbours of the property. The types of questions to ask now are:

- Will the property be left alone as a nature reserve?
- Will the public be allowed to access the property and if so how?
- Will the site be used for education and interpretation purposes?
- How will the property be affected by outside influences?

Once the goals are set, you can start to set out some recommendations. These recommendations should have timelines. The land trust can use these timelines when volunteers undertake activities. While the purpose of a management plan is to think long-term for the site, it may be necessary to address more immediate needs. For example, a boardwalk may be recommended as an immediate activity as there is concern of degradation of the surrounding wetland if the public has access to the site, while interpretive signage might be something you could do later. Assign costs to each of the recommendations; this will help to guide the Board in setting annual budgets for their properties. Although this does not need to be included in the management plan, it could be created as a management plan budget. Once plans have been prepared, they should be approved by the Board and then shared with volunteers on management teams.

Objective	Recommendation	Timeline	Cost
#1 Education	Install interpretive signs along the trail	2006	\$1,500.00
#2 Public Access	Build a trail from the entrance of the northwest corner, across the property to the southeast corner	2005	\$800.00
#3 Restoration	Plant the 5 acre block at the south-end of the property with conifers	2005	tbd

The aforementioned information only touches on the need, preparation and maintenance of management planning. Use more detailed sources such as the Ontario Land Trust Alliance's Securement Manual, the Nature Conservancy of Canada's Stewardship Manual and A Conservation Planning Training Manual in helping you to prepare stewardship/management plans.