



Significant Wildlife Habitat Technical Guide

Ontario Ministry of Natural Resources
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3 Preparing to Identify Significant Wildlife Habitat

3.1 Significant wildlife habitat

To ensure a comprehensive approach to identifying and evaluating significant wildlife habitat, wildlife habitat has been divided into four broad categories:

- seasonal concentration areas
- ALVARS → • rare vegetation communities or specialised habitats for wildlife
- habitats of species of conservation concern, excluding the habitats of endangered and threatened species
- animal movement corridors

The task of identifying significant wildlife habitat will be facilitated if other natural heritage features listed in the Natural Heritage Policy are mapped first as outlined by the *Natural Heritage Reference Manual* (OMNR 1999) and the appropriate technical manuals. Many known, as well as unknown, wildlife habitats exist in these other reference areas.

Significant wildlife habitat that is found in other natural heritage features is very important and should be identified. However, as a priority, surveys should concentrate on areas outside identified features. It will save time and be more efficient to concentrate on areas not included in other natural heritage features and areas. This approach can also enhance natural heritage conservation if the planning authority concentrates its efforts to find and protect significant wildlife habitats outside the boundaries of the other identified natural heritage features and areas.

However, significant wildlife habitat in other natural heritage areas should not be ignored. These areas may receive development pressure, and it is essential that proponents conducting impact assessments understand their functions and identify potential impacts on significant wildlife habitat.

3.2 Available information

There are several sources of information that will help planning authorities identify significant wildlife habitats. Table 3-1 summarises the most useful information and its specific application to identifying wildlife habitat. Most of the listed information can be obtained from local OMNR offices. A list of agencies and their respective areas of expertise has been comprised in Appendix F.

The most recent aerial photographs used with topographical maps and Ontario base maps (OBMs) will enable the planning authority to determine the precise location of previously mapped significant natural heritage features such as provincially significant wetlands and ANSIs, as well as identify some potential habitats. Interpretation of Forest Resource Inventory (FRI) maps, used with aerial photographs, may help locate potentially rare or

5.4 How to find some rare vegetation communities or specialised habitats for wildlife

The following sections provide detailed descriptions of rare vegetation communities and specialised habitat for wildlife. They are provided to familiarise the reader with these vegetation communities and habitats so they will be able to recognise them. Most of these habitats, especially the specialised habitats for wildlife, have not been identified and mapped, and finding them can be difficult. Some of these habitats may not exist in the planning area, while some habitats may exist, but the species that normally use it may not occur. For example, there may be springs and seeps that are not used by wintering wild turkeys.

Each rare vegetation community and specialised habitat description is accompanied by some specific suggestions on how to find them. The following is a list of information sources that can be used to find these habitats:

- Table 3-1, general information sources required to find significant wildlife habitat.
- Appendix F, list of agencies and their areas of expertise (these include web sites for updated information).
- Appendix I, information sources for the identification of specific significant habitat.
- Appendix G, wildlife habitat matrices, with lists of species that use specialised habitats.
- Appendix J provides a list of all the rare vegetation communities in Site Regions 6 and 7.
- Appendix M describes the locations of all known rare vegetation communities.
- Appendix L provides a suggested approach for using the Ecological Land Classification system to identify rare vegetation communities.
- Seek advice from the local OMNR ecologist for locations of rare or specialised habitats.
- Involve the CAC and local naturalists in searches for rare and specialised habitats.

5.4.1 Rare vegetation communities

Refer to Table M -1 in Appendix M for a list of known locations of provincially and regionally rare vegetation communities of southern Ontario.

5.4.1.1 Alvares

Alvares are naturally open areas of thin soil over essentially flat limestone, dolostone or marble rock. They support a sparse vegetation cover of shrubs and herbs, and trees are often absent or scattered. In spring, alvares may have standing water; in summer, soils can become very hot and dry. Vegetation is adapted to these extreme variations in temperature and soil moisture. Some of the characteristic plants that can indicate the presence of alvar communities include spring forget-me-not, long-plumed purple avens,

APPENDIX N

Lists of Vascular Plant Indicators of Alvar, Tall Grass Prairie, Savannah and Carolinian Forests Habitats in Southern Ontario

The communities listed in this appendix are considered rare in Ontario. The tables in this appendix list those plants that are considered to be true indicators of these rare habitat types and can be used to identify the existence of the community, or in some cases, remnants of these communities.

Table N-1 List of vascular plant indicative of Alvar habitats in southern Ontario

Species - Scientific Name	Common Name	Site 6	Site 7	Notes
<i>Allium cernuum</i>	Nodding Wild Onion		X	
<i>Allium schoenoprasum</i>	Wild Chives	X		
<i>Astragalus neglectus</i>	Cooper's Milk-vetch	X		
<i>Blephilia ciliata</i>	Downy Wood Mint		X	
<i>Bouteloua curtipendula</i>	Side Oats Grama	X		
<i>Carex crewel</i>	Crawe's Sedge	X	X	
<i>Carex juniperorum</i>	Juniper Sedge	X		
<i>Carex richardsonii</i>	Richardson's Sedge	X		
<i>Carex seireoides</i>	Bulrush Sedge	X		
<i>Cirsium hillii</i>	Hill's Thistle	X		
<i>Coreopsis lanceolata</i>	Coreopsis	X		
<i>Deschampsia caespitosa</i>	Tufted Hair Grass	X		
<i>Elychalis compressa</i>	Flattened Spike-rush	X	X	
<i>Euphorbia commutata</i>	Tinted Spurge	X		
<i>Geranium carolinianum</i>	Carolina Cranesbill	X	X	
<i>Geum triflorum</i>	Prairie Smoke	X		
<i>Hymenoxys herbocea</i>	Lakeside Daisy	X	X	
<i>Myosurus minimus</i>	Mousetail	X		
<i>Myosotis verna</i>	Vernal Forget-me-not	X	X	
<i>Panicum flexile</i>	Panic-grass	X	X	
<i>Panicum philadelphicum</i>	Panic-grass	X	X	
<i>Piperia unalascensis</i>	Alaskan Orchid	X		
<i>Poa alpina</i>	Alpine Bluegrass	X		
<i>Polygona senega</i>	Seneca-snakeroot	X	X	
<i>Ranunculus fascicularis</i>	Early Buttercup	X	X	
<i>Scutellaria parvula</i>	Small Skullcap	X	X	
<i>Solidago houghtonii</i>	Houghton's Goldenrod	X		
<i>Solidago ptarmicoides</i>	Upland Goldenrod	X		
<i>Sporobolus heterolepis</i>	Northern Dropseed	X		
<i>Trichostema brachiatum</i>	False Pennyroyal	X	X	
<i>Valerianella umblicata</i>	Corn-salad		X	
<i>Verana simplex</i>	Simple Vervain	X	X	

1.2 Rare Vegetation Communities or Specialized Habitat for Wildlife

1.2.1 Rare Vegetation Communities

The majority of Rare Vegetation Communities are protected within the Greenbelt planning area through the protection of Key Natural Heritage Features. For example, sand barrens, tallgrass prairie, alkars and savannahs are all identified as Key Natural Heritage Features by the Greenbelt plan. However, outside of the Natural Heritage System of the Protected Country-side Landuse designation, the PPS is the policy document and many rare vegetation habitats are candidate SWH, these would include sand barrens, tallgrass prairie, alkars and savannah. Woodlands not protected as Significant Woodlands have the potential to be a Rare Vegetation Community and therefore Candidate SWH Table 1.2.1 contains a listing of Rare Vegetation Communities that are considered SWH for the Greenbelt planning area and where the PPS policy is the direction to be followed.

Table 1.2.1 Rare Vegetation Communities.

Rare Vegetation Community	ELC Ecosite Code	Habitat Description	Detailed Information and Sources	CONFIRMED SWH and Defining Criteria
Hickory Deciduous Forest Policy Area: PPS <input checked="" type="checkbox"/>	FOD2	Dry-Fresh Deciduous Forest with Hickory Species Dominating	<ul style="list-style-type: none"> Complete Ecological Land Classification for Vegetation Types to determine if this forest type exists. 	<ul style="list-style-type: none"> Confirm ELC Vegetation Type FOD2-3, in woodlots or forest patches (no minimum size)
<u>Rationale:</u> Very rare forest type in Ontario.				
Oak-Hickory Deciduous Forest Policy Area: PPS <input checked="" type="checkbox"/>	FOD2	Dry Deciduous Forest with Oak and Hickory Species Dominating	<ul style="list-style-type: none"> Complete Ecological Land Classification for Vegetation Types to determine if this forest type exists. 	<ul style="list-style-type: none"> Confirm ELC Vegetation Type FOD2-2, in woodlots or forest patches (no minimum size)
<u>Rationale:</u> Very rare forest type in Ontario.				
Mixed Oak Deciduous Forest Policy Area: PPS <input checked="" type="checkbox"/>	FOD1	Dry-Fresh Deciduous Forest with Two Species of Oak Dominating	<ul style="list-style-type: none"> Complete Ecological Land Classification for Vegetation Types to determine if this forest type exists. 	<ul style="list-style-type: none"> Confirm ELC Vegetation Type FOD1-4, in woodlots or forest patches (no minimum size)
<u>Rationale:</u>				

Rare Vegetation Community	ELC Ecosite Code	Habitat Description	Detailed Information and Sources	CONFIRMED SWH and Defining Criteria
<p>Very rare forest type in Ontario.</p> <p>Rationale: Very rare forest type in Ontario.</p>	FOD1	Dry-Fresh Deciduous Forest with Black Oak Dominating	<ul style="list-style-type: none"> Complete Ecological Land Classification for Vegetation Types to determine if this forest type exists. 	<ul style="list-style-type: none"> Confirm ELC Vegetation Type FOD1-3, in woodlots or forest patches (no minimum size)
<p>White Oak Deciduous Forest</p> <p>Policy Area: PPS <input checked="" type="checkbox"/></p> <p>Rationale: Very rare forest type in Ontario.</p>	FOD1	Dry-Fresh Deciduous Forest with White Oak Dominating	<ul style="list-style-type: none"> Complete Ecological Land Classification for Vegetation Types to determine if this forest type exists. 	<ul style="list-style-type: none"> Confirm ELC Vegetation Type FOD1-2, in woodlots or forest patches (no minimum size)
<p>Sugar Maple -- Black Maple Deciduous Forest</p> <p>Policy Area: PPS <input checked="" type="checkbox"/></p> <p>Rationale: Very rare forest type in Ontario.</p>	FOD6	Fresh-Moist Deciduous Forest	<ul style="list-style-type: none"> Complete Ecological Land Classification for Vegetation Types to determine if this forest type exists. 	<ul style="list-style-type: none"> Confirm ELC Vegetation Type FOD6-2, in woodlots or forest patches (no minimum size)
<p>Alvar</p> <p>Policy Area: PPS <input checked="" type="checkbox"/></p> <p>Rationale: Alvars are extremely rare habitats in Ontario.</p>	ALOI ALSI ALTI	An alvar will be level unfractured limestone, a patchy mosaic of bare rock pavement, or shallow substrate over bedrock. The site will vary between being seasonally dry or inundated with	<ul style="list-style-type: none"> Alvars of Ontario (2000), Federation of Ontario Naturalists. Natural Heritage Information Centre. OMNR Ecologists. Local Naturalist clubs Conservation Authorities. 	<ul style="list-style-type: none"> Site to be > 0.5 ha in size. Confirm any ELC Vegetation Type for Alvars Site must not be dominated by exotic or introduced species. One or more of the Alvar indicator species listed in OMNR (2000b) Appendix N should be present.

Rare Vegetation Community	E/C Ecosite Code	Habitat Description	Detailed Information and Sources	CONFIRMED SWH and Defining Criteria
<p>Savannah</p> <p>Policy Area: PPS <input checked="" type="checkbox"/></p> <p>Rationale: Savannahs are extremely rare habitats in Ontario.</p>	<p>TPS1 TPS2 TPW1 TPW2</p>	<p>water. Vegetation cover varies from patchy and barren with a less than 60% tree cover.</p> <p>A savannah is a tallgrass prairie habitat that has tree cover between 25-60%.</p>	<ul style="list-style-type: none"> • Natural Heritage Information Centre. • OMNR Ecologists. • Local Naturalist clubs • Conservation Authorities. 	<ul style="list-style-type: none"> • No minimum size to site. • Confirm any E/C Vegetation Type for Savannahs • Site must not be dominated by exotic or introduced species. • One or more of the Savannah indicator species listed in OMNR (2000b) Appendix N should be present.
<p>Tallgrass Prairie</p> <p>Policy Area: PPS <input checked="" type="checkbox"/></p> <p>Rationale: Tallgrass Prairies are extremely rare habitats in Ontario.</p>	<p>TPO1 TPO2</p>	<p>A tallgrass prairie has ground cover dominated by prairie grasses, an open tall grass prairie habitat will have less than 25% tree cover.</p>	<ul style="list-style-type: none"> • Natural Heritage Information Centre. • OMNR Ecologists. • Local Naturalist clubs • Conservation Authorities. 	<ul style="list-style-type: none"> • No minimum size to site. • Confirm any E/C Vegetation Type for Tall Grass Prairies • Site must not be dominated by exotic or introduced species. • One or more of the tall grass prairie indicator species listed in OMNR (2000b) Appendix N should be present.

Wildlife Habitat	Wildlife Species	EEC Ecosite Codes	Habitat Characteristics and Information Sources	CONFIRMED SWH and Defining Criteria
<p>Deer Wintering Areas</p> <p>Policy Area: PPS <input checked="" type="checkbox"/></p> <p>Rationales: Sites typically have a long history of annual use by deer. Sites identified are typically the only known sites in the area.</p>	White-tailed Deer	FOC1 FOC2 FOC3 FOC4 FOM1 FOM2 FOM3 FOM4 FOM5 FOM6 FOM7 FOM8 CUP2 CUP3 SWC1 SWC2 SWC3 SWC4 SWM1 SWM2 SWM3 SWM4 SWM5 SWM6	<ul style="list-style-type: none"> Core wintering areas of mainly coniferous trees (pines, hemlock, cedar, spruce). May also include areas of deciduous forest. A conifer canopy cover of more than 60%. Land surrounding the core area is usually agriculture, mixed or deciduous forest. However, a core deer yarding area is predominantly woodland habitat with minor components of cultural lands. Traditionally used by deer. Absence of barriers to migration to and from the yard itself. Barriers cut off access to the yard and will impair use of the yard by deer during winter. Suitable areas of cover, food and adjacent natural lands. MNR determines deer yards following methods outlined in, Selected Wildlife and Habitat Features: Inventory Manual", (OMNR, 1998) 	<ul style="list-style-type: none"> No Studies Required. These areas are mapped by MNR District offices. Core or Stratum 1 Deer yards considered Significant by MNR will be provided to municipalities. Field investigations that record deer tracks in winter to confirm use (can be done from a vehicle or aircraft). This is best done in a series of winters to establish the boundary of a core Stratum 1 yard in an "average" winter. MNR will complete these field investigations. SWHDSS (OMNR 2000c) Index #28 provides development effects and mitigation measures.
<p>Policy Area: PPS <input checked="" type="checkbox"/></p> <p>Rationales: Colonies important to local bird population, typically sites are only known colony in area.</p>	Caspian Tern	(two-lined on a 1:50,000 NTS map).	<ul style="list-style-type: none"> Canadian Wildlife Service ESA reports and other studies prepared by C.A.'s MNR District Offices. Local naturalist clubs. 	<ul style="list-style-type: none"> Caspian or Common Terns (OMNR 2900b) Any nesting colony of one or more Little Gull is to be considered significant. Studies would be done during May/June when actively nesting. SWHDSS (OMNR 2000c) Index #24 provides development effects and mitigation measures.

pasture - one of more diverse
alvar types (alvar pavement
and shrubby alvar glades)

- very diverse - specialized,
rare taxa

ex. yellow body slipper
bearberry
Cooper's Milkweeds