

Worksheet #9a – Living with Wildlife

Use this worksheet to learn more about how your actions affect wildlife species in the rural landscape.

Why should you be concerned?

- For rural landowners, seeing a fox dart across a concession road, watching a hawk as it soars above the meadow, or hearing a midnight chorus of frogs is an unforgettable experience. Wildlife encounters in rural areas make our lives a little richer. In fact, wildlife is an essential part of our landscape, an integral part of the complex web that sustains our survival.
- Human activities and land use patterns have allowed species like raccoons, coyotes, and deer to flourish while others such as the barn owl, badger, and spotted turtle have drastically declined. Today's paradox is that we have both an abundance of some species of wildlife and other species at risk.
- Most habitats in southern Ontario occur on private land. Rural landowners play an important role in ensuring the stewardship of Ontario's wildlife.
- Attracting wildlife to your property brings both benefits and costs. Sometimes wildlife on your land can cause problems for you or a neighbour. Managing your wildlife habitat enhancements to promote diversity and ecological health, encourages wildlife to use the resources in those habitats instead of the alternatives around your home.
- Human health risks of living with wildlife include Rabies, Lyme Disease, and West Nile Virus. Contact your local health unit for more information.

What can you do?

1. Maintain natural habitats on your land. The greater the diversity of vegetation and areas, the more species you are likely to see. More species generally means that you will be creating population checks and balances by attracting both desired species and their predators.
2. Learn about species at risk and take a proactive role in protecting and expanding the quality of their habitat in the landscape whenever possible (refer to Worksheet 9a for further details).
3. Plant native trees, shrubs, vines, and other plants – native species are best suited to local conditions and supporting local wildlife.
4. Design your plantings to widen fencerows, create movement corridors for wildlife, and expand areas of natural cover on your land. Areas connected to one another are more valuable to wildlife, and bigger natural areas are better.
5. Cover openings and block passageways around buildings to prevent unwanted wildlife from moving in. Doing a perimeter check periodically of your buildings to remove unwanted wasp nests from eaves, plug holes, and nesting material is a good idea.
6. Become familiar with management practices for dealing with abundant wildlife.

Living with Wildlife

Abundant wildlife...

Rural areas are home to a variety of wildlife. An abundant population of wildlife is commonly a source of enjoyment. However, abundant populations of some wildlife species can have ecological impacts that are in conflict with biodiversity conservation objectives, and in some cases serious human-wildlife conflicts can occur. The difference often depends on taking a few simple steps to avoid encounters with or damages caused by wild animals. If you experience problems with abundant wildlife, consult the Ministry of Natural Resources.

Skunks and Raccoons

These creatures are often attracted to the homestead where easy food and shelter can be found.

- Eliminate access points (i.e. overhanging branches, sheds, porches).
- Control food sources (i.e. lawn grubs, pet food, proper garbage storage).
- Animals that are residing under porches or in garages can be excluded by covering all openings with woven wire fencing once animals have left to feed for the evening.
- Chicken wire fencing around gardens or other areas is effective. It can be supplemented with electric fencing if required.
- Bright lights and loud music will deter raccoons from gardens and other areas as a short-term solution.

Beavers

Beavers can become a problem if their eating habits or dam/den building activity cause damage or flooding on property.

- Choose plants and trees carefully. Beavers do not like species such as elderberry, ninebark, and twinberry.

- Wrap individual trees in metre-high, galvanized wire fencing, hardware cloth, or multiple layers of chicken wire.
- A variety of techniques (e.g., bafflers, deceivers, culverts) can be used to control the level of water behind a dam. Your local [Ministry of Natural Resources office](#) can provide advice.

Deer

A high density of white-tailed deer can impact woodland regeneration, wildflower abundance and diversity, forest composition, and the natural resistance of woodlands to invasive species establishment. Indicators of deer damage are most easily seen in your woodlot.

A visible browse line with a lack of seedlings and saplings in the 0.5 – 1.5m height range indicates a high abundance of deer.

- Another sign is the absence of, or heavy damage to, sugar maple, cedar, hemlock, and oak seedlings and saplings.
- Native wildflowers such as trilliums may disappear with the non-native, invasive garlic mustard taking over.

Canada Geese

High numbers of Canada Geese can have negative impacts on the landscape. Geese prefer areas with easy access between food, water, and nesting sites.

- Establish a vegetated buffer around wetlands, ponds, and watercourses.
- Don't create nesting islands in wetlands.
- Visual barriers of shrubs and tall grass between the water and upland areas are the best deterrent.
- Temporary fences made of 1 or 2 strands of string tied with streamers can provide temporary relief from migratory geese. Erect them between feeding areas and the water.

Living with Wildlife: How do you rate?

| Topic | Best 4 | Good 3 | Fair 2 | Poor 1 | Your Rating |
|---|---|--|--|---|--------------------------|
| WILDLIFE HABITAT MANAGEMENT | | | | | |
| 1 Familiarity with Local Wildlife | Thorough understanding of wildlife and seasonal patterns in your area, OR continually seek to learn how you can provide habitat for local wildlife, especially species at risk. | Good understanding of wildlife in your area and their seasonal patterns. | Basic familiarity with local wildlife, AND/OR general idea of wildlife seasonal patterns. | No consideration or knowledge of wildlife on your property, OR actions taken to eliminate non-nuisance wildlife.* | <input type="checkbox"/> |
| 2 Habitat Management | Effective habitats are left alone, AND where appropriate, areas that do not support a diversity of species (i.e. lawns) are enhanced or restored for wildlife by planting cover and food-producing species. | Habitats that effectively support species are left alone, OR minor alterations to wildlife habitat areas still permit a diversity of plants and animals to live in the area. | Habitats are altered but continue to provide enough habitat to support a limited number of hardy, adaptable species. | Areas that could provide habitat for species such as brush piles, fencerows, or meadows are unnecessarily removed or altered so that they no longer attract wildlife.* | <input type="checkbox"/> |
| 3 Creating Connections through Restoration | Natural area restoration or habitat enhancement areas are located to increase the size of natural areas, create ecological corridors between natural areas, connect adjacent areas, or buffer sensitive areas. | Natural area restoration or habitat enhancements are designed for specific single-species benefit only, with an attempt to link natural areas. | Natural area restoration or habitat enhancement is undertaken with little planning involved. | Habitat is further degraded.* | <input type="checkbox"/> |

* These conditions may violate provincial legislation or municipal by-laws.

| Topic | Best 4 | Good 3 | Fair 2 | Poor 1 | Your Rating |
|--|--|---|---|--|--------------------------|
| WILDLIFE HABITAT ENHANCEMENT <i>continued</i> | | | | | |
| 4 Windbreaks, Shelterbelts, and Treed Fencerows | <p>These features are maintained where they exist; a mixture of ages and species is in place,</p> <p>AND/OR features are planted or enhanced with a wide range of species and at various intervals through the years to produce varied habitat.</p> | <p>These features are maintained where they exist, but consist of a limited number of species.</p> <p>AND area is at least 10 metres wide.</p> | <p>These features are not maintained; trees may be damaged or are mature (with no young trees in place for succession).</p> | <p>Trees in windbreaks, shelterbelts and fencerows are cut down and not replaced,*</p> <p>OR are sources of invasive species spread.</p> | <input type="checkbox"/> |
| 5 Transitional Habitat Areas: Shorelines, Streambanks, Wetland/pond Edges | <p>Transitional areas that separate upland areas from aquatic habitats are naturally vegetated,</p> <p>AND vegetated area is 18 metres wide or more.</p> | <p>Transitional habitat areas are naturally vegetated and contain trees and shrubs,</p> <p>AND area is at least 10 metres wide.</p> | <p>Permanent vegetation in transitional habitat areas is at least 5 metres wide.</p> | <p>Transitional habitat areas are not vegetated,</p> <p>OR are only covered with mowed grass,</p> <p>OR are eroding.</p> | <input type="checkbox"/> |
| 6 Brush Piles, Stone Piles | <p>Natural brush cover and rock piles exist and are maintained, providing wildlife such as weasels, snakes, and rabbits with cover - an essential part of their habitat.</p> | <p>Where cover is sparse, piles of brush, rock, concrete from old foundations, and other materials are piled to provide shelter for wildlife.</p> | <p>No rock or brush piles exist.</p> | <p>Rock and brush piles are unnecessarily removed where they exist; areas are kept free of woody debris and clutter.*</p> | <input type="checkbox"/> |

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| Topic | Best 4 | Good 3 | Fair 2 | Poor 1 | Your Rating |
|--|--|---|--|---|--------------------------|
| WILDLIFE HABITAT ENHANCEMENT <i>continued</i> | | | | | |
| 7 Nesting Habitat | Non-hazard, dead standing trees, and other features that provide natural nesting habitat for songbirds, bats, cavity-nesting birds, and squirrels exist and are maintained on your property. | Where natural nesting habitat is rare, artificial nesting structures are installed and placed in the correct location to meet species' needs, protected from predators and cleaned out in early spring each year. | Natural nesting habitat is retained, AND Where natural nesting habitat is rare, artificial nesting structures are installed. | Nesting habitat has been unnecessarily removed from the property. | <input type="checkbox"/> |
| 8 Bird Food Sources | Native plants that provide natural sources of bird food flourish on your property (i.e. fruit-bearing shrubs, birch trees). | Native plants are planted to replenish natural food sources for birds. | Bird seed is used to supplement naturally-occurring food sources, preferably only in winter months. | No natural sources of bird food present on the property. | <input type="checkbox"/> |

tip

While tidying your house can be positive, try to resist tidying natural areas. Brush piles are great habitat for mice, voles, and snakes; logs on your woodlot floor are ideal salamander homes, and standing dead trees are preferred real estate for woodpeckers

tip

Feeding wildlife species is generally not recommended since it concentrates animals, may increase populations artificially, and can cause other serious human-wildlife conflicts.

* These conditions may violate provincial legislation or municipal by-laws.

| Topic | Best 4 | Good 3 | Fair 2 | Poor 1 | Your Rating |
|---|--|---|---|--|--------------------------|
| MANAGING ABUNDANT WILDLIFE | | | | | |
| 9 Preventing Access to Buildings | All crevices, openings, passageways, chimneys, vents, and soffits into buildings are properly blocked or screened and checked yearly. | Most openings to buildings are properly blocked or screened and checked regularly. | All doors and windows have a tear-free screen. | Openings to buildings are not checked or maintained. | <input type="checkbox"/> |
| 10 Waste Management | Compost and garbage is stored in wildlife-proof containers and recycling material is well-rinsed or cleaned before being stored <i>indoors</i> . | Compost and garbage is stored in wildlife-proof containers and recycling material is well-rinsed or cleaned before being put outside. | <p>tip</p> <p>There is less chance of trapping wildlife in sealed openings if you construct seals at the end of the summer.</p> | Compost, garbage and/or recycling materials are easily and/or frequently accessed by wildlife. | <input type="checkbox"/> |
| 11 Pet Management | <p>Both dogs and cats have current rabies vaccinations and are spayed/ neutered,</p> <p>AND cats are kept indoors, or are kept on a leash when outdoors.</p> <p>AND/OR dogs are confined to a fenced run.</p> <p>tip</p> <p>The domestic cat is not a natural part of the ecosystem. Scientists estimate that cats kill billions of birds each year in North America.</p> | <p>Cats are spayed or neutered AND have a bell on their collar when outdoors,</p> <p>OR dogs are supervised when outside.</p> | <p>tip</p> <p>To avoid attracting unwanted insects and wildlife to your home, keep your BBQ clean!</p> <p>Install yellow compact fluorescent light bulbs near your exterior doors to reduce the attractiveness of interior lights.</p> | Pets are allowed to roam outside unsupervised. | <input type="checkbox"/> |

Worksheet #9b – Species at Risk

Use this worksheet to learn more about how your actions affect Species at Risk (SAR) in the rural landscape.

Why should you be concerned?

- Our health and quality of life depend on biodiversity – a rich diversity of wild plants, animals, and habitats. We are fortunate to live in a province with a rich biodiversity, but more species become endangered every year as a result of human activities. More than 170 of Ontario's wild species are at risk – that's over one-third of all of the species at risk in Canada.
- The #1 conservation priority for most species at risk is the loss, fragmentation, and/or alteration of their habitat. Rural landowners can play an important role in reversing the trend for habitat loss and helping conserve and restore important natural habitats that support and promote species at risk.
- The decline of populations and the disappearance of wildlife species modify ecosystems considerably, both in Canada and elsewhere in the world. Plants, animals, and micro-organisms all play essential roles in the natural processes that keep the Earth's atmosphere, climate, landscape, and water in balance.

Did you know?

In responding to the Endangered Species Act, the Species at Risk Stewardship Fund encourages individuals and groups across Ontario to participate in the protection and recovery of the province's biodiversity through stewardship projects or activities. Since its establishment in 2007, the Fund has supported more than 600 stewardship activities and restored more than 24,000 hectares of habitat. Details on eligibility criteria and fund guidelines are available at mnr.gov.on.ca/ with the search phrase 'Species at Risk Stewardship Fund.'

What can you do?

1. Enhance your property for wildlife using native plants, increasing natural cover, and providing habitat elements as described in this manual.
2. If you think there is a species at risk on your property, you can help by reporting it to your local Ministry of Natural Resources office. MNR staff will appreciate any information you report and can explain about stewardship and other ways to protect the species.
3. Federal and Provincial Species at Risk legislation may influence what you can do on your property. **Endangered species and their habitats are protected under law.**
4. To further protect species at risk in your area, you can offer help to non-profit organizations that sometimes need volunteers for specific activities relating to the recovery of species at risk.
5. Learn about the **Endangered Species Act** and the **Species at Risk Act** using the websites in the resources section of this module. Consider the protection of locally rare species, and not just those considered at risk at the provincial or federal level.

Species at Risk

Know your Species at Risk...

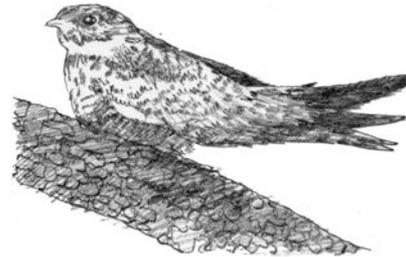
A **species at risk** is any native plant or animal that is at risk of extinction or of disappearing from the province. Increasingly, teams working on species at risk recovery are focusing on priority ecosystems rather than a single species at risk.

A **priority ecosystem** is one that supports many species at risk. Some priority ecosystems in Ontario that may occur on your lands include Carolinian forest, tallgrass communities, and alvars.



The **Wood Turtle** (*Glyptemys insculpta*) is endangered in Southern Ontario, due in part to loss of its aquatic habitat and to predation by stray pets and other 'urban' wildlife.

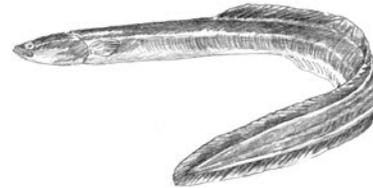
By enhancing your property for wildlife using native plants, increasing natural cover, and providing habitat elements as described in this section, you are contributing to the conservation of Ontario's biodiversity.



Special concern provincially, designated threatened federally.



Special concern provincially, not at risk federally.



Endangered provincially, special concern federally.



Endangered provincially and nationally.

For the complete Species at Risk in Ontario List (O. Reg. 230/08), please visit ontario.ca/speciesatrisk.

Species at Risk: How do you rate?

| Topic | Best 4 | Good 3 | Fair 2 | Poor 1 | Your Rating |
|--|--|--|--|--|--------------------------|
| HABITAT MANAGEMENT FOR SPECIES AT RISK | | | | | |
| 1 Identified Species at Risk (SAR) on your Property | Actively working with SAR team to protect identified SAR on your property, AND/OR implemented a conservation plan for SAR on your property. | Reported SAR on your property to recovery team or the Ministry of Natural Resources, AND encourage site visit by MNR biologist. | Identified SAR on your property is not removed nor disturbed. | Active attempts made to discourage or drive off SAR from your property for fear of limiting regulations.* | <input type="checkbox"/> |
| 2 Habitat Improvement | Windbreaks, shelterbelts, and treed fencerows are maintained where they exist; a mix of ages and species is in place, AND natural area restoration or habitat enhancement areas are located to increase size of natural areas, to connect adjacent areas, or to create ecological corridors between natural areas. | Windbreaks, shelterbelts, and treed fencerows are maintained where they exist; a limited number of species are in place, AND/OR natural area restoration or habitat enhancements are designed for specific single-species benefit only, with an attempt to link natural areas. | Windbreaks, shelterbelts, and treed fencerows are not maintained (e.g., trees may be damaged, no young trees in place for succession), AND/OR natural area restoration or habitat is undertaken with little planning involved. | No habitat restoration. Trees in windbreaks, shelterbelts, and fencerows are cut down and not replaced, OR are sources of invasive species spread, OR areas that could provide habitat for SAR are unnecessarily removed or altered at expense of wildlife.* | <input type="checkbox"/> |

* These conditions may violate provincial legislation or municipal by-laws.

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|--|--|--|--|--|--------------------------|
| HABITAT MANAGEMENT FOR SPECIES AT RISK <i>continued</i> | | | | | |
| 3 Habitat Management Actions | <p>Natural brush cover and rock piles exist and are maintained, providing wildlife such as weasels, snakes, and rabbits with cover,</p> <p>AND non-hazard, dead standing trees, and other features that provide natural nesting habitat exist and are maintained,</p> <p>AND native plants provide natural sources of bird food.</p> | <p>Where cover is sparse, piles of brush, rock, concrete from old foundations, and other materials are piled to provide shelter for wildlife,</p> <p>AND where natural nesting habitat is rare, artificial nesting structures are installed and maintained to meet species' needs,</p> <p>AND native plants are planted to replenish natural food sources for birds.</p> | <p>No rock or brush piles exist, AND natural nesting habitat is retained; where natural nesting is rare, artificial nesting structures are installed,</p> <p>AND bird seed, suet, nuts, etc. is used to supplement naturally-occurring food sources, preferably only in winter months.</p> | <p>Rocks and brush piles are unnecessarily removed where they exist; areas are kept free of woody debris and clutter,</p> <p>AND/OR nesting habitat has been unnecessarily removed from property,</p> <p>AND/OR no natural sources of bird food present on the property.</p> | <input type="checkbox"/> |
| 4 Woodland Trail Design and Layout | <p>Trails are not built through SAR sensitive areas,</p> <p>AND in creating the trail(s), tree removal is limited; trail width and layout is appropriate for intended uses,</p> <p>AND erosion is managed with water bars that avoids disruption to SAR habitat.</p> | <p>Trails avoid SAR sensitive areas,</p> <p>AND few trees have been removed to build trail(s),</p> <p>AND trail width and layout is appropriate for intended uses.</p> | <p>The trail crosses some sensitive terrain such as wetland edges and rock outcroppings,</p> <p>AND limited tree removal took place in their creation.</p> | <p>Trail width and layout is not appropriate for trail's uses (i.e. rutting and tree damage is caused by vehicles),</p> <p>AND/OR no trails area developed and activities follow different routes as the need arises,</p> <p>AND/OR several areas of the trail are actively eroding.</p> | <input type="checkbox"/> |

| Topic | Best 4 | Good 3 | Fair 2 | Poor 1 | Your Rating |
|--|--|---|------------------------------------|---|--------------------------|
| HABITAT MANAGEMENT FOR SPECIES AT RISK <i>continued</i> | | | | | |
| 5 Field and Meadow Trail Maintenance | Trails located near the field perimeter are few and don't impact nesting SAR, AND if creating new trails through fields, the first mowing is delayed until July to prevent harm to ground nesting birds. | Several trails are routed through fields. They are not heavily used, however, and do not impact nesting SAR, AND mowing new trails is delayed until July. | Trails are mowed indiscriminately. | The entire meadow is used without regard for the impact on SAR or other wildlife or native plant species. | <input type="checkbox"/> |
| 6 Pet Management | Dogs and cats have current rabies vaccinations and are sprayed/neutered; cats are kept indoors, or are declawed and kept on a leash when outdoors to preserve songbird populations; dogs are confined to a fenced run. | Cats are sprayed or neutered and have a bell on their collar when outdoors. Dogs are supervised when outside. | | Pets are allowed to roam outside unsupervised. | <input type="checkbox"/> |

| Topic | Best 4 | Good 3 | Fair 2 | Poor 1 | Your Rating |
|-------|---------------|---------------|---------------|---------------|-------------|
|-------|---------------|---------------|---------------|---------------|-------------|

HABITAT MANAGEMENT FOR SPECIES AT RISK *continued*

7 Field and Meadow Trail Maintenance

You stay on recognized off-road vehicle trails, pack out your litter, and ride in a way that limits your impact on trails and SAR,

AND you minimize the noise from your vehicle by keeping your speed and engine rpm low and steady when approaching your neighbours' property.

You stay on recognized off-road vehicle trails, pack out your litter, and ride in a way that limits your impact on trails.

You stay on recognized off-road vehicle trails, but frequently ride after rains, in early spring or during snowmelt,

AND your riding practices cause some rutting and erosion on your trails.

You ride throughout your lands with no trail system,

AND/OR regularly ride through sensitive areas,

AND/OR your activities cause widespread rutting and erosion.

Resources List

Living with Wildlife

For more information...

Carolinian Canada

carolinian.org

Environment Canada Species at Risk

Federal - sararegistry.gc.ca/ Ontario - ec.gc.ca/nature

LandOwner Resource Centre

Factsheets:

lrconline.com/Extension_Notes_English/wildlife/wild_index.html

Ontario Endangered Species Act

e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07e06_e.htm

Ontario Federation of Anglers and Hunters

Invading Species Awareness Program - invadingspecies.com

Ontario Ministry of Agriculture, Food and Rural Affairs

Booklet: Best Management Practices: Fish and Wildlife Habitat Management (pub no. BMP01E)

omafra.gov.on.ca/english/environment/bmp/series.htm

Ontario Ministry of Natural Resources

Biodiversity: It's in Our Nature

mnr.gov.on.ca/en/Business/Biodiversity/

Living with Wildlife

mnr.gov.on.ca/en/Business/FW/2ColumnSubPage/STELo2_168419.html

Natural Heritage Information Centre

Tracks and maintains data on natural areas, critical flora and fauna, communities, and special features in Ontario. You can perform a geographical search of your area on the NHIC website and view records of species at risk reported in your area.: nhic.mnr.gov.on.ca/

Strategy for Preventing & Managing Human-Wildlife Conflicts in Ontario

mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@fw/documents/document/244546.pdf

Ontario Soil and Crop Improvement Association

Booklet: Probing Problem Wildlife

ontariosoilcrop.org/docs/ProbingProblemWildlife.pdf

Royal Ontario Museum

On-line list of species at risk for Ontario's five major bioregions

rom.on.ca/ontario/risk.php

Tallgrass Ontario

tallgrassontario.org

Toronto Wildlife Centre

torontowildlifecentre.com/pages/faq/faq.htm