

# FARM FIELD GUIDE

---

to species at  
risk in southern  
Ontario

---

• **Grasslands** •

**A WILDLIFE GUIDE FOR FARMERS**



6



8

## CONTENT

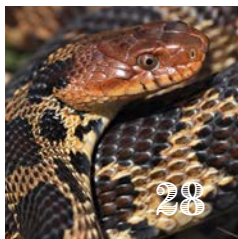
Introduction	2
How to use this guide	4
What are grasslands?	5
<b>Species</b>	-
Barn Swallow	6
Bobolink	8
Eastern Meadowlark	10
Loggerhead Shrike	12
Barn Owl	14
Short-Eared Owl	16
American Badger	18
Milksnake	20
Western Chorus Frog	22
Monarch	24
Yellow-Banded Bumble Bee	26
Henslow's Sparrow	28
Eastern Mole	28
Eastern Foxsnake	28
Northern Bobwhite	29
Rusty-Patched Bumble Bee	29
Gypsy Cuckoo Bumble Bee	29



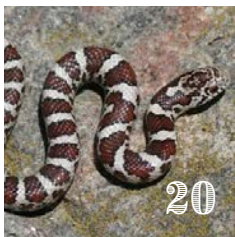
16



24



28



# AN IDENTIFICATION GUIDE TO GRASSLAND SPECIES AT RISK IN SOUTHERN ONTARIO

---

Grasslands are areas with a mixture of grasses, wildflowers and sedges, and less than 35% tree and shrub cover. In Ontario, native grasslands include tallgrass prairies, savannahs and alvars. Native grassland habitats have seen dramatic reductions in size since European settlement, however the occurrence of surrogate or agricultural grasslands like pastures, hayfields, and old fields have helped to offset these habitat declines. These farm fields provide important habitat for species that rely on grasslands (Environment Canada, 2013). This guide will help you identify wildlife species at risk (SAR) that you might find in grasslands on farms across southern Ontario. All of the wildlife featured in this guide are threatened by population decline and are listed as SAR provincially and/or federally.



Each SAR is assigned a status that reflects the level of risk it faces. The Ontario Ministry of Natural Resources and Forestry (MNRF) defines four categories of species at risk:

### **“SPECIAL CONCERN”**

means the species lives in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and threats.

### **“THREATENED”**

means the species lives in Ontario, is not endangered, but is likely to become endangered if threats are not addressed.

### **“ENDANGERED”**

means the species lives in Ontario but is facing looming extinction or extirpation.

### **“EXTIRPATED”**

means the species once lived in Ontario, but no longer does. Extirpated species are not extinct and live somewhere outside of Ontario. Extirpated species have not been included in this field guide.



## HOW TO USE THIS GUIDE

This guide contains two types of species descriptions. Full species accounts are given for grassland SAR that are relatively wide ranging in southern Ontario grasslands. These accounts include a photograph, identification features, and their habitat needs. Partial species accounts are given for grassland SAR that have limited ranges in Ontario. These sections include a photograph of the species. Some grassland SAR were not included because they have very restricted ranges and/or they require expert knowledge to identify and differentiate them from similar species.

Additional information on the species listed in this guide can be found at the Species at Risk in Ontario webpage and the Environment and Climate Change Canada Species at Risk Registry.

Species at Risk in Ontario:  
[www.ontario.ca](http://www.ontario.ca)

Species at Risk in Canada:  
[www.registrelep-sararegistry.gc.ca](http://www.registrelep-sararegistry.gc.ca)

# WHAT ARE GRASSLANDS AND HOW CAN THEY BENEFIT MY FARM?

Grasslands are open, natural spaces made up of mostly grasses, wildflowers, and sedges. Grasslands most commonly found on the farm include pastures, hayfields, meadows and abandoned fields – these are agricultural or surrogate grasslands. Other types of grasslands found in Ontario include tallgrass prairies, savannahs and alvars – these are native grasslands. Grasslands provide many ecological services, including:

- Soil erosion protection
- Water filtration to protect groundwater resources
- Removal of greenhouse gases through carbon capture and storage
- Forage for livestock
- Habitat for a wide diversity of plants and animals.

Unfortunately, less than 3% of southern Ontario's original grasslands remain today. Grasslands are being degraded and destroyed due to urban development, agricultural commodity shifts, and pollution. As grasslands become increasingly rare, so do the plants and animals that rely on these habitats for breeding, feeding, and overwintering. Without actions to conserve important grassland habitat, these species are at risk of disappearing from Ontario.

---

# BARN SWALLOW

---

Status in Ontario:  
**Threatened**

## *Hirundo rustica*

---

Barn swallows forage in grassland habitats including hay fields, meadows and pastures. Barn swallows are aerial insectivores, meaning they feed on insects while in flight. By eating flies and other insects, barn swallows contribute to effective insect pest management on farms. Look for barn swallows flying gracefully in a darting, acrobatic motion.

When not flying, barn swallows are commonly observed perched on wires, tree branches and fence posts.

---

### **Size**

15-19 cm long  
(bill to tip of tail)

---

### **Shape**

- Long, deeply-forked tail
- Long, pointed wings

### **Listen for**

A long series of continuous warbling followed by up to a dozen quick, mechanical-sounding whirs. When threatened, barn swallows will give a *chi-deep* alarm call.

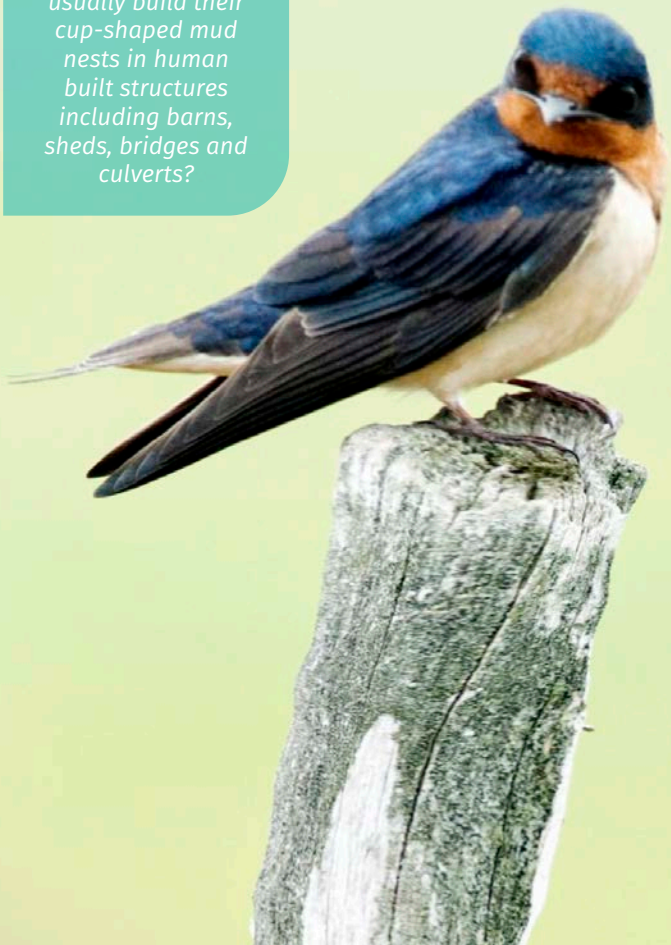
---

### **Colour**

- Metallic blue-black back, wings and tail
- White to light orange breast
- Cinnamon-coloured forehead and throat
- Males are more boldly coloured than females



*Did you know  
barn swallows  
usually build their  
cup-shaped mud  
nests in human  
built structures  
including barns,  
sheds, bridges and  
culverts?*



---

# BOBOLINK

---

Status in Ontario:  
**Threatened**

---

## *Dolichonyx oryzivorus*

---

Bobolinks breed and nest in grassland habitats, including: pastures, hayfields, abandoned/retired fields and meadows. Bobolinks build their nests on the ground. In the spring, males can be seen performing aerial display flights to attract mates. They repeatedly flutter up, singing their characteristic bubbling song, before descending. Bobolinks fly like a helicopter, moving in space slowly with rapidly-beating wings. Males can also be seen perched on shrubs and fence posts. While in Ontario during their breeding season, bobolinks feed on insects and seeds.

---

### **Size**

15-20 cm long  
(bill to tip of tail)

---

### **Shape**

- Pointed wings
  - Short, pointed tail
  - Large, cone-shaped beak
- 

### **Listen for**

A bubbly, robotic,  
“R2D2” noise.

---

### **Colour**

#### **Breeding male appearance (March - August):**

- Black underside, white upperside  
“backwards tuxedo”
- Straw-coloured patch on back of head

#### **Female and non-breeding male appearance (August - March):**

- Dull brown with streaked back and top of head
  - Unmarked breast and belly
  - Pinkish beak
-

*Did you know bobolinks fly up to 20,000 km to and from South America each year? By the end of its life a bobolink will have traveled the equivalent of 4 to 5 trips around the world!*



---

# EASTERN MEADOWLARK

---

*Sturnella magna* | Status in Ontario: **Threatened**

---

Eastern meadowlarks breed and nest in grassland habitats, including: hayfields, meadows, grassy fencerows, and prairies. During breeding season, they can be heard singing their sweet song late into the day. Look for these birds on fence posts and hydro lines attracting mates with their bright yellow breast. Eastern meadowlarks walk through grasses, probing for insects in the ground with their long, sharp bills. When flying, they alternate between several rapid wing beats and short glides flying low over ground.

---

## Size

23 cm long  
(bill to tip of tail)

## Shape

- Long, spear-shaped beak

---

## Colour

- Black V-shaped band on bright yellow breast
- Brown back
- Black stripe behind eye, yellow mark in front/above eye
- Short, wide tail with white patches on sides of tail
- Long pink legs with large feet

---

## Listen for

Two or three simple, flute-like whistles *seeooooaa seeeadoo*.

*Did you know eastern meadowlarks require at least 6 acres of grassland habitat to establish a territory?*



---

# LOGGERHEAD SHRIKE

---

*Lanius ludovicianus* | Status in Ontario: **Endangered**

---

Loggerhead shrikes hunt and nest in open pastures or other grasslands with short vegetation and scattered hedgerows, trees and thorny shrubs. Loggerhead Shrikes are perch-and-wait predators, and hunt patiently from fences, utility poles, low trees or shrubs. They scan the ground for their unsuspecting prey, including large insects such as grasshoppers; small birds, and rodents. Because they don't have strong feet, like true birds of prey, Loggerhead shrikes use thorny shrubs or barbed wire to impale their prey, to hold it in place while they rip it in to smaller pieces to eat.

---

## Size

23 cm long  
(bill to tip of tail)  
Slightly smaller than a robin

---

## Colour

- Grey, black and white bird
  - Wide, raccoon-like black mask
- 

## Listen for

Repeated, soft mechanical trills or buzzes; or clear, high whistles. Shrikes are most likely to be heard during nesting, when young birds will beg with repeated, raspy squawks.

---

## Shape

Large, blocky head with stubby, hooked black bill

---

*Did you know the loggerhead shrike uses its hooked bill to paralyze its prey with a jab to the spinal cord?*



---

# BARN OWL

---

*Tyto alba*

Status in Ontario: **Endangered**

---

Barn owls hunt for field mice and voles at night in open, grassy areas including abandoned farm fields, meadows, grassy ditches, pasture, hayfields, and edges of wetlands. Barn owls can hunt in darkness because they locate their prey primarily using sound!

Barn owls nest in barns, silos, abandoned buildings and tree cavities. Unlike many other birds, barn owls do not build nests. They simply line the base of their nesting site with shredded pellets (balls of fur and bones of their prey) they have regurgitated.

---

## Size

35 - 50 cm tall  
(bill to tip of tail)  
Medium owl

---

## Listen for

A long, 'blood curdling'  
shriek – cssssshhh

---

## Shape

Does not have ear tufts

---

## Colour

- White heart-shaped face with dark eyes
  - White breast
  - Yellow-brown feathers on back
-





*Did you know a barn owl family on your farm could eat more than 1,000 rodents during its 10-week nesting season!? Barn owls live in the same area year round, so this number only accounts for a fraction of their yearly consumption.*

---

# SHORT-EARED OWL

---

*Asio flammeus* | Status in Ontario: **Special Concern**

---

Short-eared owls nest and feed in grassland habitats. These owls are less nocturnal than most other owls and can often be seen during early and late day. Look for their characteristic floppy, moth-like flight. During midday, short-eared owls rest hidden in weeds and grass on the ground. At night these owls fly low over ground hunting for small mammals using sound.

---

## Size

33 - 43 cm long  
(bill to tip of tail)  
Slightly smaller than a slender  
medium-sized owl

---

## Shape

- Slender, medium sized owl
- Large, round head

---

## Colour

- Mostly mottled brown
- Dark triangle around each yellow eye
- Pale, yellowish-brown breast with thin streaks

---

## Listen for

Males giving a muffled *poo-poo-poo* in rapid series. Both sexes give high, nasal, or wheezy barks *cheef cheef* when in flight.

---



*Did you know short-eared owls kill their prey with one bite to the back of the skull? The prey is then swallowed whole.*

---

# AMERICAN BADGER

---

*Taxidea taxus*

Status in Ontario: **Endangered**

---

While American badger habitat is common on farmland, it doesn't include crop fields. Badger habitat can be found in field and forest edges, old fencerows, hedgerows, windbreaks, buffer strips and abandoned fields. American badgers are well equipped for digging burrows with long (3.8 cm) claws on their powerful front legs and a streamlined head. American badgers are nocturnal and spend their nights traveling between burrows and hunting for rabbits, groundhogs, small rodents, frogs, toads and bird eggs. When threatened American badgers hiss and growl and can release a smelly musk.

The chance of seeing a burrow of an American badger is much greater than seeing this nocturnal animal. Their burrows can be up to 3 m underground and 10 m long. Any burrow 25 cm or wider is worth reporting to the badger hotline: 1-877-715-9299.

---

## **Size**

60-72 cm long (head to rump)

## **Shape**

Wide, "flattened" appearance

---

## **Colour**

- Long, grey body with short, dark legs
  - Stripes on its head and face
  - White chest and neck
  - Long grey tail often held close to the body
-

A close-up photograph of an American badger in a field of tall grass. The badger is shown in profile, facing left. It has a dark brown face with a prominent white stripe running from its forehead down its snout. Its ears are small and rounded. The fur on its back and sides is a mix of brown, tan, and grey, appearing thick and somewhat shaggy. The background is a soft-focus field of green and yellow grasses.

*Did you know  
American badgers  
are very nomadic  
and can have a  
home range up to  
80,000 acres?*

---

# MILK SNAKE

Status in Ontario:

**Special Concern**

---

## *Lampropeltis triangulum*

---

Milksnakes can be found in old farm fields, barns, forest edges and rocky outcrops. This snake can also be found hibernating in basements of old buildings. Milksnakes can sometimes be found in barns because of the abundance of small mammals for them to feed on. Milksnakes provide excellent rodent control in barns and around homes.

When threatened, a milksnake will vibrate the tip of its tail, release a smelly odor and actively defend itself by biting if picked up.

---

### **Size**

Total length: 60-132 cm

---

### **Shape**

Slender body compared to other snake species

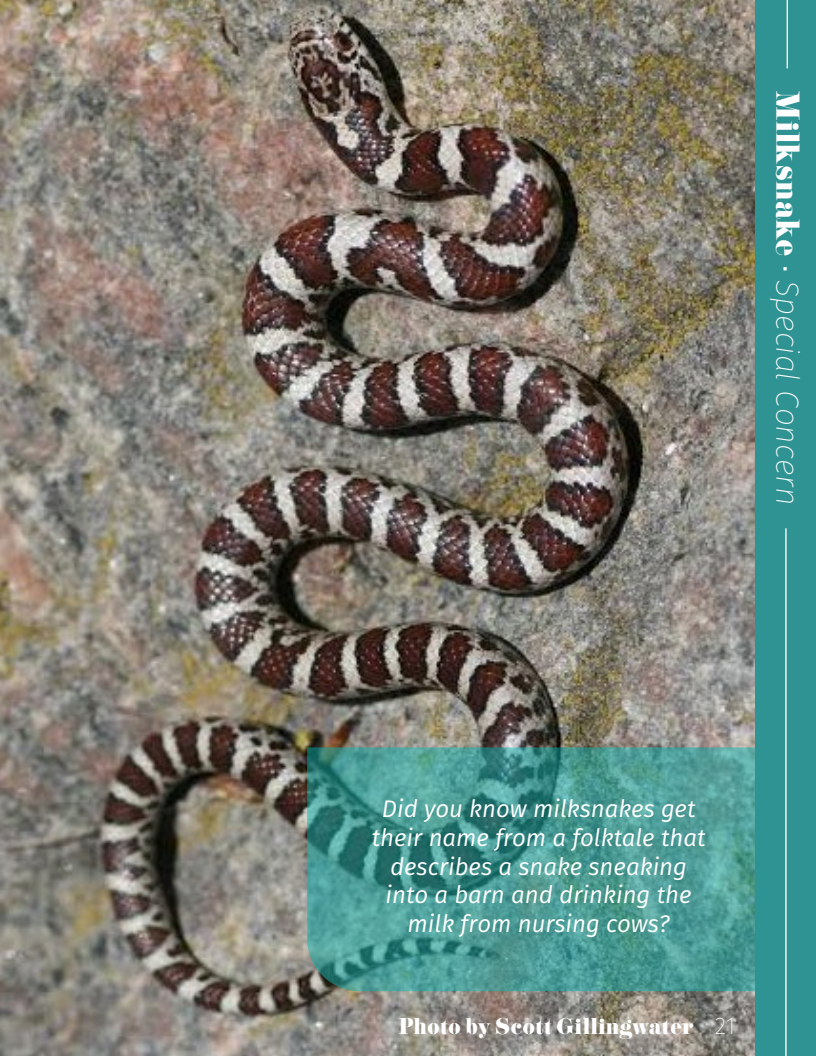
### **Colour**

- Grey to light brown background with red or brown blotches
- Light coloured “Y” or “V” mark on top of head
- White and black checkerboard pattern on belly

---

**Milksnakes are not venomous**

---



*Did you know milksnakes get their name from a folktale that describes a snake sneaking into a barn and drinking the milk from nursing cows?*

---

# WESTERN CHORUS FROG

---

*Pseudacris triseriata*

| Status in Ontario:

**Threatened**  
**(St. Lawrence-Canadian Shield population)**

In early spring, western chorus frogs breed in shallow (at least 10 cm deep), fishless, temporary water bodies with vegetation. Although much more likely heard than seen, western chorus frogs can be spotted in wet, grassy areas including flooded ditches, fields and meadows near forest edges. Western chorus frogs can also be found in wetlands and forest openings near woodland ponds. Over the winter, western chorus frogs hibernate underground or take cover under objects such as fallen logs.

---

## Size

Small, 2-4 cm long

---

## Shape

Smooth skin

---

## Colour

- Green-grey to brown
- Dark stripe from nostril and through eye
- White stripe along upper lip
- 3 dark stripes along back (might be broken into spots)


---

## Listen for

The sound of a fingernail running along the teeth of a comb. You can hear western chorus frogs calling in April during day and night.

---





*Did you know western chorus frogs can survive being frozen and are one of the first frogs to begin calling in the spring? This could be as early as mid-March when there may still be ice on the ground.*

---

# MONARCH

Status in Ontario:

**Special Concern**

---

*Danaus plexippus* |

---

Monarch caterpillars can be found in meadows and other open areas containing milkweed plants, the only plant they feed on. Monarch butterflies can be found from June to October in southern Ontario. Look for monarchs in open, weedy areas, meadows and along roadsides with wildflowers that could provide nectar to feed on. Monarchs are an important pollinator species.



Photo by Hayley Paquette

---

## Size

Butterfly is large,  
93-105 mm  
wingspan

## Colour

### Caterpillar

- Black, white and yellow stripes

### Butterfly

- Orange and black with small white spots
-



*Did you know monarch butterflies travel a whopping 3,000 kilometers from North America to their overwintering sites in Mexico each year? These butterflies can fly as far as 80 km in one day!*

---

# YELLOW-BANDED BUMBLE BEE

---

*Bombus terricola* | Status in Ontario: **Special Concern**

---

In Ontario, yellow-banded bumble bees can be found in a wide variety of habitats including grasslands, woodlands, farmlands, and urban areas. These bees feed on pollen and nectar from an assortment of flowers within these habitats. Yellow-banded bumble bees are important pollinators for alfalfa, potato, cranberry, lowbush blueberry and many other pollinated crops. They nest in underground cavities including small mammal burrows and decaying logs.

---

## Size

### Queen

19-21 mm

### Worker

10-15 mm

### Male

13-15 mm

## Colour


- Distinct yellow and black abdominal band pattern
  - Queens and workers have yellow on front of the thorax and 2nd and 3rd abdominal segments
  - Black head
  - Slightly brown wings
- 

## Shape

Short head and tongue length compared to other bumble bee species

---

*NOTE: There are very slight differences between other bumble bee species in Ontario so an expert is required to positively identify the yellow-banded bumble bee. Taking a photo of the bumble bee can assist an expert in identifying the species.*



*Did you know all yellow-banded bumble bees die off in the fall, except for the queen. She spends the winter nestled in decomposing organic material (e.g. rotten logs). In the spring she will emerge and start looking for a new nest site. Once she has made a nest, the queen will lay eggs that will hatch into worker bees and take over the queen's nest care and foraging duties.*

---

The following grassland SAR are less likely to be encountered because they have limited ranges in Ontario and some can be elusive and difficult to identify.

## HENSLOW'S SPARROW

---

Status in Ontario:  
**Endangered**



## EASTERN MOLE

---

Status in Ontario:  
**Special Concern**



---

## EASTERN FOXSNAKE

Status in Ontario:  
**Endangered**  
**(Carolinian population) &**  
**Threatened**  
**(Georgian Bay population)**



# NORTHERN BOBWHITE

---

Status in Ontario: **Endangered**



Photo by Sandra and Frank Horvath

---

# RUSTY-PATCHED BUMBLE BEE

Status in Ontario:  
**Endangered**



Photo by Johanna James Heinz

---

# GYPSY CUCKOO BUMBLE BEE

Status in Ontario:  
**Endangered**



Photo by Magne Flåten



Photo by Jen Hoesen



**Ontario** 

*The views expressed herein are those of the Ontario Soil and Crop Improvement Association and do not necessarily reflect those of the Government of Ontario.*