

In southeastern Manitoba we are very fortunate to live in an area with an abundance of nature and wildlife. Some of the species we live alongside have been identified as requiring special care and management to ensure their Manitoba-based populations continue to exist. These species are known as species at risk (SAR). This booklet is a means of raising awareness for all 28 SAR in the tall-grass prairie ecosystem, an ecosystem that itself is endangered. This booklet is an easy to read, accessible tool which includes information on well-known species and others that are less familiar.

We can all play our own small role in aiding the recovery efforts to ensure SAR survive and thrive so that the next generation has the same opportunity to enjoy them as we have.

In partnership between:









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Amphibians

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### **Eastern Tiger Salamander**

#### Identification

Eastern tiger salamanders can grow up to 35 cm in length making them one of North America's largest salamanders. They are dark in colour with dull yellow, orange or green spots on their stocky body. The prairie population can usually be differentiated from other subspecies based on where salamanders are found.

#### Habitat

As an amphibian, eastern tiger salamanders depend on both aquatic and terrestrial habitats to complete their life cycle. The water source must be free of predatory fish and be present for 3 to 7 months a year for breeding, laying eggs and raising larvae. Terrestrial habitat includes grasslands, savannas and woodland edges usually adjacent to breeding sites, and is used for foraging, burrowing and overwintering. This need for both habitats increases the number of threats caused from an unhealthy, fragmented ecosystem.

**Did You Know?** During the eastern tiger salamander's 10 - 16 year lifespan, limbs and parts of major organs can be regenerated if damaged.



## **Northern Leopard Frog**

#### Identification

The northern leopard frog is green with dark coloured spots throughout its upper body and has a light-coloured stomach. There are two prominent ridges that run along the upper body towards the eyes. Usually no more than 10 cm in length, northern leopard frogs are considered a large frog in Manitoba.

#### Habitat

As an amphibian, different habitats are needed for the various stages of their life cycle. Breeding, laying eggs and tadpole growth take place in healthy water sources such as marshes or shallow wetlands. As adults, they spend their summers in fields and meadows, and winters in well oxygenated water sources, such as ponds or swamps, that are deep enough to not freeze completely to the bottom.

**Did You Know?** The northern leopard frog will eat anything they can fit into their mouths, including small birds and snakes. When swallowing such large prey, the frog will retract its eyes to help push the food down its throat.



### Mapleleaf Mussel

#### Identification

The main identifying feature of mapleleaf mussels are the nodules on the shell. No other mussel in Manitoba has them. The mapleleaf mussel was named due to similarity in shape to the maple leaf and dark ridges on the shell that can be compared to growth rings of a tree. They are usually brown to yellowish green in colour, with a light coloured inside shell. This species is considered a large mussel in Manitoba, measuring 12 cm across.

#### Habitat

In Manitoba, mapleleaf mussels live in slow-moving rivers with clay or hard packed bottoms. Being a filter feeder, water quality is important to its success. When invasive species such as zebra and quagga mussel are present, mapleleaf mussel numbers tend to decline.

**Did You Know?** The mapleleaf mussel is a long-lived species of up to 64 years. Before the mussel gets to maturity, the larva must find a host fish (in Manitoba usually channel catfish) to attach itself to feed off its nutrients.



### **Bank Swallow**

#### Identification

This species is Manitoba's smallest swallow, between the size of a sparrow and a robin. The bank swallow has grey to brown upperparts (back and back of head) and a more lightly coloured breast with an obvious dark band. In flight, the bank swallow is observed to have an erratic flight pattern. The bank swallow may be misidentified for another SAR, the chimney swift, but has broader, short wings and lacks the stubby tail. The two SAR also have different nesting preferences to which the names of each species is attributed.

#### Habitat

Bank swallows are often found near water sources such as rivers, marshes or ponds, where they nest in cavities in the banks. As an aerial insectivore the bank swallow needs to be situated by grassland, pastures or wetlands which provide insect prey to feed on. If the insect population is not high enough or the water source is unhealthy, nest failure may occur for the bank swallow.

**Did You Know?** Bank swallows will nest in groups of 10 to 2,000.



### **Barn Swallow**

#### Identification

The barn swallow is distinguished by its distinct deeply-forked tail, which shows white markings in flight. They are larger in size than a sparrow with very little neck showing in flight. Colour patterns are metallic blue upperparts with light to rust coloured underparts rising to a darker red throat patch stretching onto the forehead.

#### Habitat

Barn swallows prefer to live in grasslands, wetlands and agricultural lands that sustain an abundance of insect prey for this aerial insectivore. They have adapted to the changing prairie landscapes by switching from nesting in caves, crevices and hollows to nesting in man-made structures such as under eaves of buildings, especially favoring older agricultural buildings.

**Did You Know?** Barn swallows are the most widespread swallow in the world. They can be found in every continent but Antarctica.



### **Bobolink**

#### Identification

The bobolink is smaller than a robin, with a short tail and neck. Non-breeders and females have a mottled buffy-brown plumage similar to most sparrows and a pink bill. In breeding plumage, the male is dramatically different in colour. Breeding males are mostly black with a white back and rump, while the back of the head is a distinctive buffy, yellow colour and their bill is black. The males can often be seen singing in flight, or while perched on tall tufts of grass and fence posts.

#### Habitat

Bobolink are found wherever tall-grass prairie remains, plus other meadows and hayfields. As more native prairie is lost, they will nest in cropland and their well-hidden, ground-based nests can be inadvertently damaged during harvest. Bobolink feed on a variety of insects, including those that may be harmful to crops, so they can benefit agricultural areas.

**Did You Know?** Some bobolink have an annual migration of nearly 20,000 kilometres from Alaska to the southern tip of Argentina. Throughout their lifetime they will travel a distance that is equal to going around the world five times!



### Canada Warbler

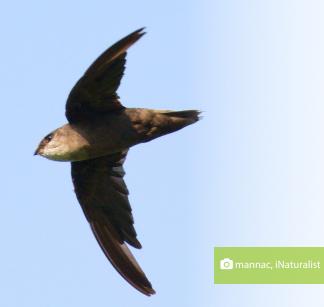
#### Identification

When identifying the Canada warbler from other warbler species across Manitoba there are some key features to consider. The first is a speckled black necklace across the yellow breast which appears most obviously on breeding males but is still seen on non-breeders and females. Its back is slate grey and its front, from face to belly is yellow. The Canada warbler has a rounded breast, longer tail and a pronounced light-coloured eye ring.

#### Habitat

The Canada warbler prefers mixed woodlands with a dense understory. Nesting occurs on or near the ground in moist areas that are plentiful with insect prey. The Canada warbler is threatened as nearly 90% of their overwintering habitat in South America has been lost due to deforestation.

**Did You Know?** Canada warbler are one of the last song birds to arrive to their breeding grounds and also one of the first to leave for their over-winter grounds. Their time spent in Canada is relatively short.



## **Chimney Swift**

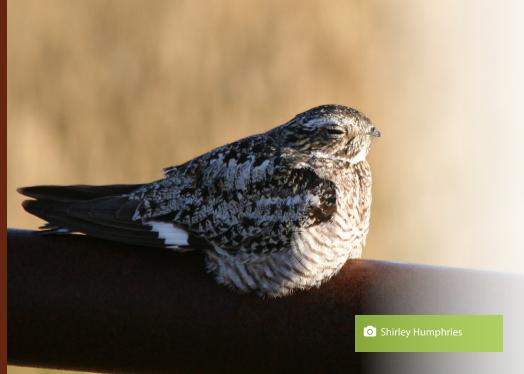
#### Identification

The chimney swift is regularly misidentified as a swallow. Look for the sooty-grey, cigar-shaped body with long curved wings and short stubby tail. Note a lighter colored throat patch. Chimney swift have a distinct jittery flight pattern and chittering call while foraging.

#### Habitat

Chimney swifts are now more numerous in urban or developed areas. Traditional nesting sites of old growth, hollow trees have mostly been lost to deforestation. Most birds now nest in chimneys, although with the modernization of these structures the chimney swift faces new challenges. Another important need is a healthy insect population.

**Did You Know?** Thousands of chimney swifts will roost together in one site. In these close spaces they can keep the roost 21° Celsius warmer than outside temperatures.



## **Common Nighthawk**

#### Identification

The common nighthawk is a medium sized bird that is well camouflaged due to its grey and brown mottled plumage. It may be mistaken for other members of the nightjar family including another SAR, eastern whip-poor-will. Most nightjars are nocturnal whereas common nighthawks are crepuscular (most active at dawn and dusk). Other features to look out for are the white bars on the wings, forked tail and the distinct "peent" call.

#### Habitat

Common nighthawks prefer open areas near mixed woodlands but can adapt to urban habitats. They will hunt around artificial light when available. As an insectivore, healthy insect populations are critical.

**Did You Know?** Common nighthawks have the nickname mosquitoe hawk (even though they are in the nightjar family not the hawk family) due to their ability to eat over 500 mosquitoes a night.



### **Eastern Whip-poor-will**

#### Identification

The eastern whip-poor-will is a nocturnal bird named for its unmistakable call, "whip-poor-will". Like all members of the nightjar family, their mottled grey and brown plumage is adapted for camouflage. They are medium in size with a flat head and short beak that is surrounded by bristles that aid in capturing prey.

#### Habitat

The eastern whip-poor-will depends on sparsely wooded areas and prairie to forage in, and more shaded, mixed woodland areas to nest in. In general, they do well in areas that are semi-open or patchy with clearings created by disturbance events such as fire. An abundant insect population is critical for a healthy eastern whip-poor-will population.

**Did You Know?** Eastern whip-poor-wills time the hatching of their chicks to be approximately 10 days before a full moon, which provides optimal hunting for this nocturnal bird.



### **Eastern Wood-pewee**

#### Identification

Eastern wood-pewees are named after its call, a slurred "pee-a-wee". They are larger than a sparrow in size, with long wings and tail, and a noticeable peak on its head. Both sexes have dark grey upperparts with a light breast which occasionally has a light-yellow tone.

#### Habitat

Eastern wood-pewees can be found on the open edges of deciduous forests. Unfragmented forest is preferred, but in their overwintering area of South America this is not always possible due to deforestation. Eastern wood-pewees need abundant insect prey to survive but will also feed on vegetation such as berries.

**Did You Know?** *Eastern wood-pewee groups are called a dribble or squirt.* 



## **Golden-winged Warbler**

#### Identification

Compared to other Manitoba warblers, the golden-winged warbler has gold wing patches and a golden crown, the latter which is most distinguishable in males. Both sexes are grey in colour and have long tails, slender bodies and pointed bills. Males have a distinct black bib on their throat and a black eye patch, while the throat and eye patch of females appear lighter in colour.

#### Habitat

During the breeding and nesting season, golden-winged warblers are found in mixed-woodlands which are in the early stages of regeneration. After leaving the nest, young birds will move to unfragmented, mature forests. Important to note is that almost one-third of goldenwinged warbler nests can be taken over by the brown-headed cowbird.

**Did You Know?** To distract potential predators, the golden-winged warbler will carry food to areas away from the nest.



### Least Bittern

#### Identification

The least bittern is a small heron with a wingspan of 45 cm and weighing only 80 grams. This species has a dark crown extending along its back, a warm brown tail and pale underparts with pale brown stripes. Breeding males appear darker on the upperparts. As with all herons, least bitterns have a hunched appearance, long legs and a long, pointed yellow beak.

#### Habitat

Least bittern are found in swamps, marshes and small bodies of water where aquatic food sources are plentiful and where dense vegetation grows. Look out for them on the edges where cattails meet open water. Due to being a shy, elusive bird, least bitterns do not do well when disturbed by the presence of humans, whether on water wor land.

**Did You Know?** When alarmed the least bittern will point its beak up in the air and sway back and forth mimicking reeds and cattails in the wind.



### Olive-sided Flycatcher

#### Identification

The olive-sided flycatcher is a medium sized bird, dark grey in colour with olive-tinged wings, and a lighter breast. The bill is large and plumage on top of the head is raised. The easiest way to distinguish this species from other flycatchers (including another SAR, the eastern woodpewee) is by their distinct call which has been said to sound like "quick, three beers".

#### Habitat

Olive-sided flycatchers are most often observed in the top of the canopy of conifer forests where they search for insect prey. When natural disturbances such as wildfires create a patchy network of woods and dead trees to perch on, olive-sided flycatcher numbers are at their highest.

**Did You Know?** Olive-sided flycatchers are the largest flycatcher in North America. They have a huge home territory that can be as large as 100 acres.



## Red-headed Woodpecker

#### Identification

The red-headed woodpecker is medium in size with a long sturdy bill. Compared to other Manitoba woodpeckers, the entire head and throat of adult red-headed woodpeckers are red. This is sharply contrasted with its black back, white patched wings, and white breast. Unlike most birds, male and female red-headed woodpeckers are nearly identical in plumage. Juveniles are duller looking with a brown head.

#### Habitat

Red-headed woodpeckers prefer aspen stands but can be found in other habitats such as wooded grasslands, forest edges or shelter belts on agricultural land. Well-grazed woodlots are particularly favoured by red-headed woodpeckers in Manitoba. The need for old growth or dead standing trees is critical for breeding, nesting and food storage.

**Did You Know?** Red-headed woodpeckers are the most omnivorous of all North American woodpeckers. They store food such as live grasshoppers and beetles in tree cavities for later feeding.



### **Short-eared Owl**

#### Identification

The short-eared owl is comparable in size to an American crow. It has streaked brown, black and beige upper parts and a more lightly streaked breast. The eyes are yellow with a black eyepatch on a light-coloured, disc-shaped face. Ears are seldom visible. A better identifying feature is a slow, moth-like flight pattern, observed at dawn and dusk, that is typical of short-eared owls while searching for prey.

#### Habitat

Short-eared owls are found throughout most of Canada but prefer open prairie and the arctic tundra where human developments are limited. Nesting occurs on the ground amongst grasses and other low-growing plants. The abundance of prey, usually small mammals, is critical to the short-eared owl.

**Did You Know?** Short-eared owl females will defecate on their eggs to dissuade potential predators from investigating.



### Yellow Rail

#### Identification

Yellow rail are very seldom seen, more often heard making a distinct "click-click" call which sounds as if two small stones are being tapped together. The yellow rail is comparable in size to a robin, with mottled, yellow and brown plumage. The underparts and face are lighter yellow and the stubby bill is a more noticeable yellow in breeding males. Yellow rail have a shape similar to that of a chicken with proportionately long legs and short head and neck.

#### Habitat

Yellow rail live in shallow wetland habitats such as wet grasslands and sedge meadows. Changes to hydrology, such as draining of wetlands or damming, have big impacts to yellow rail as they do not tolerate higher water levels. Short grasses or sedges are needed for nesting and camouflaging from potential predators.

**Did You Know?** To deter predators yellow rail will build multiple nests to incubate eggs and brood chicks as well as remove eggshells once chicks hatch.



### Monarch

#### Identification

The monarch butterfly undergoes four distinct phases in its life cycle that greatly change its appearance: egg, larva (caterpillar), pupa and adult. Most commonly observed as an adult, the monarch is bright orange with black lacing and white dots on its wings. The body is black with white markings. Its bright colour warns predators that the monarch is poisonous to eat.

#### Habitat

Monarchs are adaptable to a variety of habitats wherever common milkweed, and to a lesser extent swamp milkweed and showy milkweed, are present. Milkweed is the only plant eaten by the larvae so monarchs rely heavily on it. Weather plays a key role in the monarch's survival as well, not only during migration but also during the breeding season; if it is unstable their numbers may decline. The biggest concern of the eastern population is deforestation in Mexico's oyamel fir forests that support close to 99% of the total over wintering population.

**Did You Know?** The monarch butterfly's eastern population has an extreme migration from Mexico to southern Canada that can be as much as 5,000 km total. It will take up to four generations of monarch travelling up to 160 km a day to reach their destination.



## **Poweshiek Skipperling**

#### Identification

The Poweshiek skipperling is a small butterfly no bigger than a loonie in size. They are brown and orange in colour, with distinct silver coloured veins running through the underside of their hind wings. Their flight pattern has a characteristic skipping movement. Only a handful of experts in the world can properly identify Poweshiek skipperlings from other members of the skipper family.

#### Habitat

In Manitoba, Poweshiek skipperlings are dependent on tall-grass prairie habitat which is concerning due to its status as an endangered ecosystem. For Poweshiek skipperlings, it is important to have an abundance of larval host plants and native nectar plants, usually found in the transition zone from wetland to drier upland areas. With a critically low global population, estimated at fewer than 500, genetic diversity is a concern for this species.

**Did You Know?** The Manitoba Tall Grass Prairie Preserve is the only place in Canada that the Poweshiek skipperling is found. This is where they like to feed on their favourite flower the blackeyed susan.



### American Badger

#### Identification

The American badger is best described as being short and stocky, weighing 4 - 12 kg, with an overall flat appearance. Equipped with powerful front legs and claws that may reach 4 cm, they are built for digging. Due to their greyish colouring and striped face, the American badger may be mistaken for the striped skunk and even the common raccoon. The American badger is found in more rural settings, while striped skunks and common raccoons are found in both rural and urban settings.

#### Habitat

American badgers are generally found in unforested grasslands, shrublands, pastures and fields, while trying to avoid cultivated land. A key feature to the habitat is loamy soil which can support their underground den (also called a sett). A male American badger may have a home range of 60 square kilometres.

**Did You Know?** Dachshunds were specifically bred to hunt American badgers. The German translation of dachshund is "badger hound".



### Black Ash

#### Identification

Black ash are deciduous trees that grow 15 - 25 m tall. Two other trees in Manitoba may get misidentified as black ash: the native green ash and non-native Manchurian ash. The bark of a black ash has a corky texture and has 7-11 serrated, dark green, oval shaped leaflets per leaf compared to green ash which has 5 - 7 leaflets per leaf. Black ash are greyer whereas Manchurian ash are tan.

#### Habitat

Black ash are found in urban settings but prefer to grow in undisturbed wetland areas near rivers, swamps or fens, where they live 150 - 300 years. An important consideration in Manitoba is the emerald ash borer beetle. Where present, this non-native insect has upwards of a 90% mortality rate on black ash.

**Did You Know?** Inner bark of the black ash is used to build baskets; this is where its nickname basket tree came from.



### **Culver's Root**

#### Identification

Culver's root is a tall perennial that measures between 1 - 2 m, with spikes of tiny pale pink, purple or white flowers that bloom July through August. The leaves grow in groups (called whorls) of 3 - 7, are serrated, and usually occur in widely spaced groups along the stem. As the only member of its genus in Manitoba, Culver's root is unlikely to be confused with other species.

#### Habitat

Culver's root grows on the edges of prairie and mixed-meadow habitat that is moist and partially shaded. In Manitoba, this species is also found in ditches, and along fence lines and road allowances; therefore, it is susceptible to the practices that go into maintaining these areas.

**Did You Know?** *Culver's root was named after Dr. Culver an 18th-century physician, who prescribed the root as a laxative.* 



### **Great Plains Ladies'-tresses**

#### Identification

Great Plains ladies'-tresses are a small perennial growing 12 - 38 cm in height. The leaves are over 1 cm wide and up to 14 cm in length and will wither before blooming occurs in September. There are multiple, white-coloured flowers that spiral up the stem, each measuring about 1.5 cm in length. Great Plains ladies'-tresses have been confused for other species of ladies'-tresses and may need an expert eye to differentiate.

#### Habitat

Great Plains ladies'-tresses tend to grow in soils with low acidity, in prairie and meadow habitats. Moist areas including ditches and road allowances provide habitat as well, therefore the orchid is susceptible to the maintenance of these areas.

**Did You Know?** Due to their aromatic vanilla-like smell Great Plains ladies'-tresses are sometimes smelled before they are seen.



### Riddell's Goldenrod

#### Identification

Riddell's goldenrod stand up to one metre tall and have yellow flower clusters supporting hundreds of tiny individual flowers, blooming from the end of August to the beginning of September. With over 30 goldenrod species throughout Canada, Riddell's goldenrod can be differentiated by the leaves that are strongly curved and partially folded, giving it a v-shape in cross-section; however, a botanist may be needed to properly make the identification.

#### Habitat

Riddell's goldenrod grows best in tall-grass prairie, shrubby fens and even along undisturbed ditches or road allowances. In early growth development, Riddell's goldenrod requires large amounts of light. Wildfires, grazing and drought can reduce competition from other plant species, reduce shading by the thatch layer, and also keep woody encroachment at bay.

**Did You Know?** An experienced herbalist may use various parts of the plant for treating kidney stones, urinary tract infections, sore throat, teeth aches, internal bleeding, infection and digestion to name a few.



## **Small White Lady's-slipper**

#### Identification

The small white lady's-slipper is a perennial orchid that grows 10 - 35 cm tall. The slipper shaped flower, which blooms May through June, is white in colour with light purple veins. A single plant can have between 3 - 60 stems, with each stem surrounded by 2 - 4 leaves, and surrounding a single, sometimes double, flower. Hybridization with yellow lady's-slipper may occur, making identification challenging.

#### Habitat

Small white lady's-slippers grow in native prairie where the soil is calcium rich and moist. They are generally found in open areas that are impacted by natural disturbances such as wildfires and light grazing. When these disturbances do not occur, small white lady's-slipper can be negatively affected by woody-plant encroachment. Approximately 80% of the known grow sites of small white lady's-slipper in Manitoba occur near roadways; therefore, the activities involved in maintaining these areas may pose a risk for the species.

**Did You Know?** The intricate flower shape of the small white lady's-slipper acts as a temporary trap and ensures pollinators will move past reproductive parts, and promotes cross pollination when visiting another small white lady's-slipper. On one occasion a researcher witnessed a bee take over 15 minutes to find its way out of the flower.



### Western Prairie Fringed Orchid

#### Identification

Western prairie fringed orchids are tall perennial plants that grow to a height of 40 - 90 cm. Multiple, white flowers are deeply fringed and arranged along the upper part of the stem. These flowers bloom from late June to mid-July. There are usually 5 - 7 thin leaves scattered along the stem.

#### Habitat

Western prairie fringed orchids grow best in wet, calcium-rich, prairie and meadows. The Manitoba population in and around the Tall Grass Prairie Preserve is the most northern and contains over half of the global population. Western prairie fringed orchids can be observed in both undisturbed habitat and disturbed areas such as roadside ditches.

**Did You Know?** In Canada, western prairie fringed orchids are only found in the tallgrass prairie where they are pollinated at night by only two rare species of sphinx moth.



## Western Silvery Aster

#### Identification

The western silvery aster is a perennial plant that grows over 30 cm in height. A plant typically has no more than 10 purple flowers, though on occasion may have as many as 60, that bloom August to September and are arranged on sparsely branched stems. Leaves are thin and lance-like and when observed closely, many silvery hairs can be seen.

#### Habitat

In Manitoba, western silvery aster are found in prairie areas where the soil is calcium-rich and generally gravelly, occasionally growing in the thin soil of the Canadian shield. Thriving in a gravelly habitat means western silvery aster can be inadvertently destroyed during resource extraction or road maintenance.

**Did You Know?** The woody rootstock of the western silvery aster has evolved to allow the plant to survive prairie wildfires, cold temperatures and drought.



## **Snapping Turtle**

#### Identification

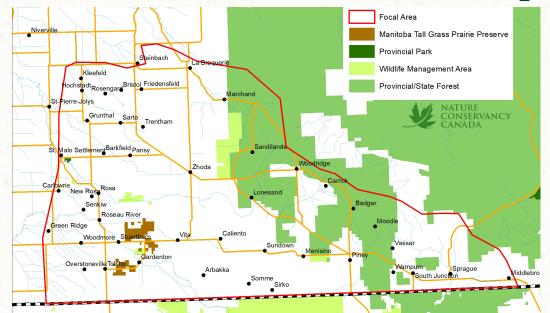
Snapping turtles are large turtles with a maximum upper shell length of 50 cm and weighing 15 kg, occasionally up to 35 kg. Snapping turtles are brown to olive in colour, with a long neck leading to a large head and hooked upper jaw. The long tail and limbs cannot be retracted into the shell due to the small size of the lower shell.

#### Habitat

These turtles are found in slow moving water systems with a soft clay or sandy bottom such as swamps, ponds or streams. As an opportunistic omnivore, the snapping turtle not only feeds on vegetation, but also uses it as cover to hunt small aquatic species. Laying eggs in sandy areas, females are attracted to roadways and in turn suffer from road mortality.

**Did You Know?** If snapping turtle eggs are incubated at temperatures between 23° and 28° Celsius the turtle will be male. If incubated on either side of this temperature the turtle will be female.

# Tall Grass Prairie Natural Area Map



## **Contact Us**

If we all work together as a community we can help keep our home in the Tall Grass Prairie wild for future generations.

For additional information, questions or concerns, please feel free to contact:

Norm Gregoire
Species at Risk Community Liaison
Rural Municipality of Stuartburn

sarcommunityliaison@gmail.com

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