

# Wild about GRASSLANDS



Grasslands are an incredible and diverse ecosystem — they cover more than 40 per cent of the Earth's surface. Although most grasslands in Canada have been largely converted to produce crops and, importantly, to support livestock, they are home to a vast array of plants and animals found only in North America. In Canada the Prairie provinces contain most of our grasslands. But there are also significant grassland habitats in British Columbia, Ontario and even Quebec. In the Atlantic provinces, salt marshes that contain species that dry grasslands do are considered grassland "adjacent". The same could be said for alpine and Arctic tundra. No matter where you live in Canada, you can get out and experience the wonders that natural grasslands have to offer in all seasons.

## MAMMALS

- A | Bison**  
COSEWIC status: Threatened
- B | Ord's Kangaroo Rat**  
COSEWIC status: Endangered
- C | Pronghorn\***
- D | Coyote\***
- E | Swift Fox**  
COSEWIC status: Threatened
- F | pocket gopher\***



**M**ammals, large and small, dominated the Great Plains before European settlement. There were as many as 60 million American Bison from as many as seven species—not just the plains bison we've drawn here. Coyotes and Swift Foxes scavenged bison remains. With no wild bison left, these predators now focus on small mammals and ground nesting birds. They'd have trouble catching up to Pronghorn, the world's second fastest land animal. Pronghorn may have once been as abundant as bison. There are not as many as that today, but they are still a common summer sight in Saskatchewan and Alberta. Not so commonly seen are pocket gophers, but this is only because they spend so little time above ground. Their below-ground tunneling is a vital part of grassland soil health, distributing nutrients and creating space for other wildlife. Their above-ground mounds are the best evidence of a pocket gopher population, even if they don't make landscape gardeners very happy. In the Great Sand Hills of Saskatchewan and Alberta, Ord's Kangaroo Rats are a surprising nighttime presence. A relative of the pet store gerbil, these tiny hoppers avoid sun- and moonlight, only emerging from their burrows on dark nights, collecting seeds that they bring back underground to eat and store.

## BIRDS

- G | Burrowing Owl**  
COSEWIC status: Endangered
- H | Chestnut-collared Longspur**  
COSEWIC status: Endangered
- I | Northern Pintail\***
- J | Greater Sage-grouse**  
COSEWIC status: Endangered
- K | Prairie Falcon\***



**P**articularly in the spring, bird life is one of the most visible and audible wonders of Canada's natural grasslands. There are dozens of bird species that choose to nest exclusively in the grasslands. Most of these spend winters in South and Central America, migrating north to Canada in the spring to raise their young that are fed the abundant insects that also make grasslands home. Songbirds, like the Chestnut-collared Longspur, prefer to build nests on the ground where the grass is well grazed and the plants short, despite perching on the tallest stems and shrubs to sing. Burrowing Owls and Prairie Falcons are among the Prairie's busiest predators. Both prefer to hunt small mammals like mice and ground squirrels, but that's where the similarities end. Burrowing Owls usually hunt at night when small mammals are most active but will also feed on insect prey during the day when grasshoppers are abundant. Prairie Falcons are daytime hunters, catching their food on-the-wing; they select cliffs for nesting. Burrowing Owls are underground nesters, but despite their name, do not burrow rather adopt holes dug by other prairie animals to raise their young. The Greater Sage-grouse is one of Canada's most endangered species. These birds depend on Silver Sagebrush habitat for food and breeding, but this habitat is increasingly being converted for annual crop production, pushing the Greater Sage-grouse out. One of nature's greatest spectacles is the annual spring arrival of waterfowl to the northern prairies and Great Lakes. Northern Shovelers, Mallards and Northern Pintails lead the parade to the prairie pothole region, a region of Canada's Great Plains where tens of thousands of small ponds attract breeding ducks, geese and wetland birds.

## INVERTEBRATES

- L | Western Bumblebee**  
COSEWIC status: Threatened
- M | Painted Lady Butterfly\***



**T**here are tens of thousands of insect species that live in Canada's grasslands, perhaps hundreds of thousands. Many have yet to be identified. All have a special ecological role, but perhaps of most importance to us are the pollinators. The Western Bumblebee is one. Native to western Canada grasslands, including BC, this colourful bee is responsible for pollinating thousands of prairie flowers and crops across the west. Like many native bumblebees, the Western Bumblebee nest either in the ground or in hollow logs. The Painted Lady Butterfly is not as well known as the Monarch butterfly but has an equally impressive travel itinerary. Found around the world, including in Canada, they migrate thousands of kilometres each spring from their warm winter roosts to northern grasslands where they will find host plants and breed.

## FISH

- N | Plains Minnow**  
COSEWIC status: Threatened



**A** minnow is not just a term to refer to small versions of adult fish, but a whole family of fish, found throughout Canada. Even as adults they rarely get big (usually less than 15 centimetres long). There are minnow species, but this family also includes dace, shiners and chub. This group has adapted to life in isolated reaches of slow-flowing grassland rivers and streams, evolving into 15 or more minnow species across the grassland region of the Prairie provinces. The Plains Minnow is Threatened in Canada, and found in only two spots, both in Saskatchewan. Indeed, we didn't even know it was here until 2003, so we don't know much about its biology. What we do know is that, like a lot of small species, they grow rapidly, reaching full adult size within months of emerging from their eggs.

## PLANTS

- O | Prairie Crocus\***
- P | Blue Grama\***
- Q | Needle-and-Thread\***
- R | Western Blue Iris**  
COSEWIC status: Special Concern
- S | Scarlet Globemallow\***



**P**lants, more than any other life, distinguish natural from human converted grasslands. The process of tilling natural grasslands to plant either annual crops like wheat or canola, or even perennial plants for hay and pasture, is known as conversion. In Canada we have converted approximately 80 per cent of natural grasslands for agriculture. Natural grasslands have dozens of plant species, not all of them grasses as the biome name might suggest. The Prairie Crocus is one of the first to bloom each year, and for prairie people, their purple flowers are one of the sure signs of spring. The Scarlet Globemallow, with its unique brick-red flowers, thrives in areas that are being grazed or disturbed, such as on roadside ditches. Western Blue Iris, native to North America, is only found on the dry upland slopes and wet meadows or seepage springs of southern Alberta, often on shallow slopes. But of course, there are grasses; the handbook of Canadian prairie grasses lists 106 species. Prominent on the Great Plains are Blue Grama and Needle-and-Thread. Blue Grama is a "warm season" grass; one that grows best in hot, dry conditions and doesn't set seed until the later, heat of summer. Needle-and-Thread is an early seeding, "cool season" grass that thrives in cool, wet conditions. This grass species is known for its specialized seed with a long, thread-like whisker that straightens when it is wet and curls when it is dry. Weather that shifts from dry to wet conditions is common on the prairies, and makes this seed drill itself into the soil, perfect to survive the cold winter and be ready to germinate in spring.