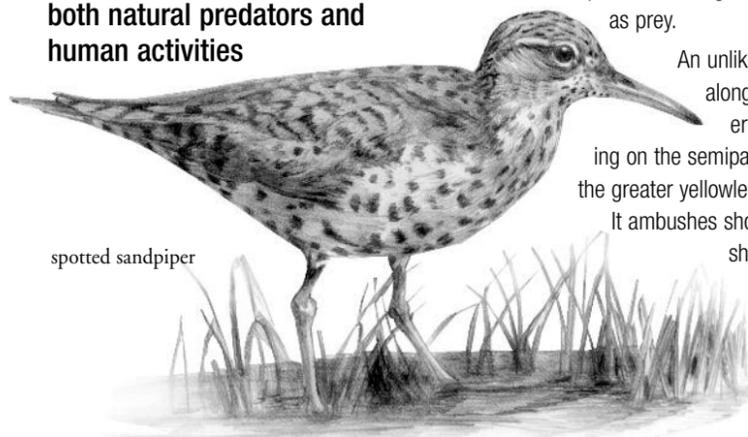


## Threats to Shorebirds

Shorebirds are threatened by both natural predators and human activities



spotted sandpiper

and sizes. Some shorebirds have developed behavioural adaptations to avoid predation. One strategy is to feed in large flocks on beaches and mudflats. When a predator approaches, shorebirds take flight in unison, making it difficult for the predator to single out an individual bird as prey.

An unlikely predator that lives along the shoreline of eastern Lake Ontario is preying on the semipalmated sandpiper and the greater yellowlegs: the snapping turtle. It ambushes shorebirds as they feed in shallow water.

### Humans

Although predators are a great threat to shorebirds, humans present an even greater one.

As the human population grows, humans' need for more and more land also increases. Wetlands, which are prime shorebird habitat, are often drained and converted to agricultural lands, subdivisions or other urban developments. Once these areas have been altered for unnatural land uses, other species move in, such as rats, gulls and domestic cats and dogs, all of which prey on shorebird eggs or young.

### Predators

Although shorebird nests are difficult to find, mammals such as raccoons, foxes and skunks, as well as other predators, often prey on shorebird eggs and young. The well-camouflaged nests in farm pastures and fields are often too well hidden for their own good, leaving them vulnerable to being stepped on by livestock or humans.

Birds of prey, like the peregrine falcon and Cooper's hawk, will target shorebirds of all ages

### Agriculture

The open fields of agricultural lands can be of some benefit to shorebirds, however, because many of Ontario's shorebirds use them as resting spots during migration. When a field is either developed for other uses or left to regenerate into a forest, these important resting places are lost. Some farmers may also spray large quantities of pesticides and fertilizers onto their land. These chemicals can affect not only the birds, but also their eggs and food supply.

### Mining and logging

Mining and logging can also have an impact on the population of shorebirds through the altering of their natural habitat. Clearcutting, which involves cutting all the trees in an area, causes widespread erosion and can destroy shorebird breeding habitat. The extraction of minerals from the land and the building of roads for their transportation also have lasting negative impacts on bird habitat.

### Changing climate

Our warming climate is having an interesting affect on shorebirds. They are beginning to nest farther north during spring and summer, in the sub-Arctic region, where fewer nest-robbing mammals live. For shorebirds that adapt in this way, the chance of having a successful breeding season is improved.

Shorebirds are one of the most interesting collections of birds in Ontario. Even their names are interesting; plovers, sandpipers, yellowlegs, snipes, curlews, phalaropes and godwits are all different types of shorebirds found in Ontario. Most of these birds have two common characteristics: long legs and a long bill. Their long legs are adapted for wading in the shallow water of mudflats and wetlands, and the long bill is used to locate tasty insects and marine creatures that hide in the mud and muck.

The killdeer, common snipe and spotted sandpiper are the most common and widespread of Ontario's shorebirds. Read on to learn more about these and other fascinating shorebirds.

By Kerry G. Everitt  
Illustration and design by Judie Shore



killdeer

# Shorebirds

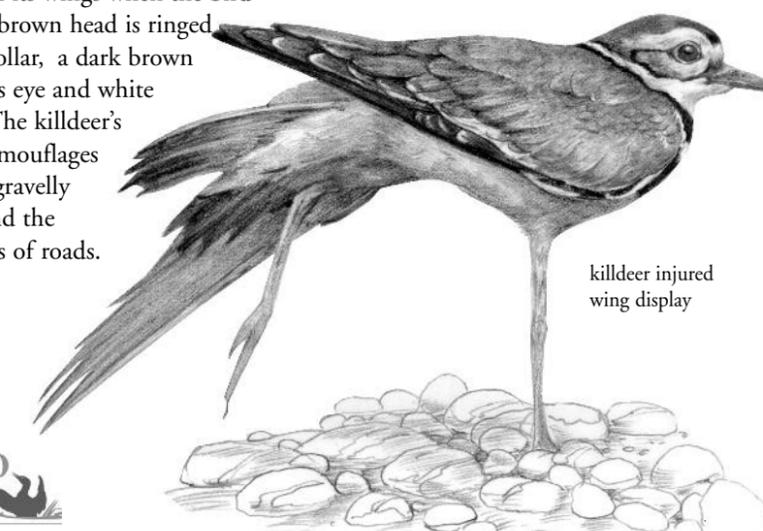
### Killdeer

The killdeer is a type of plover found mostly in southern Ontario. Although it is classified as a shorebird, the killdeer is frequently found long distances from water and has been known to nest on golf courses, gravel parking lots and rooftops. A strong flier and fast runner, this long-legged, robin-sized bird gets its name from its "kill-dee" call. The killdeer has two distinctive black stripes running across its white chest, and an orange lower back and tail. The upper back and wings are brown, but white stripes are visible on its wings when the bird is flying. Its brown head is ringed by a white collar, a dark brown line below its eye and white 'eyebrows'. The killdeer's colouring camouflages the bird on gravelly shorelines and the pebbled sides of roads.

Its brown speckled eggs blend in with the surrounding pebbles and sand.

As killdeer eat many pest species, such as weevils, grasshoppers and beetle larvae, these birds are welcome in many farmers' fields. Killdeers use their long stout bill to find worms and grubs below the surface of the ground.

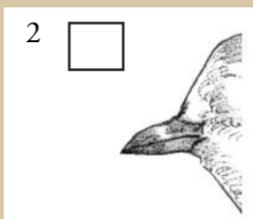
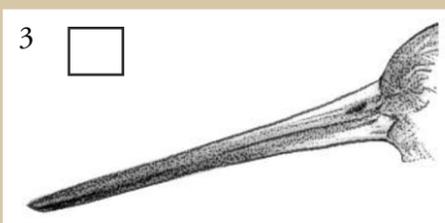
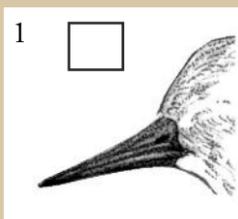
Within a day of hatching, killdeer chicks are already hunting for small insects. The chicks are similar in colour to their parents but have soft, fluffy down, making them resemble large cotton balls on toothpick-like legs.



killdeer injured wing display

## Do you know your bills?

Distinguishing between shorebirds can often be as easy as looking at their bills. Using what you have learned about shorebirds, match each diagram of a shorebird bill to the correct bird. Can you explain why the bills are shaped the way they are? How does the size and shape help the shorebird feed?



- A. greater yellowlegs
- B. Wilson's snipe
- C. least sandpiper
- D. piping plover

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**Thank you for being an important part of Ontario's strong voice for nature.**

201-366 Adelaide St. West, Toronto, ON M5V 1R9  
Tel: (416) 444-8419, 1 800 440-2366  
Fax: (416) 444-9866  
E-mail: [info@ontarionature.org](mailto:info@ontarionature.org)  
Website: [www.ontarionature.org](http://www.ontarionature.org)

Supplement to ONNATURE, Winter 2010

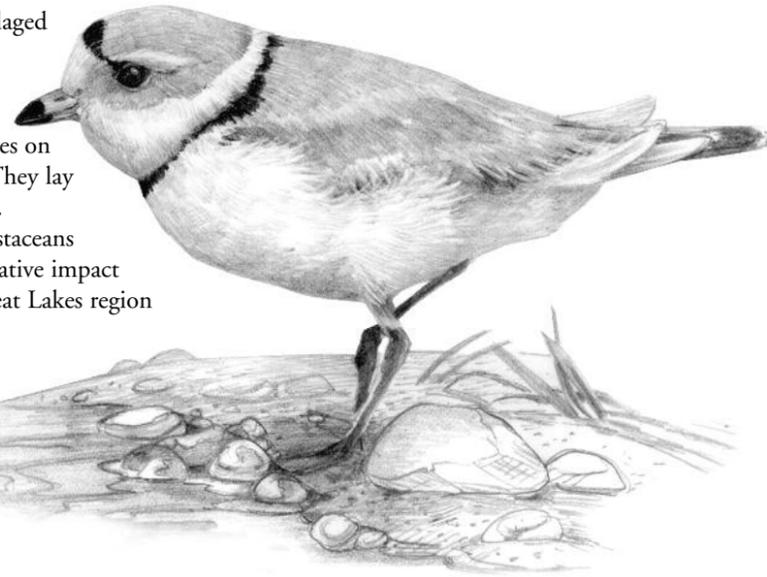
Answers: 1-C, 2-D, 3-B, 4-A

Copy Editor: Sarah Weber, Reviewer: Jimmy Blackwood, Printing: DTP Inc.

### Piping Plover

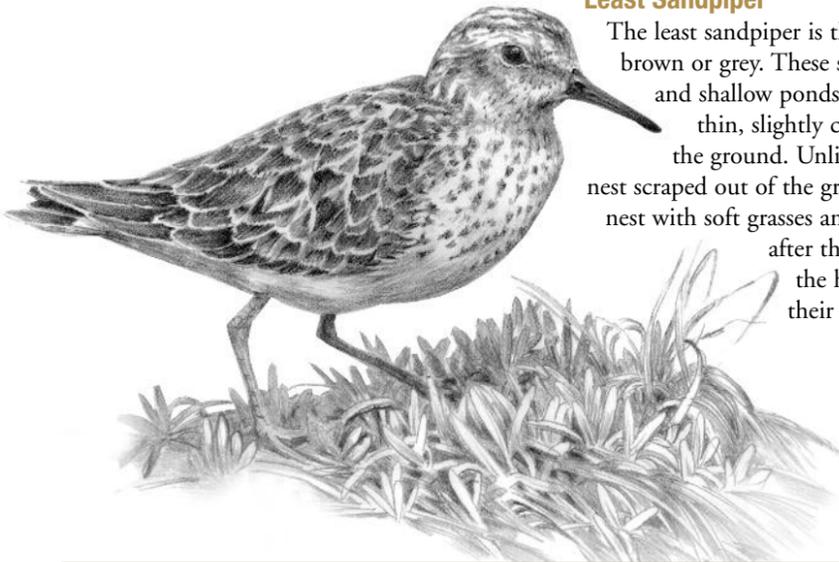
The piping plover is a sand-coloured shorebird that is well camouflaged in its environment. Other than some black on its tail and above its forehead, and a black collar or neckband, this plover is primarily the colour of dry sand. The bird has bright orange legs and a black-tipped orange bill. Piping plovers live nearly their entire lives on sandy shorelines and a little way into the nearby vegetation zone. They lay their eggs directly on the sand in shallow, bowl-shaped depressions. Piping plovers eat fly larvae, beetles and water creatures such as crustaceans and molluscs. Humans' use of beaches for recreation has had a negative impact on the population of piping plovers. Higher water levels in the Great Lakes region have also reduced the amount of habitat for this shorebird.

Within a few hours of hatching, baby piping plovers leave the nest and begin their search for food. When threatened, the young plovers will freeze on the spot, making them difficult to see, as they too are the colour of sand and blend into their natural habitat. Once abundant throughout Ontario, the piping plover is now endangered and is found only in isolated areas of the Great Lakes region such as Sauble Beach.



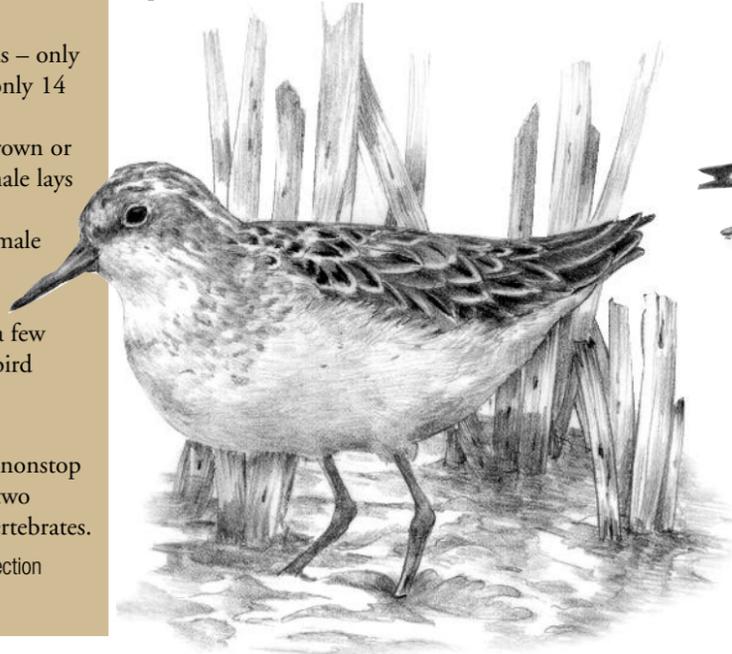
### Least Sandpiper

The least sandpiper is the smallest shorebird in the world. Adults are mostly brown or grey. These sandpipers inhabit the edges of marshes, creeks, wetlands and shallow ponds. When foraging for food, these birds, which have a short, thin, slightly curved bill, peck at insects, snails or fly larvae on the ground. Unlike many other shorebirds, the least sandpiper makes a nest scraped out of the ground in a tuft of grass or moss. The bird lines the shallow nest with soft grasses and leaves. Although usually both the male and female look after the young, the male usually spends much more time with the hatchlings, staying with them until they are ready to be on their own.



### Spotted Sandpiper *shown on page 4*

The spotted sandpiper typically breeds along the narrow strips of shoreline on rivers and lakes. This medium-sized brown-and-white shorebird constantly bobs its head up and down as it walks. It uses its long bill to dig through the mud in search of a variety of aquatic insects and insect larvae.



### Semipalmated Sandpiper

The semipalmated sandpiper is one of Canada's smallest shorebirds – only 30 grams in weight (less than the weight of a chocolate bar) and only 14 centimetres long. Observers often distinguish it from other sandpipers by its small size. This bird has partially webbed feet, brown or grey feathers and a short, stout bill that is nearly straight. The female lays one egg per day over a four-day period in late June or early July. The combined weight of the eggs may nearly the weight of the female bird. The eggs are very pointed at one end, allowing them to fit snugly together in the nest, which helps to keep them warm during incubation. The chicks are able to peck for insects within a few hours of hatching, and their parents, unlike those of many other bird species, do not feed them.

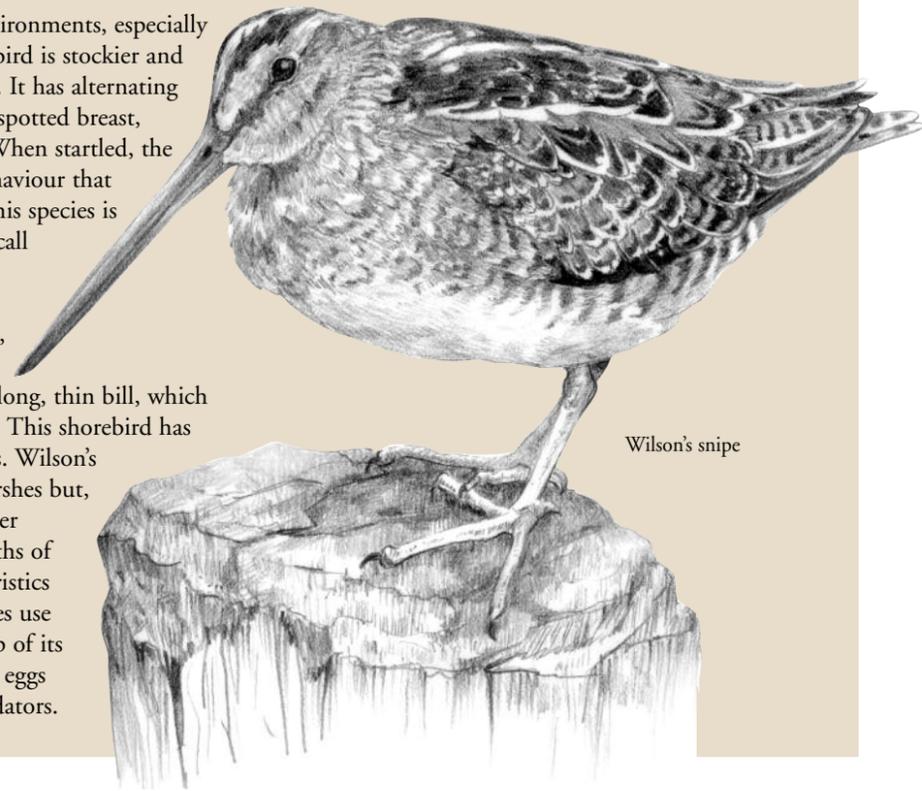
These amazing shorebirds migrate to South America each winter, a distance of over 3,000 kilometres. To prepare for this incredible nonstop flight, semipalmated sandpipers may double their weight in only two weeks, feeding on small shrimp-like insects and other aquatic invertebrates.

**Did you know ...** when flying in a flock, semipalmated sandpipers change direction and look like a school of fish in the sky.

### Snipes

The common snipe is found in wetland environments, especially in the northern parts of the province. This bird is stockier and has shorter legs than many other shorebirds. It has alternating dark brown and beige stripes on its head, a spotted breast, a white underside and olive-coloured legs. When startled, the common snipe flies in a zig-zag pattern, behaviour that may help the bird escape from predators. This species is sometimes called the "sky goat" because its call sounds similar to the baaing of a goat.

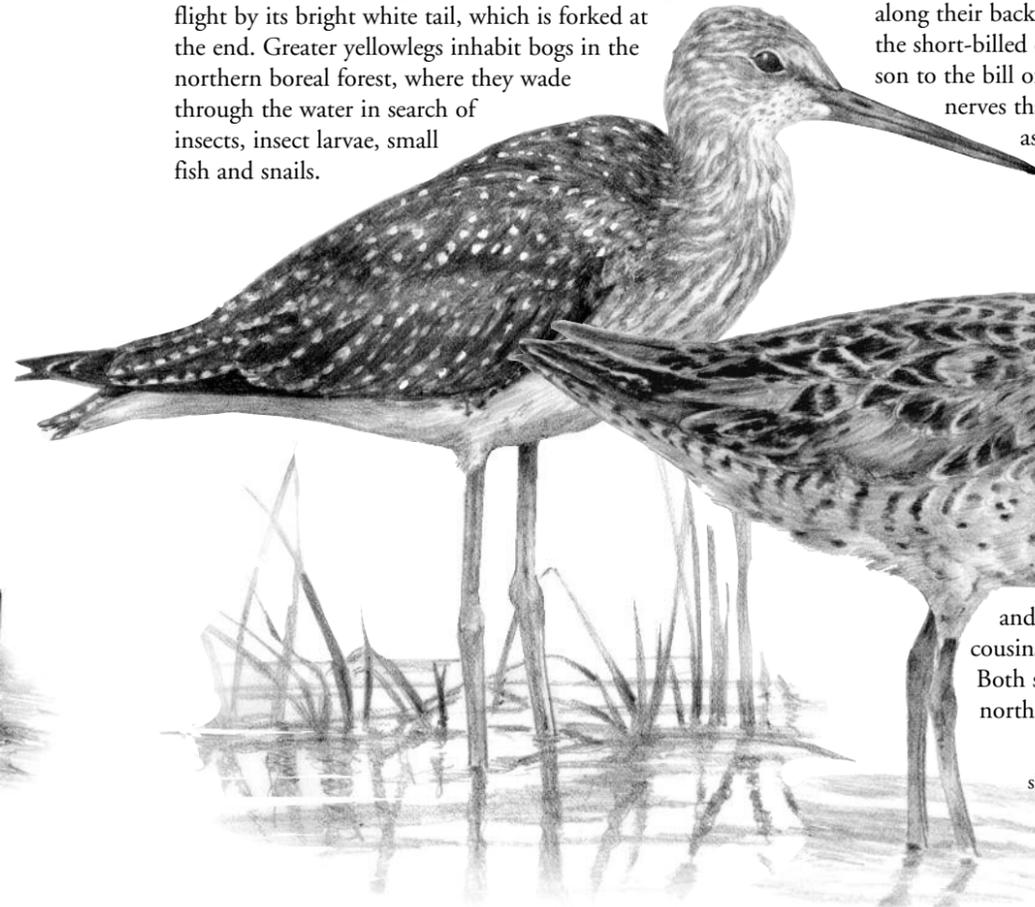
The Wilson's snipe is a heavy shorebird that, unlike most shorebirds, has both a short neck and short legs. This species has a very long, thin bill, which it uses to find insects and worms in the soil. This shorebird has been known to also feed on seeds and leaves. Wilson's snipes are normally found in freshwater marshes but, during migration, they also frequent saltwater marshes and estuaries that form at the mouths of rivers. One of the most interesting characteristics of the Wilson's snipe is that it will sometimes use grasses and reeds to weave a canopy over top of its nest. The canopy not only helps protect the eggs from the rain but also hides them from predators.



Wilson's snipe

### Greater Yellowlegs

Not surprisingly, the greater yellowlegs is a shorebird with long, bright yellow legs. It is grey and has a long, black, slender bill that is slightly turned up at the end. This shorebird can be distinguished from others during flight by its bright white tail, which is forked at the end. Greater yellowlegs inhabit bogs in the northern boreal forest, where they wade through the water in search of insects, insect larvae, small fish and snails.



### Dowitchers

The short-billed dowitcher and the long-billed dowitcher are close relatives and very difficult to tell apart. Both are large shorebirds that have reddish underbellies and are brown spotted elsewhere. As they fly, a bright blaze of white is exposed along their backs, which makes them easy to identify. Even the short-billed dowitcher's bill is relatively long in comparison to the bill of many other shorebird species. It contains nerves that make it particularly good for sensing prey as the bird stabs its bill repeatedly into the mud and muck at the edges of ponds and marshes. The continual up-and-down movement

of the bill into the mud has been likened to the action of a sewing machine needle. Short-billed dowitchers are often found in saltwater marshes and on mudflats, whereas their long-billed cousins are more often found in freshwater marshes. Both species spend the summer months in northern Canada.

short-billed dowitcher