

KANSAS

Wildlife & Parks



SHOREBIRDS





Long-billed, Black-necked, White-rumped Whachamacallits

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Each spring and fall, hundreds of thousands of shorebirds migrate through Kansas. The long flight requires that they stop to refuel and rest, and Kansas marshes are ideal rest stops. They're a joy to watch and study, but trying to identify the species can be a nightmare.

I discovered shorebirds when I was 10 years old. It was the first day of summer vacation, and I felt like a colt on its first day out of the barn. My early-morning romp took me to our farm pond, fishing pole in hand. As usual, I approached the pond cautiously in case any wildlife might be present. Pretending to be an Indian scouting for buffalo, I sneaked through the last screen of weeds at the pond's edge. To my delight, the pond was covered with brightly colored ducks. There were northern shovelers, blue-winged teal and a beautiful duck I would later learn was a wigeon. My best Indian belly crawl took me to the very edge of the pond where I watched the ducks for several minutes. I was fascinated by the beautiful wigeon drakes, which passed within feet of my position.

Suddenly, I was discovered and the ducks flushed. Then, only after the colorful ducks were gone, did I notice the other, somewhat drab, birds also feeding on the pond. I had seen plovers (upland sandpipers) and killdeer before, but the other wading birds present were different. And they weren't nearly as cautious as ducks. I watched the birds wading, picking and probing the shallows for several hours. It was obvious that I was looking at more than one variety of "snipe," but identification was beyond me. Only when I heard a distant call to lunch did I slip from my hiding spot and leave those strange birds that had captured my complete attention.

Since that day I've learned a great deal about shore-birds. In 1982 I began photographing wildlife for a living, and shorebirds have often been my subjects. Out of necessity and interest, I began learning to distinguish the many shorebird species.

Collectively, shorebirds are the least understood and most difficult to identify of any group of birds in North America. "Peeps," "little brown birds," and "snipes" are some of the terms we use to save us when we don't have a clue. Most shorebirds belong to either the sandpiper or plover families. However, wood-



Often found in large mixed flocks, shorebirds may be the ultimate challenge in bird identification. The majority of these birds are white-rumped sandpipers. It requires a good field guide, binoculars and years of experience to distinguish shorebirds.



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cock, snipe, curlews, godwits, avocets, stilts and phalaropes are also considered shorebirds.

The mention of shorebirds prompts visions of an ocean beach with birds scurrying to forage in the wash of a receding wave. While Kansas does not have an ocean, it does have Cheyenne Bottoms Wildlife Area and Quivira National Wildlife Refuge (NWR). These two sites rank right up there with the famous Delaware Bay as stopover sites for migrating shorebirds. Between 30 and 40 species of shorebirds may be observed during the spring and fall migrations at these two wetlands. Spring migration usually occurs between April 15 and June 15, and in the fall, shorebirds pass through Kansas from about July 15 through Oct. 1.

The majority of shorebirds that migrate through Kansas nest in the Arctic tundra. However, some species do nest in Kansas. Killdeer and upland sandpipers are the most common local nesters, but avocets, snowy plovers, Wilson's phalaropes and black-necked stilts all have nested at Cheyenne Bottoms and Quivira NWR.

A typical shorebird nest contains four pointed, brown or black spotted and blotched eggs. Nests usually consist of a shallow depression on bare or slightly vegetated mudflats. The Wilson's phalarope strays from this standard, nesting in spike rushes above water or on grassy areas near water. The upland sandpiper, as the name implies, nests in upland grasslands. The young of all shorebirds leave the nest soon after hatching and are cared for by both parents.

For those shorebirds that nest in the Arctic, migration is a true feat of endurance. Birds that spend the winter in South America, routinely fly non-stop for as long as 60 hours, traveling as far as 2,500 miles. These marathon flights require the bird to store great amounts of body fat for energy. When a shorebird stops in Kansas, it has one objective: a several day feeding frenzy that will supply weight gain equal to 50 percent of the bird's lean weight. A shore-



This killdeer nest represents a typical shorebird nest, usually found on bare gravel or mudflats.



Feeding methods vary. The semi-palmated plover, above, requires shallow water or mudflats. The lesser yellowlegs has a long, probing bill for deeper water.

bird's ability to quickly refuel during its stop in Kansas will result in its timely arrival at the northern nesting grounds and ultimately determine the nesting success of that species. As the loss of wetlands continues, management and preservation of existing stopover sites becomes critically important.

Migrating shorebirds require specific habitat. They feed on mollusks, crustaceans and insects. At Cheyenne Bottoms, shorebirds feed heavily on the larvae of aquatic insects that develop in the mud-bottom pools. For this food supply to be readily available to wading shorebirds, the water must be shallow. The smaller sandpipers must feed on mudflats or in water less than an inch deep. This would seemingly restrict them to the very edges of wetlands, however, our Kansas winds often expand their feeding range by moving shallow water and exposing mudflats. The water is gone, but the larvae lie waiting in the mud, creating a perfect shorebird smorgasbord. When this happens during the peak of migration, tens of thousands of shorebirds can be seen taking full advantage.

Feeding methods of shorebirds vary greatly among species. Dowitchers and white-rumped sandpipers are probers, pushing their long bills deep into the mud to feel for insects. Avocets walk through shallow water and skim with their bills in a steady back and forth movement. Baird's sandpipers merely pluck out food exposed on the mudflats or extreme shallows. The real crowd pleasers, though, are the phalaropes. The long-legged, lobe-toed Wilson's phalarope swims rapidly in tight circles, stirring insects from the bottom muck. Then it picks out larvae caught in the resulting current. A casual observer watching a large flock of phalaropes busily swimming in tight circles might think he's witnessing a group of brain damaged birds.

Upon initiation, a novice birder is quickly convinced that seasoned shorebird enthusiasts are the world's greatest liars. The veteran may re-

mark, "There are three least sandpipers, eight semipalmated sandpipers and one western sandpiper in that group." The novice, upon close scrutiny asks, "How the heck can you tell?"

Shorebird identification is truly a challenge. However, there are certain steps one can take that, when coupled with years of field experience, can actually produce results. Let's use six of the most similar looking short-legged sandpipers as an example.

These six sandpipers are commonly seen feeding together in shallow water or on mudflats in Kansas marshes. Because of their similarities, all but the experts have trouble identifying these birds. Listed by increasing size they are the least, semipalmated, western, Baird's, white-rumped and pectoral sandpipers.



These three sandpipers are similar. Subtle characteristics such as the color of the legs, length and heaviness of bill, body size and of course feather coloration are all used to distinguish the species. The time of year the bird migrates may also be a clue. The top bird is a least sandpiper, the smallest of sandpipers with pale green legs. At left is the semi-palmated sandpiper. It has black legs and is just slightly larger than the least. Below is the western sandpiper, which also has black legs, but it has a heavier bill that has a definite droop near the tip.

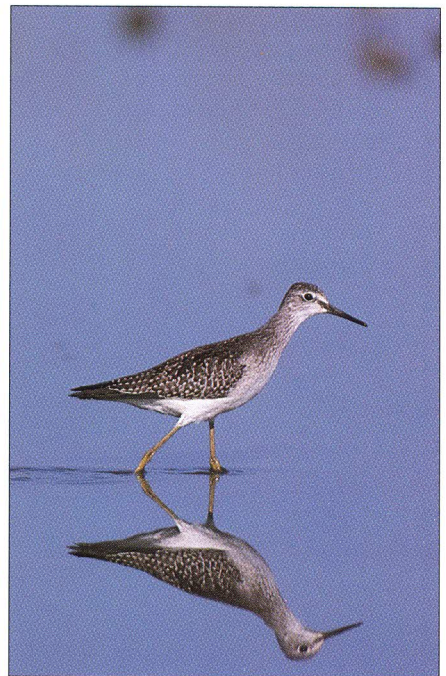
The least sandpiper and the pectoral sandpiper seem to make the task easy by being the only birds in the group that have pale green legs. The pectoral has a distinct margin between its streaked breast and its white belly and is nearly double the size of the least sandpiper. The other listed birds have short, black legs. The white-rumped is the only one of the bunch that has a completely white rump patch that is easily observed when the bird is in flight. The others have a black stripe running through the center of the rump patch. The Baird's sandpiper has a more slender body with wings that protrude a little beyond the tail when not in flight. The Baird's also holds its body in a more horizontal position than other sandpipers.

This leaves only the semipalmated and western sandpipers. They both have black legs and are just slightly larger than the least. However, the western has a heavier bill that has a definite droop near the tip.

Confused? It must be emphasized that shorebird identification skills can only be improved with field experience. Binoculars and a good field guide are necessities, but even then, confidence can be fleeting.

The time of year you observe a particular bird can also be a clue. Shorebird species do not migrate at the same time. Greater yellowlegs are among the earliest sandpipers to pass through Kansas in spring and fall. White-rumped sandpipers are among the last to arrive. Knowledge of migration habits can be helpful in identifying some species. Long-billed and short-billed dowitchers are difficult to tell apart. However, migration data from Cheyenne Bottoms indicates that if you see a dowitcher before late May, it's probably a long-billed. The shortbills don't reach the Bottoms until then, long after the longbill migration has peaked.

Until recently, little was known about shorebird habits. In an effort to learn more about the birds, independent enthusiasts, college researchers, and biologists from state wildlife agencies and the U.S. Fish and Wildlife Service have begun to



The greater (left) and lesser (right) yellowlegs illustrate just how similar shorebirds can look. Even the experts will have trouble with these, although the greater yellowlegs is usually the first species to show up on Kansas marshes in spring and fall.

compile past studies and conduct new research. Presently three researchers sponsored by the U.S. Fish and Wildlife Service are spending their summers in Kansas. Doug Helmers, a University of Missouri graduate student, is conducting research at Cheyenne Bottoms to determine the food base that makes the Bottoms so enticing to shorebirds.

Gonzolo Castro, an employee of the Fish and Wildlife Service, is studying the amount of fat gained by shorebirds stopping at the Bottoms. This data will ultimately be used to answer questions about how often a migrating shorebird must stop to feed throughout the long flight.

Susan Scoggins, also with the Fish and Wildlife Service, is spending her summers at Quivira NWR. Scoggins' research is directed at identifying a pattern of shorebird migration through the Central Flyway and identifying critical habitat areas within the United States.

Ed Martinez maintains an ongoing banding project that serves as the only source of documentation of shorebird movements to and from

Cheyenne Bottoms. Martinez, an entomologist with the State Department of Agriculture, has been independently collecting data for more than 20 years. His banding data and shorebird counts have focused much attention on the Bottoms, causing biologists from around the world to consider Cheyenne Bottoms the most important wetland in North America.


These research efforts are paramount to the future of shorebirds. Fifty percent of North America's wetlands have been destroyed since the turn of the century. As the destruction continues, migrating shorebirds must fly further between resting and feeding stops, emphasizing the need to protect the remaining wetlands. Imagine driving down a 6,000-mile stretch of freeway with no refueling stops. Shorebirds migrating through the Central Flyway could face such a plight if wetlands continue to disappear. Studies on shorebird habits and food requirements could prevent the unknowing destruction of critical wetland habitat.

The millions of birds that migrate through the Central Flyway are part

of our heritage, and the wetlands vital to their survival are living American treasures. It is easy to underestimate the value of a marsh, but wetlands provide habitat for countless other species of wildlife, even when shorebirds and waterfowl

aren't present. Spend the first days of May or the last days of August at Cheyenne Bottoms or Quivira NWR and witness the marshes teeming with wildlife. You will understand.

Shorebird watching can be immensely enjoyable. With more than

30 species to view, it's rarely boring, and the antics, varied feeding habits and behavior are entertaining. I've been a dedicated shorebird watcher since that day when I was 10 years old, and I hope my grandchildren will know the same joy. 





Opposite: Wilson's phalarope. **Right:** White-rumped sandpiper. **Below:** Long-billed dowitcher.

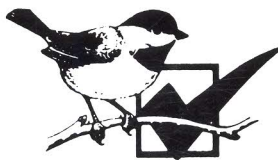






Opposite upper left:
Solitary sandpiper
Opposite above:
Least sandpiper
Opposite below:
American avocet
Right: Stilt sandpiper

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