

ABOUT THE COVER: AMERICAN AVOCET

The American Avocet (*Recurvirostra americana*) is one of our most striking shorebirds. This large, long-legged wader is white below; the striking black-and-white pattern of the back and wings is especially impressive when the bird is in flight. During the breeding season, avocets have rusty-orange necks and heads, but American Avocets are the only avocets in the world that change colors with the seasons — the orange plumage is replaced by gray in winter. Bluish-gray legs give the avocet its folknames “bluestockings” or “blueshanks.” The genus name, *Recurvirostra*, means “the bill is bent back on itself” and describes the sharply upturned bill of this beautiful shorebird. The sexes are similar in plumage, but females have shorter, more strongly curved beaks.

The American Avocet is largely a bird of western North America, breeding locally where suitable habitat occurs along the coast in California and inland as far north as Washington state; in Canada, avocets are widespread in Alberta and Saskatchewan. The breeding range extends south to New Mexico and Texas. Most breeding populations are migratory, although there are year-round populations in coastal California, on the Texas gulf coast, and in central Mexico. Migrants winter primarily in Mexico, and in the United States along the Gulf Coast and Florida and along the Atlantic Coast as far north as North Carolina. The breeding habitat is largely restricted to shallow alkaline wetlands like those associated with Great Salt Lake. In winter, American Avocets inhabit intertidal mudflats, brackish water impoundments, shallow lagoons, and saltmarshes. In Massachusetts, avocets are very rare spring migrants in late April or early May and rare but fairly regular fall visitors along the coast and on the islands.

American Avocets are monogamous and may nest with the same partner in successive seasons. They are semicolonial breeders wherever suitable breeding habitat occurs: temporally unpredictable wetlands, including potholes, salt ponds, evaporation ponds, impoundments, and alkaline salt-grass areas of the arid west. They sometimes nest together with Common and Forster's terns, and will nest on islands if they are available.

Avocet males perform pre-mating displays in which they preen and splash water on their breast feathers with increasing vigor. In post-mating displays the pair intertwine their long necks and run together through shallow water. During the egg-laying period, a newly arrived pair may be confronted by a resident pair in a bizarre “group-circle” display, in which the four birds face each other, bills lowered to the water; uttering trumpeting sounds, the four birds circle together in one direction or the other. Avocets have an aggressive display described as a “crouch-run,” with neck retracted and feathers ruffled. An aggressive “upright” display involves stretching the neck vertically with wings folded or extended. Elaborate responses to predators include false incubation, in which a bird crouches as though incubating and then moves away and repeats the

performance. In the "tightrope display" a bird approaches the predator with its neck retracted and tips its extended wings from side to side. Many distraction displays are communal, including dive-bombing predators while uttering loud "yelping" notes. During diversionary displays, alarm calls have been described as "melodic" and include various *kleet*, *wheat*, and *click* notes, as well as softer *oo-ooos*, *whicks*, and *whucks*.

Both parents select the nest site, often with ritualized scraping displays. The nest is a simple scrape lined with feathers, shells, and vegetation, which may be added throughout incubation. If water levels rise, the nest may be elevated by putting vegetation under the lining. The usual clutch is four buffy, brownish eggs, mottled with darker shades of brown. Avocets respond to high temperatures by panting and may wet their breast feathers to provide evaporative cooling. Incubation lasts about four weeks, brooding up to a week. The chicks are precocial, feed themselves, and during their first day are led by their parents to "nursery" areas, up to 1000 meters away and featuring shallow water with vegetation for cover. The young can fly after about four weeks.

American Avocets forage for invertebrates in open water up to twenty centimeters in depth. They swim well with their partially webbed feet, and forage while swimming in deeper water. They often forage in groups. They feed visually by pecking at the substrate, plunging their heads underwater, or snatching flying insects from the air. They feed tactilely by running forward opening and closing their bills in the water, by filtering prey items from the mud, or in their most impressive maneuver, "scything," sweeping their bills back and forth through the water. A group of a dozen or more avocets all scything is a sight to behold. They take mostly aquatic invertebrates such as fairy and brine shrimp, amphipods, and polychaete worms, but may take small fish, as well.

As ground-nesting birds that often breed in the open, avocets are harassed by a wide variety of mammalian predators, including foxes, badgers, and skunks, and avian nest predators such as gulls and ravens. Adults are often taken by Peregrine and Prairie falcons. Avocets were shot by market gunners during the nineteenth century, and extirpated as breeding birds from the Atlantic Coast. In this century, the major threats to this species have come from loss of habitat through competition for water with agricultural projects, and selenium contamination resulting from irrigation drainage. Effects of selenium include reduced hatching success and deformed embryos. Because of the nature of their breeding habitat, botulism can be a problem for avocets. However, despite these threats the population of this distinctive shorebird is currently stable; it is to be hoped that wetlands conservation and restoration will increase the numbers of this unusual bird and bring more avocets to Massachusetts for birders to enjoy.

— *William E. Davis, Jr.*