



## All About Birds

### Chordata: Aves

#### BALD EAGLE

*Haliaeetus leucocephalus*



The Bald Eagle is a large bird of prey with broad wings for a flapping-soaring flight and a characteristic white head and white tail in adult birds. The species is an opportunistic forager that eats a variety of mammalian, avian, and reptilian prey, but generally prefers fish over other food types. It often scavenges prey items when available, pirates food from other species when it can, and captures its own prey only as a last resort. The bird became rare in the mid- to late 1900s in the contiguous United States as persecution by humans greatly reduced survival and pesticides, primarily DDT, significantly lowered reproduction. The species was listed for protection under the Bald Eagle Protection Act in 1940 and the southern subspecies was listed as Endangered in 1966 under protection of the Endangered Species Preservation Act. The entire Bald Eagle population in the contiguous United States was listed for protection in 1978 under the Endangered Species Act of 1973. Populations have increased dramatically since 1980 as DDT levels dropped and breeding productivity returned to pre-DDT levels across many parts of the range, and as human persecution decreased with increasing environmental awareness. This recovery represents one of the continent's most successful conservation stories. Bald Eagles in the late 1990s had breeding populations in all Canadian provinces and all but 2 of the contiguous U.S. states (Rhode Island and Vermont), and a limited breeding population in Mexico.

#### BLACK-CROWNED NIGHT HERON

*Nycticorax nycticorax*



Adults are approximately 25 inches long and have a black crown and back with the remainder of the body white or grey, with red eyes and short yellow legs. Juvenile birds are brown, flecked with white and grey. These herons are found by marshes at night and by day they roost. They are found worldwide including North America, South America, Southern Europe, Africa, Southern Asia, Falkland Islands, and Hawaii. The diet of the black-crowned night heron depends on what is available, and may include algae, fishes, leeches, earthworms, insects, crayfish, mussels, squid, amphibians, small rodents, plant material, garbage and organic refuse at landfills.



## BRANDT'S CORMORANT

*Phalacrocorax penicillatus*



Brandt's Cormorant is endemic to North America, where it occurs only in marine and estuarine environments. It breeds along the West Coast of North America, reaching Alaska in the north and Mexico in the south. In the main part of its range, from California to Washington, its life history and populations are tied to the rich upwelling associated with the California Current. In the non-breeding season, when the effects of this current diminish, populations redistribute along the coast in concert with changing water and feeding conditions. This species nests in colonies on the ground on rocky islets, choosing flat or sloping areas or cliffs with ledges. Nests are large and untidy, made of terrestrial plants or seaweed collected from the land or sea, or stolen from other nests. Courtship behaviors are typical of the genus *Phalacrocorax*, and emphasize the species' distinctive cobalt blue gular pouch.

## CALIFORNIA BROWN PELICAN

*Pelecanus occidentalis californicus*



The brown pelican is about four feet in length and has a wingspan from six to eight feet. It has a brown and gray body with a white head and a light brown crown. Young pelicans are all brown. The brown pelican is a plunge diver; it drops from the air with its wings partly folded and dives into the water to catch its prey by using its bill and pouch like a net. It scoops up water and fish, strains out the water from the side of its bill, then tips back its head and swallows the catch. Brown pelicans eat mostly mid-sized fishes, such as sardines and anchovies. The Brown Pelican was listed as an endangered species in 1970 when its numbers dipped to below 10,000 individuals. Populations decreased dramatically due to birds eating fish that contained pesticides like DDT (dichlorodiphenyltrichloroethane). Scientists found that DDT caused the eggshells to be too thin to the point that they broke during incubation. Populations recovered somewhat after DDT was banned in 1972; however, the range of this species has been slightly reduced. Since then, populations have been climbing and the brown pelican was removed from the endangered species list in November 2009. Current estimates place the population at 650,000 individuals.



## GREAT BLUE HERON

*Ardea herodias*



The Great Blue Heron is one of the most widespread and adaptable wading birds in North America. The Great Blue Heron nests mostly in colonies, commonly large ones of several hundred pairs. Such colonies are often located on islands or in wooded swamps, isolated locations that discourage predation by snakes and mammals and disturbance from humans. Although the species is primarily a fish eater, wading (often belly deep) along the shoreline of oceans, marshes, lakes, and rivers, it also stalks upland areas for rodents and other animals, especially in winter. It has been known to eat most animals that come within striking range. Its well-studied, elaborate courtship displays have correlates on the foraging grounds, where this species can be strongly territorial. The Great Blue Heron weathered the impacts of 20th century North Americans relatively successfully. Although it was hunted heavily for its plumes and some of its wetland habitats were drained or otherwise degraded, many populations have recovered well. Nevertheless, breeding colonies remain vulnerable to disturbance and habitat loss, and climate change and increasing predator populations may bring new challenges.

## MARbled GODWIT

*Limosa fedoa*



The marbled godwit is a type of shorebird that lives in mudflats and wetlands. Marbled godwits occur from Canada to South America. Adults have long blue-grey legs and a long pink bill with a slight upward curve and dark coloring at the tip. The long neck, breast, and belly are pale brown with dark bars on the breast and flanks. The back is mottled and dark. The total length is 40–50 cm (16–20 in), including a large bill of 8–13 cm (3.1–5.1 in), and wingspan is 70–88 cm (28–35 in). Marbled godwits feed on insects and crustaceans, but at times also eat aquatic plants. They forage by probing in the soft sediment in mudflats, marshes, or beaches. They nest on the ground, in western Canada and the northern United States near marshes or ponds. Nests of the marbled godwit are not easily found, as the adults are not easily flushed off the nest. In the fall, they migrate south to the coasts of California, Mexico, and South America. Their numbers are reduced due to hunting and habitat loss.

## WESTERN GREBE

*Aechmophorus occidentalis*

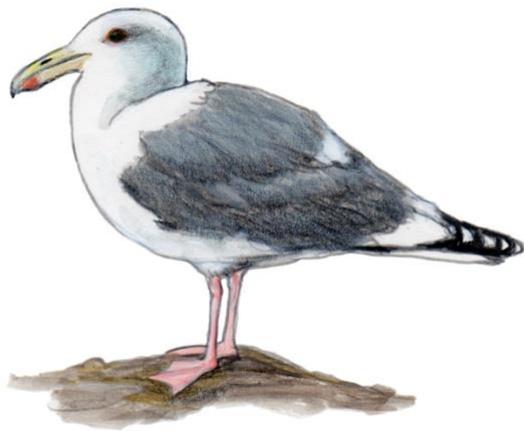


The Western and Clark's grebes are conspicuous water birds of western North America from southern Canada to the Mexican Plateau. They are perhaps best known for their elaborate and energetic courtship rituals. The courtship ceremonies in which these birds perform a series of displays in ritualized, apparently mechanical, sequences are among the most complex

known in birds. Perhaps even more remarkable is the fact that, with one exception, the rituals of these two species are identical. The exception is the number of notes, one or two, in the Advertising call; yet this, plus differences in bill color and facial pattern, are enough for individuals to recognize birds of their own species and to choose them as mates. Western and Clark's grebes are unique among grebes in possessing a mechanism in the neck that permits them to thrust forward the head like a spear. Such a mechanism is well known in herons and anhingas, but its details remain to be worked out in these grebes.

## WESTERN GULL

*Larus occidentalis*



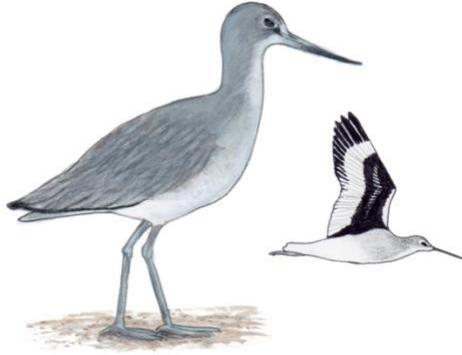
The Western gull is a large gull that can get to 60 cm long. It has a white head and body, and gray wings, a yellow bill with a red spot. This spot is near the end of the bill and chicks peck this area to stimulate feeding. Juveniles are mottled brown, with a dark bill and dark eyes, and pinkish-gray legs. The juvenile plumage varies and takes on more of the adult plumage characteristics each successive year. Western Gulls nest on the ground, laying 2-3 well-camouflaged eggs on a pad of grass or other vegetation. At birth the mottled

coloration of the down-covered chick makes it difficult for predators to spot. These birds are found mostly near the coast, but can also be found regularly offshore. They are not typically found far inland. Many types of habitats are used, including estuaries, beaches, rocky shore, and urbanized areas. Nest sites are often located on islands or inaccessible mainland cliffs. This gull ranges from British Columbia, Canada to Baja California, Mexico.



## WILLET

*Tringa semipalmata*



The willet is one of the largest members of the sandpiper family and can be easily identified while flying because of the broad white bands on their blackish wings. The body is dark gray above and light underneath and the tail is white with a dark band at the end. They have gray legs and a long, straight, dark bill. The willet feeds by probing the mud for crabs, small mollusks, insects, and worms. These birds are common in mudflats, but can also be found on rocky shores and sandy beaches. The

Willet's population declined sharply due to hunting in the late nineteenth and early twentieth centuries. Their population has since increased, but they are still considered at risk, especially in light of continued habitat loss. Ravens and crows, snakes, foxes and raccoons all prey upon the eggs and chicks. Adult predators include raptors, gulls, snakes and otters.

For more information on marine birds and other marine life, be sure to visit our the "Marine Life" page of CMA's website: <http://www.cabrillomarineaquarium.org/exhibits/marine-life.asp>

