CALIFORNIA GULL - LARUS CALIFORNICUS (SEAGULL)

Adults are similar in appearance to the herring gull, but have a smaller yellow bill with a black ring, yellow legs, brown eyes and a more rounded head. The body is mainly white with grey back and upper wings. They have black primaries with white tips. Immature birds are also similar in appearance to immature herring gulls, with browner plumage than immature ring-billed gulls.

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Charadriiformes Family: Laridae Genus: Larus Species: L. californicus

Habitat:

Biomes: California Gulls primarily breed on sparsely vegetated islands and levees in inland lakes and rivers, but they also breed in salt ponds in the San Francisco Bay, California. Breeding colonies range from sea level to 9,000 feet elevation and are usually surrounded by water to prevent predators from reaching the nests. During the breeding season they may forage up to 40 miles away from the breeding colony in open areas including farm fields, garbage dumps, meadows, scrublands, yards, orchards, and pastures. They tend to avoid heavily forested areas. In the winter they forage along the Pacific Coast, using mudflats, rocky shorelines, beaches, estuaries, and river deltas.

Distribution:

In US: Their breeding habitat is lakes and marshes in interior western North America from Northwest Territories, Canada south to eastern California and Colorado.

In Other Countries: Europe and Hawaiian Islands

Holistic Description: Gulls are often thought of as coastal birds, but California Gulls are also common in inland areas in the West. These medium-sized gulls breed in colonies on islands and levees in lakes and rivers. You'll also spot them in pastures, scrublands, and garbage dumps as they often forage miles from the colony, eating everything they can find from mayflies to garbage. In the winter they head to the coast where they cruise up and down the shoreline with other gulls.

Species Richness: 2 SUBSPECIES

Population Dynamic: In California, the California gull recently held the protected status California Species of Special Concern due to declining numbers at their historic California breeding colony at Mono Lake. However, in recent decades this species has begun to breed in the southern portion of San Francisco Bay, where it did not historically breed, and has undergone exponential population growth. These California gulls now inhabit large, remote salt-production ponds and levees and have a very large food source provided by nearby landfills from San Francisco, San Jose and other urban areas, all the way up into the Sacramento area. The South Bay California gull population has grown from less than 1,000 breeding birds in 1982 to over 33,000 in 2006.

Evolution and Systematics:

Evolution: The only Tertiary gull fossils in present range of California Gull are of a species intermediate in size between present-day Larus californicus and L. delawarensis from deposits between 1.8 and 3 million years before present and a leg fragment similar in size to present-day californicus from the Miocene of California. There is not sufficient material to judge relationships of these fossils to extant North American Larus.

Systematics: Jehl proposed 2 races: Larus californicus californicus, with darker mantle and generally smaller size, breeding in Great Basin region of w. U.S. and nearby areas; and larger L. c. albertaensis, breeding in Great Plains. In relatively small sample of specimens, he found size difference highly significant between the 2 races and mantle color noticeably different.

Number of Species: 2 SUBSPECIES

Number of Genera: 2 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 18.5-21.3 in (47-54 cm) Weight: 15.2-36.9 oz (430-1045 g)

Wingspan: 51.2 in (130 cm)

Coloration: Breeding adult California Gulls are white-headed gulls with a medium gray back, yellow legs, and a dark eye. Nonbreeding adults have brown streaking on the head. Adults have a yellow bill with small black ring and a red spot on the lower mandible—brighter on breeding gulls. In their first year, they are mottled brown and white and often have a paler face. The bill is pink with a black tip and the legs are pinkish. Second-year California Gulls are also mottled brown but begin to show gray on the back. They have a dark eye and bluish legs. Third-year gulls look very similar to adults. ***AND*** Adults are similar in appearance to the herring gull, but have a smaller yellow bill with a black ring, yellow legs, brown eyes and a more

rounded head. The body is mainly white with grey back and upper wings. They have black primaries with white tips. Immature birds are also similar in appearance to immature herring gulls, with browner plumage than immature ring-billed gulls.

General Body Features: The California Gull is a medium-sized gull with a round head. The bill is slender compared to other gull species. In flight the wings are long and pointed.

Special Features of the Body: Shorebirds are designed, or adapted, to survive in open habitats. Their brown, rust, black, and white plumage makes them less conspicuous to predators. Their bi-coloration, dark on the back and lighter on the belly, further camouflages them from predators. Their light bellies blend in against the light sky when seen from below. When observed from above, by a falcon for example, their dark backs blend in with the beach or mudflat below.

Special Features of the Head and Sensory Organs: Their bills are highly adapted tools for finding food. Some species will probe for invertebrates in mud or water, poking their bills up and down in rapid succession like a sewing machine until they feel something to eat. Others have bills perfectly adapted to swishing through the water to filter food from the water column.

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: They have a claw that goes half way up their leg that lets them hang on to branches without getting blown off by the wind. They have very good eye sight that helps them spot their next meal easily. Webbed feet help them to swim when they decide to go in the water for a meal. Shorebirds have long legs for wading. Their long toes give them the stability they need for their seemingly endless walking and running along the water's edge and in soft mud.

Any Special Internal Anatomy: They developed a special pare of glands that remove the salt from their system when drinking sea water. That's why they can drink fresh and salt water when by the sea. Not only used for finding food, bills are used for preening as well. A special oil gland located at the base of their tails helps to keep their feathers dry. The birds spread the oil from this gland with their bills or the backs of their heads when preening themselves. The oil repels water from the feathers, keeping them warm and dry.

Sexual Dimorphisms: Male has deeper bill and longer bill, head, and tarsi.

Differences Between Juvenile Stage and Adult: Juveniles overall mottled dusky brown. Feathers of head and neck brown with white edgings; throat, breast, and belly barred gray-brown and white. Mantle feathers brown with whitish edges. Alula and primary- and secondary coverts black.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: Adept on land, in the air, and on the water, California Gulls run, fly, and swim to find food. On the breeding grounds, they often run through swarms of flies with their bills open. In the water they paddle much like a duck, but they also dive into the water after fish. They eat just about anything they can find, from grasshoppers to garbage. Resting gulls often stand on one leg or sit with their legs folded underneath with their eyes closed. They frequently associate with other California Gulls as well as other gull species. Despite their highly social nature, they defend their nest areas in the breeding colony. They threaten intruders by stretching their necks straight up, by pushing their heads forward and opening their bills, or by throwing their heads up and then down to their chest while calling. Gulls that share territorial boundaries sometimes bite grass or other vegetation, aggressively pulling at it to indicate ownership of the area. If a neighboring gull crosses the line, fighting and bill jabbing usually ensues. California Gulls form monogamous pairs when they are 4 years old, some of which stay together for more than one breeding season. When the pair is ready to mate, each bird tosses its head in an arc up and over the back and offers its mate food. They perform a choking display (see Sounds) before and during nest building, in which they put their breast to the ground and jerk their heads up and down as if they were choking.

Locomotion: On land, walks or runs with legs alternating. Very seldom hops, only when jumping up to or down from an elevated surface (usually with wings half open). Runs only to take off in flight, to catch flies or to chase usurpers from territory. Does not climb with feet. Capable of jumping directly into flight, especially from elevated surface, but usually takes a few running strides if surface allows. Depth of wing strokes is affected by wind speed and angle, but wing-strokes are generally deeper and quicker than those of larger species, and shallower and slower than those of smaller gulls. When gliding in high winds or updrafts, capable of precise changes in location with almost imperceptible adjustments in degree of extension and angle of wing. Swims with alternating strokes of feet. Most frequent foraging method on water is to swim after prey and seize it from surface or just below surface. Will dive into water after prey from heights of up to several meters, but rarely penetrates >1 body length into water, apparently because of body's buoyancy. In dives, wings remain at least partially open and appear to be used for righting and balance during and immediately after dive. Dives at predators on nesting grounds are accompanied by Alarm Calls and, rarely, by striking of predator with body or (more often) feet.

Communication and Perception: California Gulls do not have true songs, but they are quite vocal; they cry and carry on even at night on their breeding colonies. Their calls consist of a scratchy, hoarse series of aow and uh-uh-uh notes. They have

several types of calls with corresponding unique behaviors including the "long call," "choking call," "warning call," and "alarm call." The "long call" given during territorial defense starts with their heads lowered and as they raise their heads straight up they bellow out an aow. During the "choking call" they put their breast on the ground and jerk their head up and down as if they were choking while giving a huoh-huoh-huoh. They give the "choking call" most frequently before and during nest building. The "warning call" is a long ringing yeow, given in flight, especially when they flush from a breeding colony. The "alarm call" is a series of sharp ha ha ha ha notes that they give in flight, often when they detect a predator. Compared to Ring-billed and Herring Gulls, their calls are intermediate in pitch—Ring-billed Gulls are higher pitched and Herring Gulls are lower pitched.

Home Range: Defends only nesting territory. Establishes territory at beginning of breeding season; older birds earlier. Both sexes defend with agonistic displays and fighting. In mixed colonies of California and Ring-billed gulls, few interspecific territorial interactions occur, because Ring-billed Gulls avoid California Gulls. Apparently no reports of territoriality away from breeding colony. Distance between nests varies with location, but generally seems to be 1–3 m.

Degree of Sociality: Breeds in colonies; individual breeding aggregations at Great Salt Lake range in size from 200 to 43,000 birds, and those at Mono Lake in historical times from about 2,000 to 40,000. Aggregates in groups of up to a few thousand birds during winter, often mixed with other gull species. Except during breeding season, when lone birds can often be seen foraging far from breeding colonies, seems uncommon for California Gull to be apart from others of its species.

Level of Aggression: When birds are near one another, they sometimes Jab at each other with their bills, making no contact. Jabbing can indicate willingness to attack, especially in birds that are standing and exchanging other agonistic displays. When displays fail to exclude intruder, California Gull defends breeding territory by fighting. Fights are generally between 2 males or between 2 females, although males fight more frequently than females. Fights take place on ground or in air. In ground fights, birds try to grab hold of one another with their bills; often the result is that the birds hold on to each other's bills. Gulls also grab opponent's wings, tails, or any other possible body part. Once bird has a good hold on its opponent, starts pulling as hard as it can, attempting to drag its opponent along.

Migration: Regular seasonal migration to and from Pacific Coast. Vast majority leave breeding grounds in late summer, flying to Pacific Coast to spend nonbreeding months. In contrast to other large white-headed gulls, few individuals remain in breeding range during nonbreeding season. Conversely, few young birds return to breeding grounds; number of subadults returning to breeding grounds increases as their age increases.

Predators:

Predators: Great Horned Owl, Golden Eagle, Bald Eagle, Prairie Falcon, Common Raven, Red-tailed Hawk, Herring Gull, Coyote, Red Fox, Least Weasel, Feral Dog, Muskrat, Norway Rat, Gopher Snake, Northern Pike, Canada Geese, Raccoons, Skunks, River Otters, Eagles, and Owls.

Anti-Predator Defenses: During day, Golden Eagles are often sighted when many hundreds of meters away, as evidenced by sudden silence in colony and many birds searching the sky. If eagle approaches, gulls respond with Alarm and Warning calls of increasing intensity, and large sections of colony will take flight in circling mob if eagle approaches closer and lands in colony. If eagle captures a gull, all other gulls except those within about 10 m of eagle will resettle on colony within minutes. If coyote gains access to colony, similar ring of confusion surrounds it as it runs through colony, with occasional gulls diving at it, issuing Alarm Calls and Long-Call Notes. These mobs and dives appear to have little effect on predators in southern colonies, but they appear to be very effective in Wyoming.

Diet and Nutrition:

Adult Diet: California Gulls are omnivores that eat Just about anything that will fit into their mouths, including fish, garbage, grasshoppers, mayflies, brine shrimp, earthworms, small mammals, cherries, bird eggs, grains, carrion, and more. They scavenge food from the ground, run after flying insects, pick prey off the surface of the water, and plunge into the water after fish.

Juvenile Diet: **California Gulls are themselves important predators of California Gull eggs and chicks. In most colonies, whenever attending adults are scared from their nests, eggs and small chicks are consumed by other gulls in the colony. In undisturbed colonies, intraspecific predation is probably uncommon, but in most colonies, losses to neighboring gulls are the principal source of mortality and serve to magnify the effect of any other predator's visit to the colony.**

Special Adaptations for Getting Prey: Resourceful like other gulls. Methods range from scavenging off ground to hovering over cherry trees, beating fruit off trees with flapping wings, and recovering it from ground. Often follows behind plows in fields, eating exposed insect.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Apparently monogamous. Female-female pairs observed in populations with skewed sex ratio, but in most populations, these are a rare phenomenon. Causes of such skewing (males rarer than expected) are unclear; possibly result of overrepresentation of females in population of dispersers colonizing new areas.
Mating Season: July to May
Courtship: No elaborate displays associated with advertisement of nest site or potential mate. Head-Tossing Display, often in conjunction with Begging Call, used to initiate copulation or courtship-feeding. In Head-Tossing Display, bird hunches head onto shoulders and lowers anterior of body slightly; then tosses head loosely in arc of about 30° upward, backward, and to either side of body's longitudinal axis. Courtship-feeding occurs during prelaying and early egg-laying periods.
Territoriality: HOME RANGE
Mating: Copulation is initiated by either sex, by Head-Tossing Display and Begging Calls. One bird starts tossing head and begging, and mate joins in. Early in season, male may respond to female with courtship-feeding instead of copulation. But courtship-feeding very often leads to copulation. When copulation occurs, birds toss heads and beg for some time; then male eventually moves behind female, ceases Head-Tossing, and jumps onto her back, settling down with his tarsi resting on either side of her back. While female increases intensity of Head-Tossing, rubbing her bill against male's chest, male begins to give Copulation Call and lowers his tail alongside hers, making cloacal contact while waving his wings in air to maintain balance. After making as many as several cloacal contacts, he stops calling, folds his wings, and jumps off.
Nesting: Pairs walk around their territory together digging small scrapes in the ground until they find a suitable spot to build a nest. They build their nest on the ground in the open or at the base of a small shrub. They nest in colonies, and sometimes they nest in the same spot as the previous year. Both sexes help build the nest with small pieces of bone, feathers, grasses, and other pieces of vegetation found nearby. The female shapes the inside of the nest with her body to form a cup. It takes them about 1 week to complete the nest, which is around 11 inches wide. The size depends on how much material they add; some nests are just scrapes in the ground while others are larger with a lot of feathers and vegetation.
Egg-Laying: Clutch Size: 1-4 eggs Egg Length: 2.5-2.7 in (6.3-6.8 cm) Egg Width: 1.7-1.9 in (4.4-4.7 cm) Incubation Period: 23-27 days Nestling Period: 3-4 days Egg Description: Buff to greenish, with dark spots, speckles, splotches, and short swirls.
Hatching and Incubation/Gestation: Completely covered in down and able to stand within a few hours after hatching.
Development: Hatching mass averaged 50 g. Chicks covered in down at hatching. Able to stand by the time feathers are dry, usually within several hours of hatching. PRECOCIAL
Parental Care: Brooding generally declines with development of thermoregulatory capability in chicks and is rarely seen after chicks are a few days old. In about 1% of eggs, chick is dead because, by all appearances, it was smothered as it attempted to break out of its egg. Such death appears to result from parents' sitting too tightly on hatching egg, perhaps because transition from incubation to brooding behavior did not come soon enough. Both parents feed young from hatching until fledging. Parents swallow food to transport it back to nest, and upon return to nest, regurgitate to young in response to Begging Calls and pecking at parent's bill. As chicks grow larger, they become increasingly aggressive in begging. Adults with chicks less than about 1 wk old often take considerable time to present food to young, but by the time chicks are about 2 wk old, they jump the parent as soon as it lands and force their heads into its throat.
Lifespan: 10-15 years
Conservation:
Official Federal Status: Least Concern
Special Statuses in Individual States: NONE
Threats: California Gulls are common throughout their range. They are also now breeding in large numbers in salt ponds in the San Francisco Bay area. According to the North American Breeding Bird Survey, populations were generally stable between 1966 and 2015, though there have been significant declines in some areas. Partners in Flight estimate a continental breeding population of 410,000 breeding birds. California Gull rates a 12 out of 20 on Partners in Flight's Continental Concern Score published in the 2016 State of North America's Birds report. The species is not on the 2016 State of North America's Birds' Watch List.
Conservation Efforts: ^^^^^
Extra Facts:

1. In 1848, a plague of katydids (also known as Mormon crickets) began devouring the crops of Mormon settlers in Utah. When California Gulls returned to breed, they started feasting on the katydids, saving the crops from complete destruction. A golden statue in Salt Lake City commemorates the event, and in recognition the California Gull was made the state bird of Utah.

2. The California Gull, like most gulls, is an opportunist, eating anything it can catch or scavenge. It has an odd foraging strategy for catching alkali flies that congregate on the shores of salty lakes in the Great Basin. It starts at one end of a huge raft of flies and runs through them with its head down and bill open, snapping them up along the way.
3. Both parents incubate the eggs, taking turns throughout the day at about 3–4 hour intervals. When it's time to trade incubation duties, an adult flies into the nest area while calling. The incubating gull stands up and gives several "long calls" as its mate lands near the nest. The returning mate joins in the calling and eventually takes over incubation duties. Sometimes the incubating bird isn't ready to leave the nest, so the returning mate offers encouragement by giving the "choking call," presenting nest material, or physically nudging its mate to get it off the nest.
4. Learning how to fly takes practice and so does learning how to catch something in midair. Young California Gulls practice this skill by dropping a stick in midair and swooping down to catch it.
5. The oldest recorded California Gull was at least 28 years, 3 months old when it was caught due to an injury in California in 2013. It had been banded in the same state in 1985.

Notable Species:

1. There are two subspecies recognized, the nominate from the Great Basin to central Montana and Wyoming, and the slightly larger, paler L. c. albertaensis with a more northerly distribution, ranging from Great Slave Lake onto the Great Plains of western Manitoba and South Dakota. Although these subspecies are not well distinguishable by mtDNA allozyme variation, they breed true and the low genetic divergence can be explained by separation during the Pleistocene and renewed contact in Montana during more recent times.
2. Nominate is L. c. californicus