[EUROPEAN-WIKIPEDIA] HERRING GULL - LARUS ARGENTATUS

Breeding and nonbreeding Herring Gulls are larger than California Gulls with a pale eye and pink legs unlike breeding and nonbreeding California Gulls, which have a drake eye and yellow legs.

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

Habitat:

<u>Biomes</u>: Herring Gulls' scavenging habits take them to open water, intertidal pools and shallows, mud flats, landfills, newly plowed fields, picnic grounds, and fish-processing plants. They roost and loaf, often in large mixed species groups, in open areas with good visibility for spotting predators, including agricultural and athletic fields, beaches, parking lots, airport runways, and garbage dumps. They breed near lakes in northern forests across Canada to Alaska and in some coastal areas. Colonies often form on isolated islands, barrier beaches, and marshy hummocks, which are safe from terrestrial predators (though aerial predators can still be a danger). City rooftops, for example, serve the same purpose.

Distribution:

<u>In US</u>: The Herring Gull has a wide breeding distribution across northern North America from western Alaska east to Labrador and Newfoundland, extending south to the Great Lakes and the northeastern U.S. It also breeds along the entire Atlantic coast from Baffin Island south to North Carolina, but is very local on the Pacific coast, where it interbreeds with the Glaucous-winged Gull.

In Other Countries: Iceland, British Isles, France, Europe, Russia, Bering Strait, Europe, Japan, China, Azores, Canary Island, Asia to Mongolia.

Holistic Description: Spiraling above a fishing boat or squabbling at a dock or parking lot, Herring Gulls are the quintessential gray-and-white, pink-legged "seagulls." They're the most familiar gulls of the North Atlantic and can be found across much of coastal North America in winter. A variety of plumages worn in their first four years can make identification tricky—so begin by learning to recognize their beefy size and shape.

Species Richness: 5 SUBSPECIES

Population Dynamic: CHECK THREATS

Evolution and Systematics:

Evolution: Remains of Herring Gulls have been reported from archaeological sites at Kodiak Island, Little Kisku Island, Attu Island, Dutch Harbor, and Cape Prince of Wales, Alaska, but the specific identification of these specimens has been questioned.

<u>Systematics</u>: There are 5 subspecies, but with species limits following the American Ornithological Society in 3 groups. The number of subspecies is debated, sometimes hotly, because species limits among large, white-headed gulls remain in a state of flux. The shade of gray on the mantle in adults varies complexly, being darker from south to north across Europe and through eastern Asia. In North America, the darkest birds occur along the Atlantic Coast and in northwestern British Columbia, the palest birds occur across central Canada and around Great Lakes.

<u>Number of Species</u>: 5 SUBSPECIES <u>Number of Genera</u>: 5 SUBSPECIES

Physical Characteristics:

<u>Size and Length</u>: Length: 22.1-26.0 in (56-66 cm) Weight: 28.2-44.1 oz (800-1250 g)

Wingspan: 53.9-57.5 in (137-146 cm)

<u>Coloration</u>: Adults have light-gray backs, black wingtips, and white heads and underparts. In winter, dusky streaks mark their heads. Herring Gulls take four years to reach adult plumage. Juveniles are mottled brown; second-year birds are brown but show gray on the back. Third-years have more gray on the back and more white on the head and underparts. The legs are dull pink at all ages.

<u>General Body Features</u>: Herring Gulls are large gulls with hefty bills and robust bodies. In flight, they look barrel-chested and broad-winged compared to smaller species such as Ring-billed Gulls.

<u>Special Features of the Body</u>: 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.

<u>Special Features of the Head and Sensory Organs</u>: 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. <u>Dentition</u>: BEAK/LAMELLAE/GIZZARD

<u>Special Features of the Limbs and Digits</u>: The wings of herring gulls are and amazing compromise of soaring, speed and agility, specializing in no one area but having the potential to be good at all. Their fight style works well for the coastal habitats it inhabits. Often circling over head and then diving quickly when food is spotted. Herring gulls feet are webbed so they can swim while floating on the water surface, but not as agile as a diving duck or penguin

<u>Any Special Internal Anatomy</u>: Herring Gulls prefer drinking freshwater, but they'll drink seawater when they must. Special glands located over the eyes allow them to excrete the salt that would otherwise dehydrate most animals, including us. The salty excretion can be seen dripping out of their nostrils and off the ends of their bills.

<u>Sexual Dimorphisms</u>: Male and female plumage is identical at all stages of development, however adult males are often larger.

<u>Differences Between Juvenile Stage and Adult</u>: Juvenile and first-winter birds are mainly brown with darker streaks and have a dark bill and eyes. Second-winter birds have a whiter head and underparts with less streaking and the back is grey. Third-winter individuals are similar to adults but retain some of the features of immature birds such as brown feathers in the wings and dark markings on the bill.

Behavior:

<u>Diurnal, Nocturnal, or Crepuscular</u>: Diurnal

Activity: Herring Gulls patrol shorelines and open ocean in widely scattered groups, soaring raptor-like and spiraling down to pick scraps off the surface. Individuals plunge-dive from near the surface and dip while paddling to take shallow prey. Rallying around fishing boats or refuse dumps, they are raucous and competitive, threatening and stealing from other birds. They'll prowl tide flats seeking out invertebrates, gobbling small items whole, picking apart larger prey, and dropping shellfish onto rocks to break them open. Tighter groups follow foraging whales, groups of dolphins, or schools of large fish in open water, hovering to nab small prey driven to the surface. Their opportunistic scavenging punctuates hours of bathing, preening, and "loafing" near food sources. ("Loafing" is a term behaviorists use to describe a bird that isn't doing much of anything; many seabirds spend long hours this way.) Males establish breeding territories and both members of a bonded pair defend it with threatening postures, warning calls, and chase-attacks in air and on ground. Courtship rituals include mate-feeding, and pairs remain bonded as long as both live. They return to the same territories each breeding season and share the work through a month of incubation and three months of chick-raising. One parent is always at the nest until the chicks are at least a month old.

Locomotion: On land, Herring Gulls typically walk or run. They can jump or hop onto perches by opening their wings, pushing off with their legs and using a single wingbeat to lift. They also hop down with wings partially spread. In agonistic charges, they run with wings partially upraised. They also run to take off for flight. They do not hop or climb vertical objects. Herring Gulls adjust their wingbeats and orientation to the wind to regulate their speed. They spend a considerable portion of their flight time gliding or soaring with outstretched wings. They often fly close to the water surface, especially when flying against the wind; they will also often fly at altitudes of 30-300 m, especially when commuting overland or flying downwind over water. Herring Gulls swim using a paddling motion of the legs for propulsion. They can dive either from the surface or from 50-100 cm above the water, but they cannot reach depths > 1-2 m below the surface because of their buoyancy. Communication and Perception: Herring Gulls have a rich repertoire of calls, each of which may be modified in different contexts and accompanied by different postures. For example, the long-drawn single note of their mew call is always accompanied by an arched neck, but serves to attract attention in contexts as diverse as courtship, chick feeding, nest approaches, or agitated aggression. Their characteristic ha-ha-ha alarm call may change to a plaintive yeow in flight or a yelping keow as the threat intensifies. That keow is highly individual and can serve as personal identification. When trumpeted more and more shrilly as the gull lowers and then raises its head, this becomes the gull's "long call," the most elaborate, variable, and individualized call in its repertoire. Both sexes make a repeated huoh-huoh in courtship, territorial disputes, and nest selection to indicate some version of "I'm not moving." It's been called their "choking call" because the birds deliver the call while leaning forward, head down, and heaving upward as they call. Chicks beg for regurgitated food with a klee-ew call that they first peep while inside the egg. And adults use the same call in a softer "baby-talk" version during courtship or in exchanges when the male returns to take his turn on the nest. Home Range: Herring Gulls maintain a breeding territory on the colony site during the breeding season, and often defends

Home Range: Herring Gulls maintain a breeding territory on the colony site during the breeding season, and often defends feeding territories during both breeding and nonbreeding seasons. Otherwise, they maintain only individual distance (< 1 m)

on roosting and loafing areas during both breeding and nonbreeding seasons. Breeding territories are established by males, but defended by pairs. Feeding territories are occupied by pairs, but defended mainly by males.

<u>Degree of Sociality</u>: Although Herring Gulls nest colonially, most social interactions between neighbors are agonistic, resulting in the spacing-out of nests. They appear to nest as far apart as space in the nesting area allows, although the spacing within a colony may vary according to habitat.

<u>Level of Aggression</u>: Inter- and intraspecific intruders into nesting territories are chased, both in the air and on the ground, and may be attacked. Attacks on neighbors begin with jabbing at the opponent with the bill, grabbing the opponent by the tail, wing, or bill, rarely by the neck. Two birds gripping each others' bills sometimes continue to hold on and wrestle for several minutes. If an individual loses its balance during a pulling contest, it is often struck with the wings or pecked. Adult Herring Gulls attack alien chicks of their own or other species that intrude into their territories. Typically, chicks are grabbed by the neck and shaken. Smaller chicks may be grabbed by the body and pummeled or thrown. Intruding conspecific chicks may be killed, but are almost never eaten.

<u>Migration</u>: Short to medium-distance migrant. Birds that breed inland across Canada and Alaska generally seek milder winters, while those already along the coasts of Alaska, the Great Lakes, and New England remain nearby or move out to sea. Immature birds, even in coastal areas, head south, with younger birds migrating farther.

Predators:

<u>Predators</u>: Birds of prey such as peregrine falcons are regular predators of many species of water birds including sandpipers, shorebirds, terns and gulls. Young chicks may be eaten by scavenging gulls in the colony.

<u>Anti-Predator Defenses</u>: Herring Gulls usually move away to other islands or other parts of the same island. Herring Gulls progressively moved away from higher and more central parts of each island until they were confined to a peripheral ring close to the tideline, but they rarely evacuated an island completely. Herring Gulls are more aggressive protecting chicks than eggs. If a chick gives the Shrill Waver, its parents (but not other adults) dive at and strike the predator while giving the Charge Call, while neighbors emit intense Long-call Notes.

Diet and Nutrition:

<u>Adult Diet</u>: Herring Gulls prey on marine invertebrates, fish, insects, smaller seabirds, and even on adults, young, and eggs of other gulls. Along rocky shores, they take mussels, crabs, sea urchins, and crayfish. On mudflats, they seek worms, small clams, and mussels. In open water, they follow large predators (including fishing boats) that bring small fish, squid, and zooplankton to the surface. Newly plowed fields provide ready supplies of earthworms and other invertebrate prey. Herring Gulls are opportunistic scavengers on fish, carrion, and trash. Individual gulls often specialize on a food type. Most choose marine invertebrates like crabs, sea urchins, or clams, even though fresh-caught fish make their most calorie-, protein-, and fat-rich meals by far. In spite of this apparently poor choice, these gulls have the largest, heaviest eggs and the highest hatching success rates. The opportunism of gulls extends to raiding nests of other seabirds, and one or two males per large breeding colony may even specialize in cannibalizing chicks of others in the colony.

Juvenile Diet: ^^^^^

<u>Special Adaptations for Getting Prey</u>: The Herring Gull feeds while flying, walking or swimming. In coastal areas, they capture prey by walking or swimming along the shore at low tide, dipping to pick up floating prey, diving from the surface, or shallow plunge-diving from heights usually < 1 m. When following fishing boats or lobster boats, they fly low or hover behind the boats to pounce on discarded fish, make shallow plunge-dives for sinking items, or sit on the water waiting for scraps to float by. CHECK FEATURES.

Reproduction:

Mode of Reproduction: Monogamous

<u>Mating System</u>: Herring Gulls are almost exclusively monogamous with biparental care. Rare instances of polygyny have been reported, in which 1 male and 2 females occupy a single territory and incubate eggs in either single nests or double nests.

Mating Season: October to May

<u>Courtship</u>: Females typically approach males in the Head-Tossing Posture, producing the Begging Call. The male responds by assuming either the Upright or Mew-Call Posture and giving the Mew-Call. The female circles the male, increasing the intensity of begging if he Mew-Calls. The male may either Choke, or regurgitate food. If the male regurgitates food and the female eats it, this often leads directly to copulation. If the female does not eat the food regurgitated by the male, she may prevent him from mounting by walking away.

<u>Territoriality</u>: HOME RANGE. They only defend territories against other gulls: Great Black-backed and Laughing Gulls along the Atlantic Coast; Ring-billed Gull in the Great Lakes; California Gull in the Prairie Provinces; Glaucous-winged Gull

in southern Alaska; and Glaucous Gull in the Canadian Arctic and northern Alaska. They often displace smaller species, especially terns and skimmers, but are displaced by Great Black-backed and Glaucous Gulls and sometimes by cormorants. *Mating*: Prior to copulation, the male and female Head-toss together repeatedly. The male moves behind the female, then jumps on her back with his wings outspread. The female continues Head-tossing while the male begins the Copulation Call. After completion of copulation, the male jumps off the female's back, shakes and preens. If the male loses balance or takes too long achieving cloacal contact, the female may walk out from under him after he begins the Copulation Call. *Nesting*: Herring Gull pairs pick nesting sites together in the soft soil, sand, or short vegetation of their territory. To protect the nest from prevailing winds and hide it from predators, it is usually placed next to a rock, log, or bush. This also hides it from the nearest neighbors. Crevices may be used as nest sites in rocky areas. Several days before egg-laying, pairs hollow out up to four depressions 10–15 inches across with central depressions 4–8 inches wide and about the depth of an egg. They line the scrapes with vegetation, feathers, plastic, rope, or other materials. The pair chooses the final nest from these alternates. After the female lays her eggs, the pair continues to add vegetation to this nest throughout the monthlong incubation. Sand nests are sometimes left unlined or only sparsely lined.

<u>Egg-Laying</u>: Clutch Size: 1-3 eggs Number of Broods: 1 brood Egg Length: 2.6-3.0 in (6.5-7.6 cm) Egg Width: 1.9-2.1 in (4.8-5.3 cm) Incubation Period: 31-32 days Nestling Period: 45-50 days Egg Description: Light olive, buff, or greenish with darker splotches or speckling.

<u>Hatching and Incubation/Gestation</u>: Eyes open, covered in thick gray down with black spots; able to move around nesting area after several hours.

<u>Development</u>: Herring Gull chicks are nidifugous and semiprecocial (i.e., they require brooding for the first few days after hatching, but can then maintain their body temperature and leave the nest). They hatch with open eyes, and have thick gray down marked with black spots over the entire body. They remain in the nest for several hours while drying. During the first 2–3 days they remain close to the nest; at one week old they can run about freely but remain on the natal territory. They can live off yolk reserves for the first few days of life, but are usually fed by their parents within hours of hatching. They become endothermic (able to regulate their body temperature without being brooded) within 3-4 days after hatching.

<u>Parental Care</u>: Brooding behavior begins with the hatching of the first egg. Chicks are brooded both day and night for the first 3-4 days after hatching, but only at night until about day 10. Both parents brood the chicks, the female more in total. Both parents feed chicks from the day of hatching until they are 11–12 weeks old. Males feed chicks more often before fledging, females more often after fledging. Chicks < 10 days old peck the parent's bill at the red spot near the gonys: this may stimulate regurgitation by the adult, but many adults regurgitate before the chicks peck.

Lifespan: Up to 15 years.

Conservation:

<u>Official Federal Status</u>: Least Concern <u>Special Statuses in Individual States</u>: NONE

Threats: Herring Gull populations declined by over 3.5% per year between 1966 and 2015, resulting in a cumulative decline of 83%, according to the North American Breeding Bird Survey. The North American Waterbird Conservation Plan estimates a continental population of over 246,000 breeding birds and lists it as a Species of Low Concern. The species rates an 11 out of 20 on the Continental Concern Score. Herring Gull is not on the 2016 State of North America's Birds Watch List, but the 2014 State of the Birds Report listed it as a Common Bird in Steep Decline. Human activities are the main threats to local populations. For example, Atlantic Coast populations were nearly wiped out in the late 1880s by hunters seeking feathers and eggs. But by the 1980s, their numbers had increased tenfold to more than 100,000 pairs. Conservation movements ended exploitation in many areas, though numbers had shrunk so far that hunting became unprofitable anyway. Other changes inadvertently aided recovering populations. Increasing numbers of coastal fishing boats in the 1930s dumped "garbage fish" and waste, providing a rich new food source. The growing number of onshore refuse dumps also attracted gulls but probably had mixed effects, since chicks fed human refuse show poorer survival rates. Whaling, the destruction of dolphin and porpoise populations, and intensive fishing of larger fish like cod and salmon decreased competition for the smaller fish that gulls favor. More recently, however, continued overfishing has made even these smaller fish less numerous. And changing fishing practices have meant less waste from fishing boats. Oil pollution, pesticide contamination, and deliberate control measures have threatened some Herring Gull populations.

Conservation Efforts: ^^^^

Extra Facts:

1. The Herring Gull has extended its breeding range southward along the Atlantic Coast, and may be displacing the more southern Laughing Gull from some areas. At the northern end of its range, however, the Herring Gull is itself being displaced by increasing numbers of the Great Black-backed Gull.

- 2. Breeding brings special dietary challenges for Herring Gulls. During courtship, males feed their mates, losing fat reserves in the process. Then egg-laying reduces the females' protein and bone calcium, and they seek out marine invertebrates and fish to replenish stores. After chicks hatch, both parents feed them day and night for up to 12 weeks, splitting foraging shifts to offer each chick up to half a pound of food per day as it nears fledging.
- 3. Sibling rivalry is a problem in the bird world, too. The third chick in a Herring Gull clutch can have it especially tough. While the first two chicks hatch the same day, the third is born a day or two later, weighs less, gets less food, and grows more slowly.
- 4. Incubating Herring Gulls often pant to cool off. They orient their bodies to keep darker plumage out of direct sun as best they can, but short of dipping their feet and legs into water, their mouth lining is their best means of shedding heat
- 5. An adult Herring Gull was spotted bait-fishing. It floated bits of bread on the surface of a Paris pond and attacked goldfish feeding on the bread. It are none of the bread itself, indicating deliberate tool use.
- 6. Herring Gulls are one of the most familiar gulls of the East Coast and many people just call them "seagulls." In fact, some two dozen different species of gulls live in North America, and they present almost endless opportunities for identification.
- 7. Herring Gulls prefer drinking freshwater, but they'll drink seawater when they must. Special glands located over the eyes allow them to excrete the salt that would otherwise dehydrate most animals, including us. The salty excretion can be seen dripping out of their nostrils and off the ends of their bills.
- 8. Young Herring Gulls appear to be more migratory than adults. In some areas, such as the Great Lakes, most adults remain near their breeding grounds, but the nonbreeders move father south in the fall.
- 9. The oldest recorded Herring Gull was at least 29 years, 3 months old when it was seen in the wild in Michigan in 2015 and identified by its band. It had been banded in Wisconsin in 1986.

Notable Species:

- 1. ARGENTATUS GROUP (Herring Gull or European Herring Gull):
 - a. L. a. Argentatus This subspecies breeds on Svalbard and is a resident breeder in Denmark, around the Baltic Sea, and across the Scandinavian Peninsula to northwest Russia.
 - b. L. a. Argenteus This includes L. affinis Reinhardt, 1853. This subspecies is resident in Iceland, the Faeroe Islands, the British Isles, and from northwest France to western Germany.
- 2. SMITHSONIANUS GROUP (American Herring Gull or Smithsonian Gull):
 - a. L. a. Smithsonianus This subspecies breeds across North America, from western Alaska to Newfoundland, north locally to the Arctic Ocean and south to south-central British Columbia and western Pennsylvania, with breeding populations along the Atlantic Coast south to North Carolina.
- 3. VEGAE GROUP (Vega or Siberian Gull):
 - a. L. a. Vegae This subspecies breeds across northeastern Siberia.