

*BIOLOGY, LEGAL STATUS, CONTROL MATERIALS AND DIRECTIONS FOR USE*

Gulls

Herring, *Larus argentatus*

Ring-billed, *L. delawarensis*

Western, *L. occidentalis*

California, *L. californicus*

Glaucous-winged, *L. glaucescens*

Family: Laridae



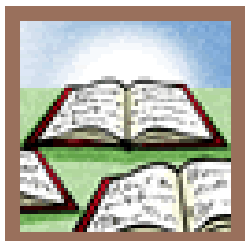
Introduction: The term gull refers to members of a group of 25 North American bird species that belong to the family *Laridae*. Gulls are small to large seabirds, many of which also live inland for at least part of the year; some are found strictly in marine environments. Most are grey, black and white when fully mature, but extensively marked with various shades of brown during from one to four years of immaturity. They have long, slim wings and can fly exceptionally well, but also strong legs, which give them reasonably good mobility on the ground. They swim buoyantly and often resort to water to roost at night.



Identification: Adult gulls are white with varying patterns of gray and black over their back, wings, and head. The young are often gray or brown and take several years to develop adult plumage. Both sexes are similar in appearance. They all possess excellent flying and swimming skills, some can dive underwater. Further information including audio is available at:

[Cornell Lab of Ornithology](#)

[The Royal Society for the Protection of Birds](#)



Legal Status: Gulls are classed as migratory species and may only be taken with a

permit issued by the U.S. Fish and Wildlife Service.

In California, the California gull holds the protective status "California Species of Special Concern" due to declining numbers at their historic California breeding colony at Mono Lake. However, in an ironic twist, this species has colonized the southern portion of San Francisco Bay, an area it did not historically nest, and has undergone exponential population growth. These California gulls now inhabit large, remote salt-production ponds and levees.



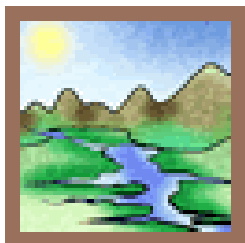
Damage: Gulls cause damage to agricultural crops and threaten human safety at airports through air strikes with aircraft. Their abundant distribution throughout the country mean gulls are involved in more aircraft collisions than any other bird, see the [FAA Wildlife Strike database](#). Gulls can pollute domestic water reservoirs by fecal contamination, transmit Salmonella bacteria to sheep and cattle, and become a public nuisance in and around refuse dumps, outdoor restaurants, and public buildings.

Gulls occasionally cause a nuisance when they nest on rooftops and seek food from people outdoors. Gulls are predators of several seabirds during the breeding season.

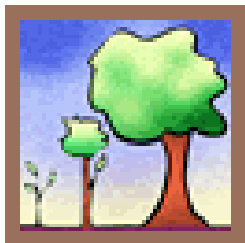


Range: Nearly worldwide, favoring coasts. Of 43 species known globally, 17 species of gulls occur in the Western United States. The above listed are the most commonly encountered that infringe upon human activity in California.

With the exception of the more resident Western gull, most species typically migrate along the coast, southward for the winter, and returning northward to breed and reside in small or large colonies.

[Herring Gull](#)[Ring-billed Gull](#)[Western Gull](#)[California Gull](#)[Glaucous-winged Gull](#)

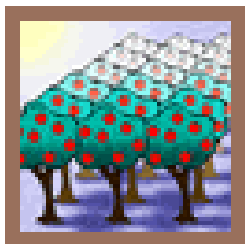
Habitat: Gulls are common along our marine coasts, but some are found many miles inland from water. Gulls spend much time on shore, and most of their feeding is done on water. Omnivorous feeding habits and gregariousness may relate to their recent intrusion into waterfronts, cities, refuse dumps, fields, and farmland.



aroused by flood irrigation.

Biology: Gulls (25 species known to U.S.) are medium to large, typically gray and white seabirds, with long, pointed wings, a strong, hooked bill and a square tail. The feet, bill and wing-tip colors are the most reliable characters for identifying adults. Gulls depend on their narrow wings mostly for gliding, using air updrafts from ocean waves, buildings, ships and cliffs. They swim well, because of their webbed feet, yet can walk with agility on land. Flocks will follow the tractor disk to pick up unearthed grubs and mice, or gather in fields to eat grasshoppers and other insects

Though primarily fish-eaters, gulls eat almost anything, and are known to scavenge decaying sea animals along the coast as well as harvest fresh food from the sea. Gulls also eat young, other gulls' eggs, rabbits, ground squirrels, rats, earthworms, cherries, insects, wheat, and steak bones. Special glands in their heads enable them to drink salt water as well as fresh.



### Damage Prevention and Control Methods

Exclusion: Exclusion of gulls from attractive areas i.e. garbage dumps, sewage discharge areas, and restaurant areas is significant as it may reduce gull numbers near airports.

Excluding gulls from temporary or limited resting areas such as window ledges, roof tops, etc is best achieved as with other birds (see Pigeons) using porcupine wires. Large area exclusion, such as water reservoirs, crops, and landfills, is best achieved with wire or plastic netting, or by suspending parallel steel wire or nylon monofilament over the area. Spacing should be 40 feet to 15 feet.

Similar gull exclusion is used in fish rearing ponds. Other devices including floating plastic balls are

commercially available to keep gulls from using water areas.

**Habitat Modification:** Discouraging gull use of areas essentially means reducing or eliminating food, water, nesting, and resting sites. This is not easy to do given gulls adaptability to a wide variety of foods. Human food wastes, fruit, vegetable crops, insects, earthworms, other invertebrates, and vertebrates are all potential foods.

Manipulating grass and vegetative cover around airports, park areas, can be successful in discouraging gulls. However, the key is to identify the pest. For example, gulls are deterred by increasing cover, while many other airport bird pests are deterred by reducing cover.

**Frightening:** Frightening devices can be effective when used against gulls e.g. shotgun shells, shell crackers, gas-powered exploders, and broadcasting distress or alarm calls. Carter (2002) reports success with radio controlled aircraft at Dover Air Force Base as a hazing technique.

To be successful, all scaring devices should be used with experience, continuity and care in use. Most distress and alarm calls are species specific. Limit use to avoid over familiarization.

Frightening devices are usually a temporary measure and will not cure repeated presence by gulls. Dead effigies or decoys may assist in this issue.



**Fumigants:** Not an effective method and none are registered.

**Repellents:** Not an effective method and none are registered.

**Shooting:** Shooting gulls is only effective in highly selective situations and is not recommended for management control of large populations. Shooting has been used to eliminate gulls habitually flying over airport runways, and to remove offending gulls preying on the nestlings of protected species. Federal and State permits are required.

**Toxic Bait:** The toxicant DRC-1339 is a Restricted Use Pesticide that is registered in the U.S. and is registered in California for control of nesting herring gulls, great black backed gulls, and ring billed gulls. It is an acute toxicant and its use is in limited situations where there are high gull populations. DRC-1339 is slow acting. Death is caused by poisoning. A depredation permit from USFWS is required to use this material.

**Trapping:** Live trapping is possible using rocket or cannon netting over baited sites, using box traps over nests and eggs, spotlighting at night and capturing with hand nets. Live trapped and relocated gulls are likely to return to their place of capture.

**Other:** Removal of nests, eggs, and young needs to be done on a continual basis. It is time and labor intensive. Permitting is required.

## REFERENCES AND ADDITIONAL READING

- Barras, Scott C., R. Dolbeer, R.B. Chipman, G.E. Bernhardt, 2000. Bird and Small Mammal Use of Mowed and Unmowed Vegetation at John F. Kennedy International Airport, 1998 to 1999. Proc. 19th Vertebrate Pest Conf. (T.P. Salmon & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 31-36.
- Beason, Robert C., 2004. What Can Birds Hear? Proc. 21st Vertebrate Pest Conf. (R.M. Timm and W.P. Gorenzel, Eds.) Published at Univ. of Calif., Davis. Pp. 92-96.
- Belant, Jerrold L., S.K. Ickes, 1996. Overhead Wires Reduce Roof-Nesting By Ring-Billed Gulls and Herring Gulls. Proc. 17th Vertebrate Pest Conf. (R.M. Timm & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 108-112.
- Blackwell, Bradley F., B.E. Washburn, M.J. Begier, 2004. Evaluating Population Management Scenarios: Crunching the Numbers before Going to the Field. Proc. 21st Vertebrate Pest Conf. (R.M. Timm and W.P. Gorenzel, Eds.) Published at Univ. of Calif., Davis. Pp. 306-311.
- Carter, Nicholas B., 2002. Radio-Controlled Models for Bird Dispersal. Proc. 20th Vertebrate Pest Conf. (R.M. Timm and R. H. Schmidt, Eds.) Published at Univ. of Calif., Davis. Pp. 135-139.
- Dolbeer, Richard A., 1998. Population Dynamics: The Foundation of Wildlife Damage Management for the 21st Century. Proc. 18th Vertebrate Pest Conf. (R.O. Baker & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 2-11.
- Dolbeer, Richard A., 2000. Birds and Aircraft: Fighting for Airspace in Crowded Skies. Proc. 19th Vertebrate Pest Conf. (T.P. Salmon & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 37-43.
- Dolbeer, Richard A., P. Eschenfelder, 2002. Have Population Increases of Large Birds Outpaced Airworthiness Standards for Civil Aircraft? Proc. 20th Vertebrate Pest Conf. (R.M. Timm and R. H. Schmidt, Eds.) Published at Univ. of Calif., Davis. Pp. 161-166.
- Erickson, William A., R.E. Marsh, T.P. Salmon, 1990. A Review of Falconry as a Bird-Hazing Technique. Proc. 14th Vertebrate Pest Conf. (L.R. Davis and R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 314-316.
- Erickson, William A., R.E. Marsh, T.P. Salmon, 1992. High Frequency Sound Devices Lack Efficacy in Repelling Birds. Proc. 15th Vertebrate Pest Conf. (J.E. Borrecco & R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 103-104.
- Gorenzel, W.P., T.P. Salmon, A.C. Crabb, 2000. A National Review of the Status of Trapping for Bird Control. Proc. 19th Vertebrate Pest Conf. (T.P. Salmon & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 5-21.
- Knittle, C.Edward, 1992. Nontarget Hazards Associated with Egg Baits Used to Control Corvid Depredations on Endangered California Least Tern Eggs at Camp Pendleton, California-1990. Proc. 15th Vertebrate Pest Conf. (J.E. Borrecco & R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 53.

- Parkhurst, James A., 1994. An Overview of Avian Predation and Management Techniques at Fish-Rearing Facilities. Proc. 16th Vertebrate Pest Conf. (W.S. Halverson & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 235-242.
- Pochop, Patricia A., R.J. Johnson, D.A. Aguero, K.M. Eskridge, 1990. The Status of Lines in Bird Damage Control-A Review. Proc. 14th Vertebrate Pest Conf. (L.R. Davis and R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 317-324.
- Pochop, Patricia A., J.L. Cummings, C.A. Voder, J.E. Steuber, 1998. Comparison of White Mineral Oil and Corn Oil to Reduce Hatchability in Ring-Billed Gull Eggs. Proc. 18th Vertebrate Pest Conf. (R.O. Baker & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 411-413.
- Rossi-Linderme, Gina, B.K. Hoppy, 2000. Natural Resources Management and the Bird Aircraft Strike Hazard at Westover Air Reserve Base, Massachusetts. Proc. 19th Vertebrate Pest Conf. (T.P. Salmon & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 63-67.
- Seamans, Thomas W., B.F. Blackwell, J.T. Gansowski, 2002. Evaluation of the Allsopp Helikite as a Bird Scaring Device. Proc. 20th Vertebrate Pest Conf. (R.M. Timm and R. H. Schmidt, Eds.) Published at Univ. of Calif., Davis. Pp. 129-134.
- Swindle, Kelly F., 2002. Current Uses of Avitrol for Bird Management. Proc. 20th Vertebrate Pest Conf. (R.M. Timm and R. H. Schmidt, Eds.) Published at Univ. of Calif., Davis. Pp. 114-116.
- Tobin, Mark E., 2002. Developing Methods to Manage Conflicts between Humans and Birds- Three Decades of Change at the USDA National Wildlife Research Center. Proc. 20th Vertebrate Pest Conf. (R.M. Timm and R. H. Schmidt, Eds.) Published at Univ. of Calif., Davis. Pp. 91-96.
- Washburn, Brian E., R.B. Chipman, L.C. Francoeur, 2006. Evaluation of Bird Response to Propane Exploders in an Airport Environment. Proc. 22nd Vertebrate Pest Conf. (R.M. Timm and J. M. O'Brien, Eds.) Published at Univ. of Calif., Davis. Pp. 212-215.
- Wenning, Krista M., M.J. Begier, R.A. Dolbeer, 2004. Wildlife Hazard Management at Airports: Fifteen Years of Growth and Progress for Wildlife Services. Proc. 21st Vertebrate Pest Conf. (R.M. Timm and W.P. Gorenzel, Eds.) Published at Univ. of Calif., Davis. Pp. 295-301.