Herons

Prepared by the National Wildlife Control Training Program. http://wildlifeControlTraining.com
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Your source for training, animal handling and control methods, and wildlife species information.



Figure 1. Great blue heron (*Ardea herodias*). Photo by Lee Karney, US Fish and Wildlife Service (USFWS).



Figure 2. Great egrets (*Ardea alba*). Photo by Steve Hillebrand, USFWS.

Species Overview

Herons include the great blue heron (*Ardea Herodias*, Figure 1), great egret (*Ardea alba*, Figure 2), snowy egret (*Egretta thula*), tricolored heron (*Egretta tricolor*), little blue heron (*Egretta caerulea*), cattle egret (*Bubulcus ibis*), green heron (*Butorides virescens*), black-crowned night-heron (*Nycticorax nycticorax*), and yellow-crowned night-heron (*Nyctanassa violacea*). This chapter will focus on the great blue heron but will discuss other species of herons in passing.

Conflicts

Herons and similar wading birds prey on fish raised in ponds for aquaculture or ornamental purposes. They also can transfer diseases affecting fish between ponds. Heron activity near airports increases the risk of bird strikes.

Legal Status

All fish-eating birds are protected by the Migratory Bird Treaty Act (16 USC 703-712) and state laws. Lethal control is not allowed without a permit. Permits to use limited lethal action against depredating birds may be granted, but only after nonlethal techniques have been used correctly, and after qualified USDA-Animal and Plant Health Inspection Service-Wildlife Services (WS) personnel verify that lethal methods are necessary. A permit is not needed to physically or mechanically exclude any fish-eating bird from raceways or water impoundments. Except for threatened or endangered species such as the bald eagle, a permit is not required to harass or scare fish-eating birds.

Identification

Herons are a sub-group of wading birds. Many species of herons, particularly when in their white phase, can be difficult to identify. In some cases, identification is confirmed by their stalking behavior. All herons, however, have long necks and elongated and pointed beaks for impaling prey.

Physical Description

The body length of herons varies from 11 to 38 inches and wingspan from 25 to 70 inches. They have long legs and toes, large wings, and corresponding short tails. Plumage varies from

all white, brown, gray, or blue; or patterns of stripes and streaks.

Species Range

Herons and other fish predating birds occur throughout most of the continental US.

Health and Safety Concerns

Herons are not considered a threat to humans. However, their presence near the flight paths of aircraft raises the potential for aircraft strikes.

General Biology, Reproduction, and Behavior

Reproduction

Mating occurs between March and May. Males select nesting sites and then perform courtship displays to attract a female. Mature herons pair up and nest and raise young. Mated pairs typically are monogamous only for the year.

Great blue heron females lay two to seven eggs that are pale blue in color. Eggs hatch within 26 to 30 days. Young fledge in 2 months. Both adults care for young.

Nesting/Denning Cover

Nesting by herons tends to be colonial. Groups of nesting herons are called rookeries. Most species of herons nest in trees or near water.

Behavior

Herons feed mostly during the day or at dusk; black-crowned night-herons and yellow-crowned night-herons feed mostly at dusk or night. Depending on species, herons hunt alone but group hunting can occur. Foraging areas can be several miles from nesting sites.

Habitat

Herons prefer wetlands that have slow moving or standing fresh water with tall trees nearby. Herons will feed in brackish waters as well.

Food Habits

Herons primarily feed on animals associated with aquatic environments, including fish, crustaceans, lizards, and frogs.

Voice, Sounds, Tracks, and Signs

Great blue heron calls during flight sound like "fraaahnk" or "braak." When aggressive, they utter a low series of "fraank, fraank, taaaw, taaaw." Great egrets say "kroow" or "karrr." Tracks of herons have three toes pointing forward and one toe pointing backward.

Damage Identification

Damage to Landscapes

Herons are not a significant threat to plants or turf.

Damage to Livestock and Crops

Their presence threatens fish and crawfish. Obvious signs of hunting include birds perched on trees or wires near raceways or ponds, hovering overhead and then plunging into the water, standing or stalking along the edges of ponds, or swimming and diving in the ponds. Because most fish are swallowed whole, few direct signs of damage are left behind. In these cases, the presence of whitewash (bird excrement), bird feathers, and/or bird footprints may be the only signs of bird predation. Additional observations should be made at night to verify bird depredation. Chewed or partially eaten fish may be a sign of predatory mammals, including raccoons, mink, and otters.

Herons also can transmit diseases to ponds, but researchers do not consider this source of disease to be significant.

Damage to Structures

Herons are not known to damage structures.

Damage Prevention and Control Methods

With the exception of total exclusion, single control methods rarely solve a bird problem. Results obtained from nonexclusion techniques may vary.

Habitat Modification

Dig deep ponds (3 feet or more) with steep banks to discourage herons and egrets. Ensure fish have plenty of oxygen to prevent them from feeding at the surface where they are more vulnerable. Reducing stocking rates may make ponds less attractive to depredating birds.

Exclusion

Selection of a barrier system depends on the expected duration of damage, size of facility, and whether the barrier will interfere with other operations. Other considerations include possible damage from severe weather and the barrier's effect on the appearance of the site (aesthetics) in visually sensitive areas. Any physical barrier control system must be constructed so that it does not become a lethal hazard to birds, especially to threatened and endangered species.

The complete enclosure (caging) of ponds and/or sensitive areas with screen or net (1 to 2 inch mesh) is the most effective way to stop heron predation. It is not practical, however, for protecting most ponds larger than 5 acres.

Overhead wires can discourage birds from entering a feeding zone or perching nearby. Space lines 1 to 2 feet apart at most (Figure 3). Install bird spikes to prevent perching.

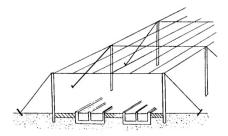


Figure 3. Overhead lines or wires. Image by Prevention and Control of Wildlife Damage (PCWD).

Frightening Devices

Frightening devices typically disperse birds for a limited period of time. To increase effectiveness, vary the kinds, number, and locations of methods used. Consult manufacturers for details on use and safety requirements. Communities may prohibit the use of devices that disturb others.

Lasers, both red and green, and bright flashing amber barricade lights will frighten herons. Human effigies and strobe lights will disturb herons as well.

Propane exploders and alarm or distress calls will cause herons to flee an area. For best results, broadcast distress calls as birds begin to arrive. A timing device can be used to play calls at predetermined intervals. Lengthen the time between broadcast intervals as much as possible while still achieving the desired response. Birds habituate to distress calls if played frequently or over a long period in the same location. Ultrasound has not been shown to be effective.

Pyrotechnic devices such as shell crackers and bird bangers will disperse herons. Follow safety instructions and consult with local law enforcement prior to use.

Water spray from rotating sprinklers placed at strategic locations may frighten birds for short periods. Motion-activated sprays work best.

Repellents

Repellents with the active ingredient methyl anthranilate are available for use against herons. The product must be aerosolized and inhaled by the birds to obtain the repellent effect. Repeated treatments are required.

Toxicants

None are available for the control of herons.

Shooting

Be sure to apply for a Migratory Bird Depredation Permit through the US Fish and Wildlife Service before any protected species are taken by lethal methods.

Shooting can be effective in reducing populations of herons. Appropriate firearms include 12-gauge shotguns and .22-250-caliber rifles. Try to shoot when herons are hunting. Consider the risk of ricochet.

Trapping

It is illegal to trap fish-eating birds without a permit from the USFWS. Check with the state agriculture or wildlife department or USDA-WS before trapping birds that are causing damage at aquaculture facilities.

Disposition

Relocation

Relocation of herons is only practical for rescuing a bird from imminent harm.

Translocation

Aside from legal restrictions, translocation is not practical for herons due to their great mobility.

Euthanasia

Euthanasia by carbon dioxide is suitable for herons. When performed properly, shooting the back of the skull is appropriate. Place the bullet at the middle of the widest part of the head.

Disposal

Check your state regulations regarding disposal of carcasses.

Web Resources

http://dnr.sc.gov http://wildlifecontroltraining.com http://icwdm.org/ http://wildlifecontrol.info

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