

BIOLOGY, LEGAL STATUS, CONTROL MATERIALS AND DIRECTIONS FOR USE

Common Raven

Corvus corax

Family: Corvidae



Introduction: The common raven is one of the most widespread species in the world capable of surviving in both Arctic and desert climates. Ravens opportunistically feed on eggs and the young of animals, including California condors (Coates 2006). Unnatural increases in raven numbers due to resource opportunities created by human-modified areas mean the raven can rapidly become a pest. Increased raven numbers also conflict with agriculture and crops.

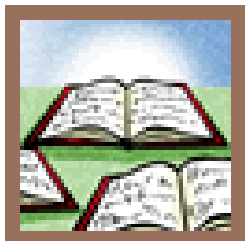


Identification: Ravens are a very large bird, generally 22 to 27 inches in size. Males tend to be larger than females. Wingspan: 41 to 56 inches, weight: 24 to 57 ounces. Completely glossy black they have a relatively long, slightly curved bill with a long, graduated or diamond/wedge-shaped tail. Long pointed wings with obvious separation of primaries while soaring, and elongated throat feathers.

The common raven is an acrobatic flier. It frequently is seen making rolls and somersaults in the air. It has even been observed flying upside down for as far as one half mile. Breeding pairs of common ravens hold territories and try to exclude all other ravens throughout the year. The common raven often uses sheep wool to line its nest. When the female leaves the nest she may cover the eggs with the wool. Further information including audio is available at:

[Cornell Lab of Ornithology](#)

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



Legal Status: Ravens are classed as migratory nongame birds in the U.S. Code of Federal Regulations. They may be controlled only under a permit from the U.S.

Fish and Wildlife Service.

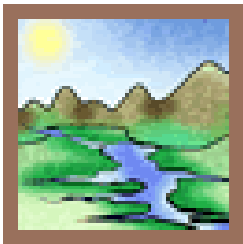


Damage: Poultry eggs and young poultry; young or sickly calves; lambs, ewes, and pigs; sprouting corn and grain seed.

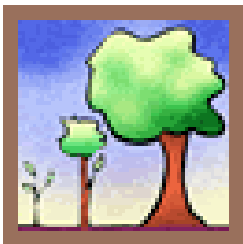


Range: Resident, although classified as migratory, they are year round in much of the state except the High Sierra and thickly settled regions. The chief centers of distribution are the interior coast ranges of south-central California, the larger Channel Islands, and the northwestern humid coastal strip. The raven is non-migratory and its movements are local and sporadic.

Common Raven



Habitat: Mountains, plains, deserts, and seacoasts; coniferous, mixed, and deciduous forests.



Biology: Dawson (1923) states that ravens mate for life. Each spring, groups of ravens engage in spectacular aerial courtship rituals, after which the pairs disperse to their nesting sites. Nest building commences in April in coastal California, but it may start as early as February in the interior. The nest is a bulky affair constructed on a rock ledge or hole in a cliff or, in northwestern California, in a tree. Some pairs utilize the same nest year after year, despite loss of a brood. Only one brood is raised yearly, although a new clutch will be laid if the first set is destroyed. Three to eight eggs are laid, usually five or six, and incubated by the female for about 20 days. The young are able to leave the nest four to six weeks after hatching. Attended by their parents for some time after that, they are taught to forage for themselves. Soon after, the family departs the nest site for valleys where food is more easily obtained. Within a few weeks, the family breaks up and the young are left to feed for

themselves.

Ravens are scavengers and, though they prefer fresh meat, will eat carrion. Examination of ravens' stomachs in Oregon by Nelson (1934) indicated that small mammals, mostly young rabbits, accounted for an average 35 percent of adult and nestling diet in early summer, followed by insects, amphibians, birds, bird eggs, and corn. Year-round studies of food appear to be lacking. Stomach contents studies varied greatly among individuals, and local conditions undoubtedly alter the diet. Other foods taken include shellfish, acorns, nuts, fish, and young or weak livestock.

Ravens readily prey on lambs and ewes, particularly when inclement weather coincides with the lambing period. Early morning is a favored time of attack. Ravens are attracted to lambing ewes, perhaps in search of the afterbirth, and they will often attack the emerging or new-born lamb. The attack invariably begins at the eyes, which are eaten, progressing to the tongue, navel, anus, and heels. Eventually the body cavity is pierced, usually just behind the rib cage, the liver and heart being preferred. The udder of the ewe may also be attacked.

Lambs up to two weeks of age are also taken, particularly twins and sickly stock. The attack may begin with a preliminary peck to the eye region, which will induce hasty retreat in a normal lamb; but a sluggish response will call forth more vigorous attacks. Occasionally a lamb's eye will be pecked out as it sleeps in the morning sun, sometimes causing fatal loss of blood. Often a lamb or ewe will be alive but incapacitated to the extent that the rancher must destroy it.

Centers of bird activity vary from time to time owing to availability of food. A scarcity of ravens just prior to lambing is no indication that a problem will not exist. Depredations are often caused by relatively small groups of ravens (less than ten). The birds are very wary and frighten easily.

West Nile Virus: Ravens, as members of the Corvid family, are particularly susceptible to the West Nile Virus. Safety gloves should be worn at all times when handling these birds or their carcasses, and handlers should avoid all contact with blood. Agencies responsible for disease monitoring are often extremely happy to receive raven carcasses for examination, see www.cdc.gov.



Damage Prevention and Control Methods

Exclusion: Not practical in most situations.

Habitat Modification: As predators, ravens may become pests due to their predation i.e. they are considered a threat to the desert tortoise. Efforts to lower habitat quality for ravens might include reducing food sources by covering landfills and individual trash containers and removing road kills from highways, eliminating standing water, and denying ravens access to perch sites by installing spike like devices on utility poles and fence posts (Van Vuren 1998).

Frightening: Not usually a cost effective means of reducing raven damage. See crow chapter for information on frightening.

Fumigants: Fumigation is not practical for raven control, and no fumigants are registered for this purpose.

Repellents: None.

Shooting: Conditions for taking under the permit are specified in CFR § 21.41(c). They include, but are not limited to, killing only migratory birds described on the permit; unless otherwise specified, only a shotgun not larger than 10-gauge from the shoulder may be used. The take must occur over the area where the damage is occurring and must be specified on the permit. Any devices such as calls, decoys, blinds, or anything else that shall entice the birds within gun range are prohibited. All birds killed must be retrieved by the permittee and turned over to the permit issuer. Only persons listed on the permit shall take the birds. The tenure of the permit shall be specified on the permit and shall be observed.

Toxic Bait: The only toxicant currently registered with the United States Environmental Protection Agency (EPA) to remove ravens lethally is DRC-1339. Researchers have demonstrated that the acute toxicant DRC-1339 can be used for lethal control of common ravens for ecological and economic reasons as a short term measure with sporadic results (Coates 2006 and Spencer 2002). This is a restricted use pesticide and in addition to any permits that may be necessary to take ravens, special pesticide application licensing is required, see [California Department of Pesticide Regulation](#). Methods for application of DRC-1339 have included injecting egg baits with the toxicant.

Trapping: Ravens have been successfully trapped in Australian crow traps (6" x 12" entrance holes) with eggs and turkey carcasses as bait. Proper trap placement and the use of decoy birds are important in trapping success.

REFERENCES AND ADDITIONAL READING

Boardman, William I., 1992. Problems with Management of A Native Predator on a Threatened Species: Raven Predation on Desert Tortoises. Proc. 15th Vertebrate Pest Conf. (J.E. Borrecco & R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 48-52.

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