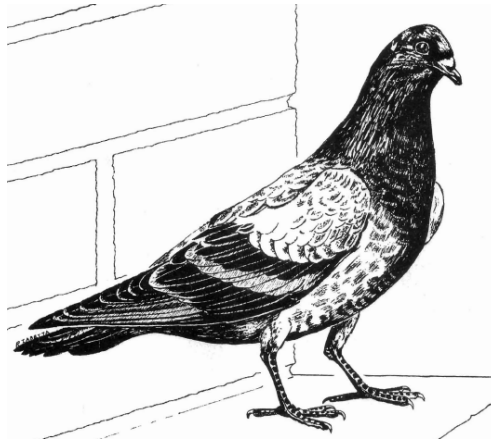


*BIOLOGY, LEGAL STATUS, CONTROL MATERIALS AND DIRECTIONS FOR USE*

Rock Doves (Domestic pigeons - also known as feral pigeons)

*Columba livia*

Family: Columbidae



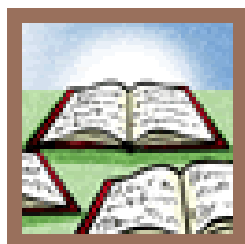
Introduction: Pigeons and doves share many common features, including small, rounded heads, small slim bills with a small fleshy patch at the base, rounded bodies with dense, soft feathers, tapered wings and short, scaly legs, and cooing or crooning calls. In fact, there is no strict division. The rock dove has long been domesticated and 'escaped' to live wild as the familiar town pigeon. There are many species all over the world. The rock dove was first introduced into North America in the 1600's.



Identification: The rock dove is a large pigeon. Their color varies, but the truly wild birds are gray. They have a white rump, rounded tail, usually with a dark tip. Their pale gray wings have two back bars. The sexes look alike although the male is slightly larger with more iridescence on the neck. Size: 11-14 inches. Distinctive sound is a continuous "Coo, recto-coo." Further information is available at:

[Cornell Lab of Ornithology](#)

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



Legal Status: Feral pigeons are not protected by federal or state statute. However, the taking of Antwerp or homing pigeons (banded individuals) is a misdemeanor.

There may be local municipal restrictions on the methods used to take feral pigeons.



Damage: In rural areas, pigeons can cause serious losses by their depredations on small grains and vegetables, contamination of foodstuffs, and potential dissemination of disease to domestic stock.

Domestic pigeons carry [pigeon ornithosis](#) (psittacosis), [Newcastle Disease](#), [aspergillosis](#), [pseudotuberculosis](#), [pigeon coccidiosis](#), [toxoplasmosis](#), [encephalitis](#), and [Salmonella typhimurium](#). Except for the latter three, these diseases rarely infect humans, although the effects may be serious if diagnosis is delayed. Salmonella is found in about 2 percent of pigeon feces and is statistically the most frequent cause of salmonella food poisoning in man. Pigeon-transmitted encephalitis has killed dairy calves in Los Angeles County.

Histoplasmosis and cryptococosis are systematic fungus diseases in humans which can be contracted from dusty pigeon manure. Pigeon ectoparasites such as bugs, fleas, ticks, and mites may bite humans, possibly transmitting disease. Welts and skin infection may also result from mite bites. Ectoparasites frequently invade homes from pigeon nests in or on the building.

Pigeon droppings deface and accelerate deterioration of buildings and automobiles and may land on unwary pedestrians. Pigeons' feces are a common contaminant of grain destined for use as human food. Pigeon nests may clog drain pipes, interfere with awnings and render fire escapes hazardous. The nests harbor numerous ectoparasites.

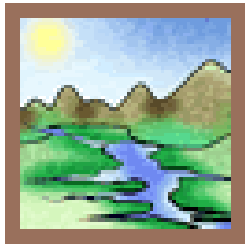
Further information on wildlife diseases can be found in the Wildlife Diseases chapter of this book, and at the [Center for Disease Control and Protection](#).





Range: Widely distributed in California cities and surrounding countryside. In winter, the feral pigeon is less frequently encountered in open country.

Rock Dove

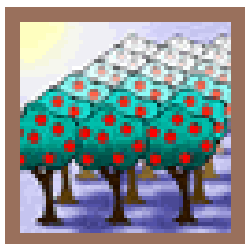


Habitat: Cities and farms.



Biology: Building ledges, barn rafters, and similar man-made shelters are usual nesting sites. The pair constructs a rather messy nest in which the female lays one or two eggs. The male cares for and guards the female and nest. The incubation period is 17 to 19 days. The young are fed predigested food until weaned and just before leaving the nest at 35 to 37 days. More eggs are laid before the first young are weaned. Breeding occurs in all seasons and several broods are raised each year. The average life span is five to seven years and some live over fifteen years. Pigeons are generally monogamous although, when a mate dies, the survivor will select a new mate.

An adult pigeon will eat about a pound of food per week, consisting of seeds and other grains augmented with some amounts of fruit, green feed, insects, and sufficient grit for digestion.



Damage Prevention and Control Methods

Exclusion: A permanent solution to excluding pigeons from spaces or openings is the installation of plastic netting or galvanized wire mesh.

Permanent exclusion of pigeons from window sill, ledges, eaves, and roof peaks is the traditional method of control using 'porcupine wires,' spikes or similar commercially available materials. The sharp, pointed wires inflict temporary discomfort and cause birds to avoid landing on these surfaces. Recent studies (Haag-Wackernagel 2007) suggest that these methods are not 100 percent fool proof in excluding feral pigeons, which are capable of sitting on ledges smaller than 2 inches and at steep angles, greater 45 degrees.

Habitat Modification - Nest Removal: Removing nests and destroying the young help depress populations; however, inaccessibility makes the cost-benefit ratio unattractive.

**Frightening Devices:** Pigeons have a strong territorial sense and are less responsive to noises than are most other birds. No practical alarm or distress calls have been found. Raptor forms such as stuffed owls are ineffective for repelling pigeons. Flags, dangling paper, foil or Mylar® strips, etc., will sometimes work temporarily.

**Fumigants:** No known fumigants registered and not a recommended method for controlling feral pigeons.

**Repellents:** As a pigeon's sense of smell is rudimentary, odor repellents like naphthalene are not effective except in confined locations. Tactile repellents, made of sticky materials, are available commercially. They are usually applied to ledges, sills, or rafters where birds roost. They repel pigeons by entangling their feet and sometimes their feathers causing alarm, flight and a distress signal to the flock. It is advisable to seal porous surfaces or apply tape to assure adhesion. Note that these sticky materials may stain treated surfaces, such as building exteriors.

**Shooting:** Where local ordinances permit (always check local laws), pigeons may be shot. Normally .22 shot or shotguns are necessary, but compressed air guns or .22 dust shot may be effective at close range. Shooting can be an effective technique to remove the few pigeons that may be left around farm or grain elevators following a lethal control program with toxicants.

**Trapping:** Colonies of pigeons tend to use regular feeding and roosting areas and can sometimes be controlled by intensive trapping at these locations. Large, walk-in traps have been reported to be more effective than smaller ones. However, a low profile trap design has produced consistently good results in trapping pigeons in Southern California. Smaller traps are less expensive to construct and easier to transport. Suggested baits include whole or coarse-cracked corn, wheat, milo, oat groats, millet, popcorn, sunflower and natural seeds, peas, non-wilted greens, bread or peanuts. Water should be available in the trap at all times.

Traps with the "bob" type entrances (light rods that swing inward to allow the bird entrance) are the most common. Other trap designs include funnel traps, double entrance funnel trap, lily-pad traps, and clover-leaf trap.

Heavy prebaiting in and around traps with the doors left open may be necessary to get pigeons to visit the trap readily. Live decoys should be placed in the trap to help attract other pigeons. White or light colored birds make better lures than drab, blue-gray ones. If possible, leave the same individuals in the trap.

**Toxicants:**

Avitrol - 0.5%

A fright-producing chemical commercially prepared on grain bait for use by public agencies and licensed pest control operators qualified in bird control. Use according to label directions. A permit from the county agricultural commissioner is needed for its use.

#### DRC-1339

DRC-1339 is a Restricted Use Pesticide registered for the control of pigeons. It is strictly controlled and can only be used by USDA-APHIS personnel under direct supervision.

The toxicity of DRC-1339 to birds varies considerably. Starlings, red-winged blackbirds, crows, and pigeons are most susceptible, while house sparrows and hawks can be resistant. Generally, mammals are not sensitive to the toxic effects of DRC-1339.

DRC-1339 is a slow acting poison. It takes from several hours to three days for death to occur. The excreta and carcasses of poisoned pigeons are nontoxic to predators or scavengers.

#### Directions for Use

General Procedure: Before exposing treated baits, thorough observations should be made to determine the number of pigeons present, their feeding habits, their preferred locations, their daily behavior patterns, and the presence of nontarget species. Observations should continue throughout the day. During these observations desirable locations for bait exposure should be selected. If adequate precautions are taken in selecting bait sites no other species should be harmed. When the daily pattern of the birds has been established and baiting locations selected, clean bait should be used to determine the preferred bait. Prebaiting should continue for several days or until there is good bait acceptance. Toxic baits should not be exposed until good acceptance of clean bait occurs.

Bait should be applied only under the supervision of the agricultural commissioner. Allow only responsible adults to place bait.

## REFERENCES AND ADDITIONAL READING

- Blackwell, Bradley F., 2002. Understanding Avian Vision: The Key to Using Light in Bird Management. Proc. 20th Vertebrate Pest Conf. (R.M. Timm and R. H. Schmidt, Eds.) Published at Univ. of Calif., Davis. Pp. 146-152.
- Cummings, John L, P.A. Pochop, M.V. Garrison, C.A. Furcolow, 1994. Laboratory Studies with Compound Drc-1339 on Feral Pigeons. Proc. 16th Vertebrate Pest Conf. (W.S. Halverson & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 265-274.
- Garrett, Kimball L., 1998. Population Trends and Ecological Attributes of Introduced Parrots, Doves and Finches in California. Proc. 18th Vertebrate Pest Conf. (R.O. Baker & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 46-54.
- 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.

Hygnstrom, Scott E., K.C. Vercauteren, T.R. Schmaderer, 1994. Biological Management (Control) of Vertebrate Pests—Advances in the Last Quarter Century. Proc. 16th Vertebrate Pest Conf. (W.S. Halverson & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 293-300.

Miller, Lowell A., K.A. Fagerstone, 2000. Induced Infertility as a Wildlife Management Tool. Proc. 19th Vertebrate Pest Conf. (T.P. Salmon & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 160-168.

Nelson, Peter C., 1994. Bird Control in New Zealand Using Alpha-Chloralose and DRC1339. Proc. 16th Vertebrate Pest Conf. (W.S. Halverson & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 259-264.

Pochop, Patricia A., R.J. Johnson, D.A. Agüero, 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.

Vogt, Peter F., 2000. Effective Dispersal of Birds From Buildings and Structures By Fogging With Rejex-It TP-40. Proc. 19th Vertebrate Pest Conf. (T.P. Salmon & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 77-80.

Watkins, Richard W., D.P. Cowan, E.L. Gill, 1996. Plant Secondary Chemicals as Non-Lethal Vertebrate Repellents. Proc. 17th Vertebrate Pest Conf. (R.M. Timm & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 186-192.

Woronecki, Paul P., R.A. Dolbeer, T.W. Seamans, W.R. Lance, 1992. Alpha-Chloralose Efficacy in Capturing Nuisance Waterfowl and Pigeons and Current Status of FDA Registration. Proc. 15th Vertebrate Pest Conf. (J.E. Borrecco & R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 72-78.

Woronecki, Paul P., R.D. Dolbeer, 1994. Alpha-Chloralose: Current Status, Restrictions and Future Uses for Capturing Birds. Proc. 16th Vertebrate Pest Conf. (W.S. Halverson & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 255-258