



**EXTENSION**  
College of Agriculture,  
Biotechnology & Natural Resources

**SP-02-11**

## **PIGEONS** **(*Columba livia*)**

Adapted for Nevada

By William A. Kerns, M. L. Robinson and Maria Ryan

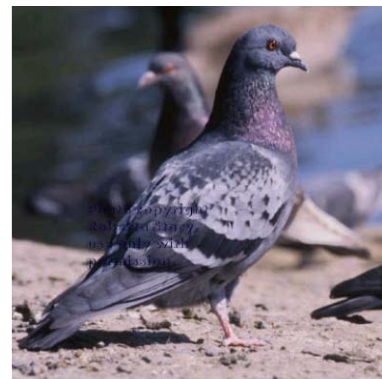
From University of Florida Extension Publication “Pigeons” (SSWEC117)

By William H. Kerns

Pigeons (*Columba livia*) or rock doves found in North America are the feral offspring of pigeons brought to this continent by European immigrants. Pigeons are domesticated animals raised for sport racing, show, and food (squab). Ancestors of the pigeons we see in our cities and on our farms escaped from captivity and found a favorable environment living with humans. Feral pigeons now have a cosmopolitan distribution, having become established every place humans have built cities. They are one of three species of non-protected birds, which also include the english sparrow and starling.

### **DESCRIPTION**

The feral pigeons found in Nevada and North America are extremely variable in coloration. They exhibit the full range of coloration that domestication and selective breeding have produced. All pigeons that were developed from rock doves (Figure 1) have a white rump, usually a white diamond-shaped patch just above the tail feathers. In white birds, the white rump blends with the general body color. Many pigeons have retained the ancestral rock dove coloration; gray body, darker gray head and neck, white rump, dark band on the end of the tail, dark wing tips, and two black stripes running along the back edge of each wing. The total length is around 11-13 inches (28-33 cm).



**Figure #1: Pigeon or Rock Dove**

### **RANGE AND HABITAT**

The pigeon is found in Nevada congregating in urban, suburban, and rural agricultural areas. Pigeons are believed to have occurred naturally in southern Europe, the Middle East and North Africa. Rock doves (pigeons) naturally nest in protected cliffs

and inside the mouths of caves. Human cities provide artificial cliffs (buildings) and caves (attics, abandoned buildings, open warehouses, barns), so pigeons feel at home and flourish in southern Nevada. Additionally, tile roofs and air conditioning units on roofs provide the environments they favor and they multiply continuously.

## FOOD AND FOOD SOURCES

Pigeons feed primarily on seeds and grains, but in urban areas they also eat human food scraps like breadcrumbs, garbage, etc. Bird feeders also provide a primary food source for pigeons in urban and suburban areas. Pigeons are especially fond of the cracked corn, sorghum, and milo seeds in wild birdseed mixes. Pet food such as dog and cat food left outside are also food for pigeons. In agricultural areas pigeons eat and/or contaminate large amounts of livestock feed. Pigeons are not picky about their food - they are often seen picking undigested seeds from the feces of livestock.

## REPRODUCTION

Pigeons breed year-round in southern Nevada and in the warmer months in northern Nevada. Nests are simple platforms of sticks built in sheltered locations on horizontal ledges. Pigeons commonly nest on man-made structures such as window ledges and balconies, under bridges, in barns and open warehouses, behind or on signs, in soffits, and in attics of houses (especially tile roofs). They enter attics through missing soffit panels or attic vents. A clutch normally consists of 1 or 2 eggs. In southern Nevada, 3 to 4 clutches per year is common. The incubation period is 16-18 days and fledglings leave the nest at 4-6 weeks of age. Adult pigeons feed their babies a material secreted by their crops called "Pigeon's milk".

## PROBLEMS AND SOLUTIONS

### AESTHETIC AND ECONOMIC PROBLEMS

Pigeon droppings deface many urban buildings, monuments, and public spaces. The uric acid (white material) in their droppings is not just unsightly, it can damage the finish on buildings, automobiles, etc. When birds occupy warehouses, they also defecate on stored goods. This is a problem for warehouse managers when customers refuse to accept contaminated goods.

### HEALTH-RELATED PROBLEMS

Mites are the most common health related problem associated with feral pigeons nesting in buildings. Mites invade the human-occupied space during or after the nesting

season. Bird mites, such as the northern fowl mite and tropical fowl mite, will bite humans and cause a small pustule, similar to a chigger bite. Pigeons are also important reservoirs and vectors for the reintroduction of fowl mites into previously treated poultry houses.

Pigeon nests can also be a source of stick-tight fleas, soft ticks, bed bugs, and dermestid (carpet) beetles invading buildings.

Pigeons are associated with diseases that are transmissible to humans and livestock. A partial list follows:

Bacterial diseases: *salmonellosis* (Salmonella food poisoning), fowl typhoid, paratyphoid, *pasteurellosis*, *streptococcosis* and *tuberculosis*

Fungal diseases: *aspergillosis*, *blastomycosis*; *rickettsial* disease; Q fever

Viral diseases: eastern equine and *St. Louis encephalitis*, Newcastle disease and fowl pox of poultry

Tapeworms in the genus *Taenia*, *Davainea proglottina*, and *Railletina tetragona*

Parasitic nematodes of poultry including *Tetramares* (2 species), *Capillaria* (5 species) and *Acuaria spiralis*

14 parasitic flukes of poultry, livestock, and humans.

Pigeons are generally a more serious disease vector to livestock, especially poultry and egg producers, than to humans. Still the presence of pigeons where food is prepared or people eat such as picnic areas and outdoor restaurants, should be a cause for concern due to the potential spread of Salmonella bacteria.

## CONTROL

### Exclusion

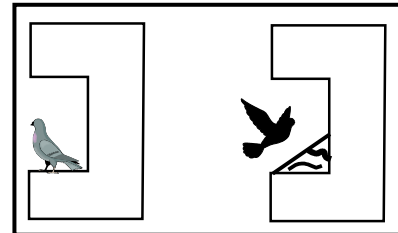
Exclusion is often the best option to control a nuisance wildlife situation. Exclusion

will also prevent most situations from developing. Make sure all attic and soffit vents are properly screened to keep birds and other animals out.



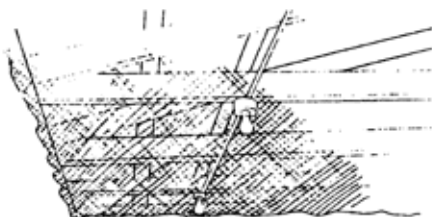
**Figure 2. Plastic curtain for large doorways.**

Large openings can be filled with heavy door curtains of plastic stripping to discourage entry. Once inside pigeons can be discouraged from roosting on ledges and light fixtures by modifying a flat surface to create sloping surfaces. This can be as simple as a board or a piece of sheet metal installed to create a 45° or greater slope (Figure 2).



Birds nesting inside or behind signs can be excluded by sealing the edges of the sign with hardware cloth and silicone caulk or with plastic bird netting.

On home roofs, any over hang where roofs meet need to be screened with wire or exclusion spikes. Netting or wire around air-conditioning units is also useful. Artificial snakes and owls are effective for short periods of time, if at all.



**Figure 3. Exclusion with bird netting or chicken wire.**

In large open structures, like barns and warehouses, close off the space above the rafters where pigeons roost and nest with industrial bird netting.

Pigeons can be deterred from roosting on railings or pipes by suspending a wire or monofilament line 1 ½ - 2 inches over the center of the roost surface so that the birds will be off balance.

### Repellents

Tactile repellents used for pigeon management may be mechanical devices like porcupine wire, wire loops, electrified wires on roosting surfaces, or sticky substances, usually containing polybutene. Sticky substances are short lived. Dust and dirt eventually render them ineffective. Naphthalene flakes may be used as a repellent. This product may have limited value. The use of this product may help move pigeons from an enclosed area. The odor is always a consideration. If this product is chosen, it should not be confused with POB—Pora dichloro benzene. Both are ingredients in mothballs, but only naphthalene should be used. All the methods listed make surfaces uncomfortable or impossible to roost on.

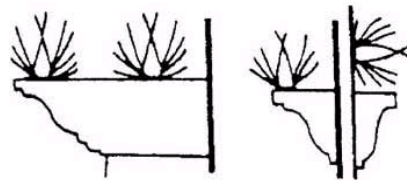


Figure 4. Exclusion with porcupine wire.

## LIVESTOCK AREA OPTIONS

Livestock producers can also reduce pigeon problems. Clean up spilled grain and do not feed livestock on the ground. Store grain and feed in bird and rodent proof storage bins. Use bird-proof livestock feeders, especially for swine. Feed livestock in covered areas like pole barns, as these areas limit access and are less attractive to pigeons. Use feeds that are difficult for pigeons to handle such as silage, granular meal, or blocks or cubes greater than ½ inch (1.5 cm) in diameter. Avoid using grain-sized pellets of approximately 3/16 inch (0.5 cm) in diameter. Mix protein supplements with silage or other feeds to reduce the pigeons' access to them. Adjust feeding times to when pigeons are less active if possible. Later in the afternoon is better than morning or midday. Feed cattle supplements at night. In places where water is limited, pigeons can be discouraged by regulating watering troughs so the water is too low to be reached from the top edge and too deep to wade in. There is a pesticide requested for pigeon control in feedlots – DRC 1339. This product can only be used by U.S.D.A. Wildlife Services personnel. Contact the nearest wildlife services office for further information.

## TRAPPING

Use trapping, described in Figures 3 through 6, if a local pigeon population becomes a nuisance. Loft traps are used where large numbers of pigeons must be removed. These traps are usually made onsite since their large size prevents easy relocation.

The decision to construct and use a loft trap or smaller traps should be based on the economics of the situation. Are the pigeons causing enough economic loss to justify the cost of trap construction or purchase? Is there a threat of disease? Commercially produced pigeon traps are available with both bob-type and funnel-bob type entrances.

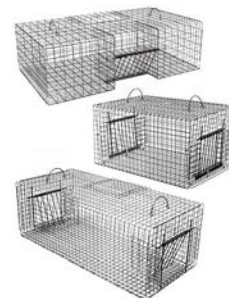
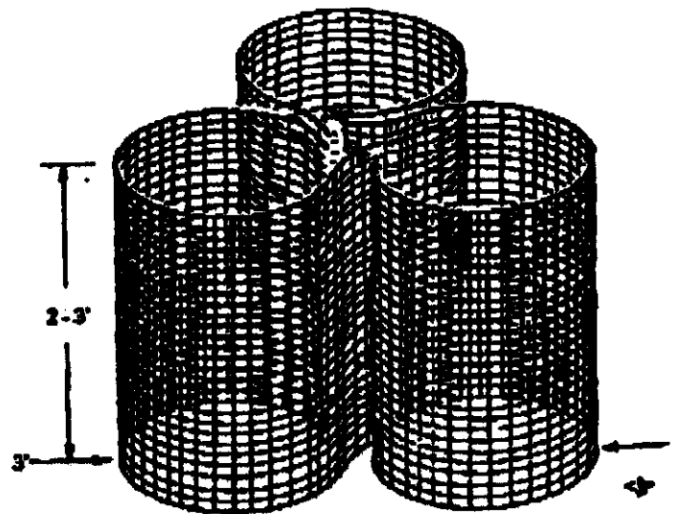
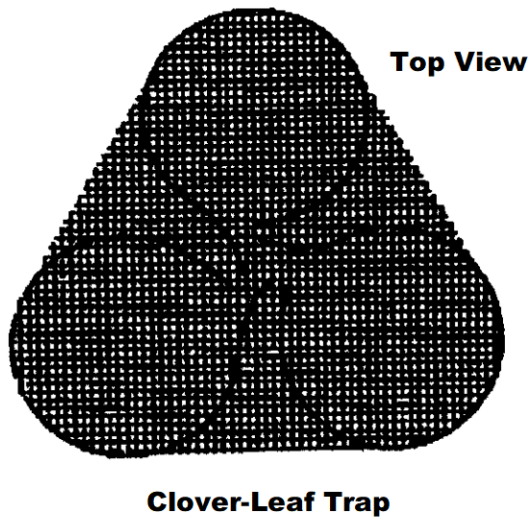
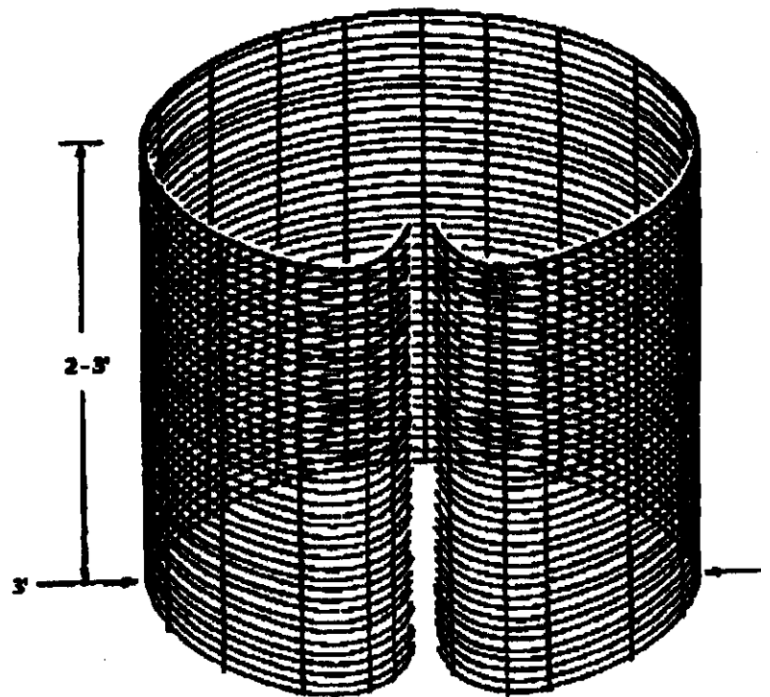
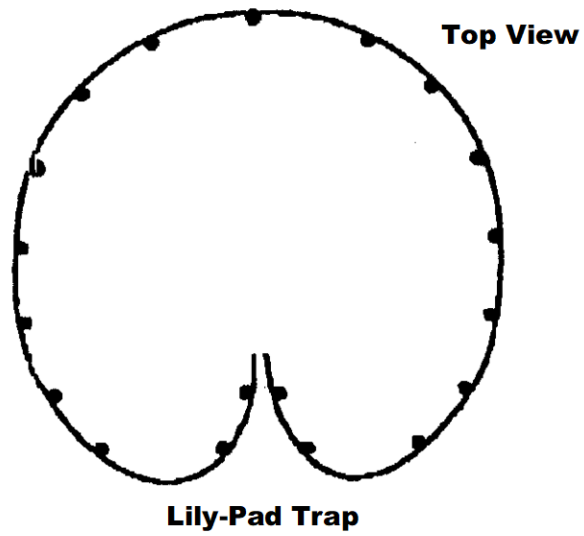
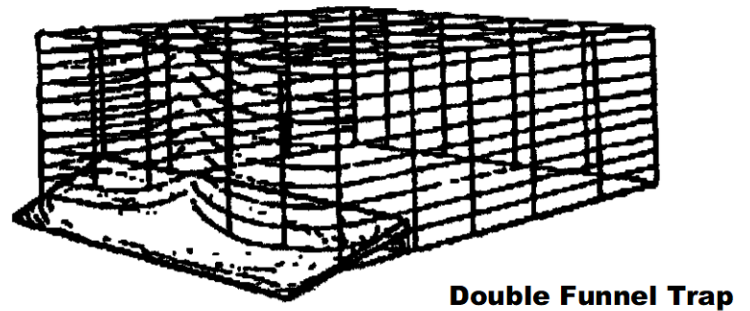


Figure 5. Commercial Traps: Bob-Type and Funnel-Bob Type.



**Figure 6. Lily pad funnel trap, clover leaf funnel trap, and double-funnel designs.**



In some situations numerous birds can be trapped at one time with a walk-in bob type trap or low-profile bob-type traps or by various funnel traps. The secret to trapping pigeons is pre-baiting about one week before setting the trap. Usually trap success will be good on the first day of trapping, fair on the second day, and poor by the third day. After the third day, it is time to pre-bait for another week. Immediately release ANY non-target birds you trap and check your traps at least once every 24 hours. Supply water in a cup or bowl in your trap to avoid stressing captured birds and to act as an added enticement to enter the trap. A live “decoy” bird or two also aids capture.

Active removal of nests, eggs, and chicks whenever they are found also helps manage pigeon populations. Check for and remove nests at most every two weeks. For best results, exclude all areas with wire or other devices if possible. By removing nests more often than every 14 days and excluding all areas where nests are found you will not have to deal with chicks.

## SHOOTING

Shooting is usually not an effective way to control a pest bird situation. Before considering shooting as a control method, contact your local law enforcement agency to determine if discharging firearms in your area is legal. (Some municipalities even designate pellet rifles and BB guns as firearms.) Many cities and towns also have local ordinances protecting birds-which may include pest species like starlings, house sparrows, and pigeons. Always check with local authorities first.

If you are legally permitted to use a weapon and local ordinances do not protect pigeons, it is wise to receive a type of firearm safety training. The Nevada Division of Wildlife offers hunter education classes that stress firearm safety as well as teaching shooting and hunting skills. Anytime you shoot, be absolutely sure where you are shooting and identify your back stop. A .22 bullet is capable of passing through corrugated tin, drywall, or plywood to hit anyone or anything behind it. Pigeons soon adapt to shooting and leave before a shot can be fired.

Another consideration is that racing pigeons often mix with feral pigeons. So, avoid shooting banded birds. *Note: this is easier said than done. Often the bands are only seen when the bird is in the hand.*

## POISONS

Currently in Nevada, there are only two registered avicides (poisons for birds). One is Avitrol™. It can only be used by persons who are licensed and certified by the Department of Agriculture. This is usually a pest control operator. However, private individuals can also be certified to use Avitrol™ on their own property, not for hire. The second product is DRC 1339. Information on this or other products that may become available in Nevada can be obtained from the Department of Agriculture office.

## BIBLIOGRAPHY

Kramer, Richard. 1999. PCT Bird Management Field Guide. G. I. E. Inc., Cleveland, OH. p. 116. ISBN: 1-883751-11-X.

Johnston, R. F. and M. Janiga. 1995. Feral Pigeons. Oxford University Press, New York. 320 pages.

Managing Health Hazards Associated with Bird and Bat Excrement. USAEHA TG No. 142. December 1992.

<http://chppm-www.apgea.army.mil/ento/tg142.htm#CHAPTER%204>

Williams, D.E. and R.M. Corrigan. 1994. pages 87-96 in. "Prevention and Control of Wildlife Damage Manual" produced by the Cooperative Extension Service, University of Nebraska, Lincoln, NE.

<http://wildlifedamage.unl.edu/handbook/handbook>

Timm, R. M. and R. E Marsh. 1997. Vertebrate Pests. Pages 954-1019 in. Handbook of Pest Control, 8<sup>th</sup> Edition, Chapter 21, p. 954-1019. Mallis Handbook & Technical Training Co.

The use of trade names in this publication is solely for the purpose of providing specific information. It is not a guarantee or warranty of the products names, and does not signify that they are approved to the exclusion of others of suitable composition.

Not recommending any of these control methods but providing information on control methods. It is up to the individual to determine which method will best fit their particular need and situation.

The University of Nevada, Reno is an equal opportunity/affirmative action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability and sexual orientation in any program or activity it operates. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States.