

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Great Plains Wildlife Damage Control Workshop Proceedings    Wildlife Damage Management, Internet Center for

---

December 1975

## Feral Mammal Damage and Control

Philip S. Gipson

Follow this and additional works at: <https://digitalcommons.unl.edu/gpwcwp>



Part of the [Environmental Health and Protection Commons](#)

---

Gipson, Philip S., "Feral Mammal Damage and Control" (1975). *Great Plains Wildlife Damage Control Workshop Proceedings*. 185.

<https://digitalcommons.unl.edu/gpwcwp/185>

This Article is brought to you for free and open access by the Wildlife Damage Management, Internet Center for at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Great Plains Wildlife Damage Control Workshop Proceedings by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

## FERAL MAMMAL DAMAGE AND CONTROL

by

Philip S. Gipson<sup>1/</sup>

### Introduction

Feral populations of five domestic mammals, dogs (Canis familiaris), house cats (Felis catus), hogs (Sus scrofa), burros (Equus asinus) and horses (Equus caballus), presently occur in North America. At times these animals cause problems, damaging crops or livestock, or competing with livestock and native wildlife for food and living space. Free-living bands of a sixth species, cattle (Bos taurus), formerly occurred in the Southwest. Feral mammals are adaptable, and they have become a permanent part of the fauna in many states. Researchers generally ignored feral mammals in the past, although numerous reports have been published in the past 10 years. A number of investigations treating feral mammals are presently in progress. Much additional research is needed.

In this paper the term "feral population" refers to a group of interbreeding animals, formerly domesticated with its gene pool controlled artificially by man, but presently under the control of natural selection and genetic mutation.

### Dogs

Other than man, the domestic dog is the most widespread and abundant mammalian predator in North America. The size of the dog population in

---

<sup>1/</sup> Extension Wildlife Specialist, Department of Poultry and Wildlife Sciences, University of Nebraska, Lincoln 68583.

the U.S. is overwhelming. The American Humane Association (1972) estimated the dog population in the U.S. at 34,100,000. Katz (1973) reported an estimated 100,000,000 to 120,000,000 dogs and cats, and about 50,000,000 of these are homeless.

Denny (1974) points out that the dog population is expanding and that damage incidents are likely to increase. He conducted a nationwide survey of damage caused by dogs and listed the following as major problems (in order of decreasing importance):

1. Damage to wildlife including deer, small game and birds.
2. Damage to livestock, including sheep, cattle, hogs, goats and poultry.
3. Human injury, nuisance and property damage.

Feral dogs occur in many areas in the U.S. (McKnight 1964; Nesbitt 1975), especially the Southeast (Gipson 1972; Caras 1973; Scott and Causey 1973). At times dogs develop social contacts with coyotes and/or wolves (Gipson 1972). Dog × coyote hybridization is common (Gipson et al. 1974; Cook 1952), and dog × wolf hybridization has been documented (Young and Goldman 1944; Mech 1970). Such hybrids appear to be well suited for life in the wild.

There is a need for improvement in dog control. Strict federal or state regulations to prevent dumping and abandoning dogs would help prevent problems. In areas where wild dog populations exist, the same techniques used to control coyotes (Henderson 1972; Wade 1973) are appropriate: traps, snares, shooting, den hunting, sport hunting and the use of toxicants in some situations.

### Cats

Cats are probably the second most common feral species. Free-living cats presently exist in all 50 states. The American Humane Association (1972) estimated the cat population at 31,000,000.

The number of true feral house cats is debatable. Hubbs (1951) has reported feral cat populations as high as one cat per 20-30 acres. Korschgen (1957) on the other hand, feels that few cats are actually feral. According to Korschgen, most cats that roam the fields and woods are associated with man.

Free-ranging cats may cause problems at times:

1. Occasionally kill poultry, particularly young chicks or young turkeys.
2. Damage game birds (pheasants, quail and water fowl) and small game mammals (rabbits).

Where control is called for shooting, trapping and hunting with dogs is effective.

### Hogs

Wild hogs have been present in the southern U.S. for at least 400 years (Hanson and Karstad 1959). Today feral hogs probably occur in all southern states as far west as Texas, California and Hawaii (Lamb 1938).

Indians started the custom of running hogs free in the woods. This practice was soon picked up by white men, and continues today in many areas of the South.

The distribution of wild hogs appears to be limited by several factors (Hanson and Karstad 1959; Pine and Gerdes 1973):

1. Temperature. Hogs cannot root in frozen ground, and therefore, are seldom found north of central Missouri or on high mountains. However, in the Appalachians of Tennessee and North Carolina, feral hogs occur where they have adapted to a mast diet and do little rooting during winter.
2. Standing water is required for wallowing and drinking.
3. Dense vegetation for cover. A survey of southeastern states (Hanson and Karstad 1959) showed that feral hogs were found in counties where a minimum of the land was used for agriculture, usually less than 10 percent.

In many areas of the South, free-ranging livestock including hogs have long been common on public lands and areas owned by lumber companies. In areas of the South and California, domestic hogs have hybridized with European wild hogs released for sport hunting (Shaw 1971; Pine and Gerdes 1973).

Problems caused by feral hogs follow:

1. Destruction of young trees in forest plantings. A single hog may destroy an acre of planted pine seedlings in one day (Wahlenberg 1946).
2. Damage to gardens and crops.
3. Destruction of fences.
4. Nuisance around recreation sites and rural homes.
5. Destruction of wildlife plantings.
6. Compete with wildlife, especially deer, for food.
7. Wild boars may invade barnyards, injuring domestic boars and mating with domestic sows.
8. Destructive to coastal marsh muskrat populations. Feral hogs have learned to break apart muskrat houses and eat the young.
9. In Hawaiian parks hogs are destructive to fragile native vegetation, permitting the establishment of weeds and exotic plants.

One of the most effective methods of controlling feral hogs is sport hunting. Still hunting is popular, but the use of dogs is generally more efficient. Plotts and catahoulas are favored breeds of dogs because of their fighting spirit and ability to follow scent.

Trapping and electric fences are also effective. At times cover removal or poisoning may be required.

#### Wild Horses and Burros

The wild mustang has long been a part of the folklore of the West. Wild and free-ranging horses and burros have existed in the western U.S. for hundreds of years. By 1767, wild mustangs by the thousands were known

to exist in Texas west of the Brazos River (Dobie 1941). Burros were slower in becoming established, but large bands of feral burros were known in the Southwest by 1875 (McKnight 1958). By 1945, burros were reportedly displacing bighorn sheep in Death Valley National Monument (Ratcliff and Summer 1945). Today wild burros and/or horses exist in most western states.

Both horses and burros were shot, trapped and poisoned to control populations until strict protection was provided in 1971 legislation. Since enactment of the Wild Horses and Burros Protection Act, populations have increased on public lands in the west.

Increasing populations of horses and burros cause serious problems:

1. Competition with wildlife for food, cover and water. Among the most seriously affected are ground game birds, bighorns, pronghorns, deer and small game mammals.
2. Competition with livestock for food and water.

Control methods include shooting, capturing alive in traps and round ups, and poisoning.

#### Longhorn Cattle

Wild longhorns or mustang cattle are of historic, ecological and economic importance. Cattle were first introduced into the new world during the 1520's, and by 1555, wild bulls were routinely captured near Mexico City for bull fights. By 1565, herds of wild cattle were common in Mexico (Dobie 1941). In the U.S. populations of feral cattle developed in Texas and California. In 1767, large numbers of wild cattle were reported west of the Brazos River (Dobie 1941) in Texas. According to Dobie there were approximately 100,000 longhorn cattle in Texas in 1830, possibly half of them wild.

It is interesting to speculate regarding possible competition between longhorns and buffalo. Settlers arriving in east Texas during the late 1700's and early 1800's reported that Buffalo were uncommon, but wild cattle existed there by the thousands (Dobie 1941). To the west on the

plains and also to the east in the forests and canebreaks of Arkansas and Louisiana, herds of buffalo occurred through the early 1800's (Gerstaecker 1856; Holder 1951; Roe 1951). It is possible that wild cattle displaced buffalo in the east Texas region.

Longhorns, usually feral stock, gave rise to the cattle industry of the western U.S. Longhorns provided most of the beef for eastern U.S. cities from the Civil War period until around 1900.

Feral cattle were dangerous, often attacking or trampling herders during stampedes. Bands of free-ranging longhorns were destructive to fences and crops. Wild bulls often mated with superior breeds of domestic cows.

During the early 1900's longhorns were replaced by beef and dairy breeds. Feral longhorns were eliminated by fencing the range, trapping, round ups, and sport hunting.

Today in regions of the South and West where cattle are permitted to range free, occasional animals escape to remote areas and become wild. There are no serious problems with such feral cattle. The docile breeds of today do not often survive independent of man.

#### Literature Cited

- American Humane Association. 1972. Animal control survey. The American Humane Assoc. Denver. 15 pp.
- Caras, R. 1973. Meet wildlife enemy no. 2. National Wildlife. 11(2): 30-31.
- Cook, R. 1952. The coy-dog: hybrid with a future. J. Hered. 43: 71-73.
- Denny, R. N. 1974. The impact of uncontrolled dogs on wildlife and livestock. Transactions of the Thirty-Ninth North American Wildlife and Natural Resources Conference: 257-291.
- Dobie, J. F. 1941. The longhorns. Little Brown, Boston. 388 pp.
- Gerstaecker, F. 1856. Wild sports in the far west. B. Routledge and Co. New York. 314 pp.
- Gipson, P. S. 1972. The taxonomy, reproductive biology, food habits and range of wild Canis (Canidae) in Arkansas. Ph.D. Dissertation. Univ. of Ark., Fayetteville. 188 pp.
- Gipson, P. S., J. A. Sealander and J. E. Dunn. 1974. The taxonomic status of wild Canis in Arkansas. Systematic Zoology. 23(1): 1-11.

- Hanson, R. P. and L. Karstad. 1959. Feral swine in the southeastern United States. *J. Wildl. Manage.* 23(1): 64-74.
- Henderson, F. R. 1972. Controlling coyote damage. Cooperative Extension Service, Kansas State University, Manhattan, Kansas. 23 pp.
- Holder, T. H. (Editor). 1951. A survey of Arkansas Game. Arkansas Game and Fish Commission. Little Rock. 155 pp.
- Hubbs, E. L. 1951. Food habits of feral house cats in the Sacramento Valley. *Calif. Fish and Game.* 37: 177-189.
- Katz, B. J. 1973. Every litter hurts a bit. Dogs, cats suffer as pet population soars. *The Nat. Observer.* 12(13): 1,18.
- Korschgen, L. L. 1957. Food habits of coyotes, foxes, house cats and bobcats. *Missouri Conser. Comm. Bull. No. 15.* 64 pp.
- Lamb, S. H. 1938. Wildlife problems in Hawaii National Park. *Transactions of the Third North American Wildlife Conference:* 597-602.
- McKnight, T. L. 1958. The feral burro in the United States: Distribution and problems. *J. Wildl. Manage.* 22(2): 163-179.
- \_\_\_\_\_. 1964. Feral livestock in Anglo America. University of California Press. Berkeley and Los Angeles. 87 pp.
- Mech, L. D. 1970. The wolf. Nat. History Press. Garden City, N. Y. 384 pp.
- Nesbitt, W. H. 1975. Ecology of a feral dog pack on a wildlife refuge. Pages 391-395. *In* M. W. Fox (Ed). 1975. The wild canids. Van Nostrand Reinhold Co. New York. 508 pp.
- Pine, D. S. and G. L. Gerdes. 1973. Wild pigs in Monterrey County, California. *California Fish and Game.* 59(2): 126-137.
- Ratcliff, H. M. and L. Summer. 1945. National Park Wildlife Ranges. *Transactions of the Tenth North American Wildlife Conference:* 246-250.
- Roe, F. G. 1951. The North American Buffalo. University of Toronto Press. Toronto. 957 pp.
- Scott, M. D. and K. Causey. 1973. Ecology of feral dogs in Alabama. *J. Wildl. Manage.* 37(3): 253-265.
- Shaw, A. C. 1941. The European wild hog in America. *Transactions of the Fifth North American Wildlife Conference:* 436-441.
- Wade, D. A. 1973. Control of damage by coyotes and some other carnivores. Cooperative Extension Service. Colorado State University. Fort Collins, Colorado. 16 pp.
- Wahlenberg, K. A. 1946. The longleaf pine. C. L. Park Forestry Foundation. Washington, D. C. 429 pp.
- Young, S. P. and E. A. Goldman. 1944. The wolves of North America. *The Am. Wildl. Inst.* Washington, D.C. 636 pp.