

Golf Course Aviary and Animal Problems

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ALLIGATORS, armadillos, beaver, badger, 'coon, coots, dogs, deer. Sounds more like roll call at the zoo parade than creatures that often pose problems on the golf course. Normally, when club officials and superintendents discuss golf course problems, they refer principally to insects and disease or the growth of weeds. Animals on many golf courses, however, are real problems to people who maintain them and to people who play.

Damage from animals occurs in various forms, depending upon their numbers and the frequency and intensity of the visits they make searching for food. Flocks of birds can severely

limit the effectiveness of an overseeding program by eating newly sown seed and young seedling plants as they emerge. Migrating water fowl have also been seen causing considerable damage to fairways by completely denuding areas of turf. Seagulls, coots, crows and starlings are the most frequent and troublesome insect predators. Although deer, by virtue of their gentle grace and beauty, add to the pleasantness of the environment, they, too, create some problems, especially in areas where the winters are snowy. Deer often ruin small trees by scraping their antlers along the trunk to remove moss and other growth. They sometimes eat all the

growth they can reach on small trees. Gophers and other burrowing animals create holes that may cause the golfer to twist an ankle or lose a golf ball. A ball lost is not serious, but a turned ankle may be. Mice, rabbits and other rodents can severely damage turf during winter. These small creatures can even kill trees by feeding on the bark at the base of the tree.

To cope with the damage that animals can do, various means of control have been developed. Some golf course superintendents have used homespun ingenuity in coping with these problems, whereas others rely upon commercially recommended products.

Deer grazing on the front lawn of the Wawona Golf Club, Yosemite National Park, California.



The turf damage caused by birds generally occurs when they are feeding on worms, grubs, young seedlings or newly sown seed. Some golf courses have been able to frighten birds away by using automatic exploding devices and sound generators. Both the frequency of the explosion and the volume can be adjusted. One golf course reported effective seagull control by assigning someone to fire a shotgun into the air at irregular intervals and just before the birds attempted to land. Using sound-deterrent devices can be effective not only for bird control but also for most other animals. One problem that can limit the use of loud and explosive noises is the annoyance caused to nearby residents and the obvious disturbance to players.

Visual methods of frightening birds can also be used. These include scarecrows, metal pie plates and other homemade devices that create constant motion and clatter. Some orchard growers have been able to chase birds away by placing imitation snakes in the trees. Brightly colored plastic or rubber snakes discourage birds from feeding. It is possible, occasionally, to use other natural deterrents to discourage bird activity. For example, birds were feeding or resting under the eaves of a clubhouse in the Pacific Northwest. By placing an imitation owl under the rafters, the birds were discouraged from occupying the area. Falcons can be used to discourage coots. The falcon flies over the area, the pesky coots become scared, and they relocate. A combination of the sound devices along with natural predator control is likely to give better results than just one of these techniques.

Should it be difficult to obtain satisfactory control with biological or mechanical means, it is possible to use a chemical approach. A chemical method of bird control has become available. After ingesting a small amount, this chemical produces an alarming reaction; first the taste is extremely unpleasant and soon thereafter a tightening of its throat muscles creates a touch of panic. This reaction is usually enough to cause the bird to stop eating and leave the area. Fortunately, this chemical reaction is reversible within 45 minutes.

Under a thick snow cover during the winter, mice can damage turf. They can also girdle and damage trees by

(Below) Rabbits feed on young tree bark.



feeding on the bark. Mice can be controlled by applying a toxic-coated grain, bait or other compound around the base of young trees. The mice die shortly after they eat the treated grain or bait.

Rabbits also can be very damaging to newly planted trees when they are pressed to find food when snow cover is deep and long-lasting. Rabbits and other rodents have been known to destroy young trees by completely removing the bark at their base. The use of the fungicide material Thiram has been effective as a taste repellent in discouraging rabbits and other rodents from feeding on trees, shrubs and bushes. The Thiram-based formulations will last for approximately one to three months, possibly longer when they are used in conjunction with a spreader sticker. Some commercially available materials are also reported to be successful for repelling deer.

Plastic tree guards, poultry netting or wire fences placed around trees have been effective in discouraging animals from feeding on the bark of trees. Recently, ultrasonic rodent repellents have become available. They produce a high-frequency sound (inaudible to humans) at a high volume. Mice, rabbits and other rodents are repelled, but these instruments have limited range.

To discourage deer, numerous chemical repellents are available commercially. In addition, many superintendents have formulated their own repellent. This includes mixing a tablespoon or two of Tabasco or Louisiana Hot Sauce with one tablespoon of an anti-desiccant in a gallon of water. This material can be sprayed on the trees to discourage summer browsing. Deer apparently dislike the hot, tangy taste. A similar mixture with twice the amount of anti-desiccant has been used to discourage mice and rabbits from girdling trees and bushes. This solution must be applied when temperatures are above 40° F.

Another method for discouraging deer has been to use felt strips treated with creosote about ½ inch wide by 6 inches long. One or two strips of the treated felt are hung on the tree at a height of about 30 to 40 inches. During rainy weather, these strips will have to be retreated approximately every three weeks. However, one application could last through the winter. Since creosote will burn the leaves and bark, they should be hung where it will not drip onto the foliage or wood.

Small cloth bags filled with two or three teaspoons of tankage or blood meal have been hung in trees to repel deer. The odor repels deer for about four months, but it is ineffective in



(Left) Beaver can destroy large trees.

(Below) Field mice feed on grass under snow in winter.



Decoy predators are sometimes effective in keeping pesky birds from buildings.

winter. A second problem with use of this technique is that quizzical animals are attracted to the tankage and quickly destroy the bags. As a result, this procedure has limited use.

Hanging small bags of strong, offensive material in trees is apparently a popular way of repelling deer. Everything from urea fertilizer to moth balls has been hung in trees. Since the deer is a protected game species and several states have programs to increase the deer population, some who continually experience damage from deer feel that the government should provide assistance with problems that deer cause.

In areas where snow cover is not a problem, some superintendents have reported favorable results by discouraging deer and elk from foraging in their fairway areas by letting the rough grow longer. When long, succulent grass is available, the deer and elk usually confine their feeding primarily to those areas.

Other problems on the golf course include the damage that muskrats and beavers do to the shoreline of ponds and streams. Since the fishery and wildlife laws vary considerably from state to state, it is important to contact the local authorities for guidance and assistance with such problems. In many instances, the state fish and

wildlife officials will assist in trapping these animals for relocation.

In turfgrass areas where high grub and insect populations occur, skunks, racoons, moles and armadillos can destroy turf by digging and scraping to feed on the grubs. By applying an insecticide for the eradication and control of the grubs, it is possible to discourage the animals from feeding in those areas. Where grub control is ineffective, it is advisable to contact local conservation officials for assistance in trapping and relocating troublesome animals.

The presence of wildlife on the golf course can definitely be considered desirable until their populations reach such proportions that turf and trees suffer frequent damage. The use of natural predators or decoys has been more effective to date than the use of toxic baits and chemicals.

Editor's Note: Ken Stohl, former superintendent at Orinda Country Club in Orinda, California, has reported that applying a diluted solution of asphalt-based grafting wax to the trunks of young trees will discourage gophers and other rodents from feeding on tender bark. It sets up quickly in warm weather, but it doesn't become hard or brittle. Stohl suggests two applications for best results.