

# Management and Control in South Carolina



www.dnr.sc.gov

# HISTORY

The beaver, the largest rodent found in North America, was once abundant in South Carolina, and was found commonly in all areas with the exception of a narrow strip of sandy soil along the coast. These animals were trapped extensively by early trappers, and by the late 1800s or early 1900s had disappeared from most of the state. Many feel the beaver was eradicated; however, some remnant populations may have persisted in remote areas.

During the winter of 1940 to 1941, United States Fish and Wildlife Service personnel released six beavers, which were captured in Georgia, on the Sandhills Wildlife Refuge in Chesterfield County, South Carolina. During the same period, beavers from Georgia began to invade the Savannah River drainage system. These animals established populations in counties which border the Savannah River.

The beavers in these two areas and potential existing remnant populations have increased their range significantly and presently occur in portions of all 46 counties in the state

### DESCRIPTION

The beaver is a large brown rodent which has webbed rear feet and a flat tail. Most people are surprised to find the average weight of adult beavers is around 40 pounds, and individuals weighing up to 60 pounds are not uncommon. The beaver has a large head with no distinct neck and a large body. The tail is long, flat and scaly. Both feet have long claws which are adapted for digging. One claw on each rear foot is split and is used for grooming the fur.



The beaver's ears and eyes are small, and the nostrils close when under water. The fur consists

of a thick underfur and a larger, coarser outer fur. In South Carolina the beaver's color ranges from dark brown to reddish blond.

### BIOLOGY

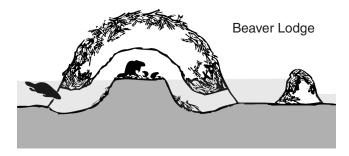
#### **Beaver Ponds**

The beaver pond, which has one or more dams and lodges, provides security for the beaver. These ponds are usually found along smaller tributaries or drainages, and each encompasses one-half to several acres. One colony of beavers may maintain several ponds which encompass as many as 20 to 30 acres.

The water in these ponds is impounded by dams which consist of sticks, mud and debris. The dams vary in height from 1 to 3 feet in the lower portion of the state to as much as 8 to 10 feet upstate. Beavers do obstruct pipes which go under roads or railroad beds. In these cases the road or railroad bed functions as the dam. Beaver ponds may be 8 to 10 feet deep, but the average depth ranges from 1 to 3 feet.

Beavers typically construct several types of lodges. The bank den is found along steep banks around the edges of a water body. They are more common in lakes, deeper ponds, and in areas where steep terrain provides suitable sites. The beavers simply dig several holes which begin in 1 to 4 feet of water and lead to a common chamber 2 to 3 feet in diameter. This chamber or opening lies above the waterline and is usually lined with soft material.

Another type of lodge is the traditional mud and stick lodge that is illustrated in most books. This lodge is usually built upon a log, stump or small island in the water. It consists of mud, sticks and debris and has several entrance holes under water.



### Feeding Habits

A common misconception is that beavers feed upon fish. Beavers are true vegetarians and do not eat fish. Their diet consists of soft aquatic plants during the summer months and the bark of woody plants (trees) during the winter months. It is during the colder months that beavers cut the greatest number of trees. The bark is removed from the felled trees and is eaten, leaving the woody portions for possible construction of dams or lodges.

### Reproduction

Beavers produce their first young at 2 to 3 years of age. Breeding takes place about December, and the young are born about March. The average litter consists of two to three young, which are born fully furred and with their eyes open. They can swim almost immediately; however, most do not leave the lodge until they are 1 to 2 months of age. Only one litter is produced each year. Once mated, a pair of beavers will usually remain together for life.

### Family Units

A typical family or colony of beavers consists of one mature male and one mature female along with as many as two sets of offspring. Young beavers leave the colony at approximately 2 years of age; therefore, a colony could consist of (1) the adults, (2) a set of offspring ranging up to 1 year of age and (3) a set of offspring from 1 to 2 years of age. Although the abundance of cutting might indicate otherwise, a typical colony usually consists of only two to eight beavers.

# IMPACT

#### Benefit

Beavers produce excellent habitat for many species of wildlife. Waterfowl, furbearers, fish, reptiles and amphibians all benefit from the beaver's presence. The wood duck, the only duck which nests in South Carolina in large numbers, is very fond of beaver ponds. These areas are important nesting areas because they provide an abundance of food for the hen and brood.

Anyone whose land has beaver ponds should consider erecting wood duck nesting structures. Plans for these boxes can be obtained online at *www.dnr.sc.gov* or by writing: WOOD DUCK BOX PLANS, S.C. Department of Natural Resources, P.O. Box 167, Columbia, S.C. 29202.

#### Damage

Although beavers produce suitable habitat for many wildlife species, they can also conflict directly with the economic interests of man. The damage to timber or agricultural crops (such as soybeans and corn) from cutting or flooding can be extensive. In such cases it is often necessary to implement beaver control measures.

## CONTROL

#### Destruction of Dam and Lodge

In very few cases will human destruction of the dam or lodge make beavers abandon a particular site. Usually the beavers rebuild in one night the work that has taken an individual all day to accomplish. However, sometimes beavers will move if the dam or lodge is destroyed properly:

1. All material removed from the dam or lodge should be carried away from the water where the beaver cannot use it for rebuilding. The structures should be taken apart completely so that the beaver will have to start anew to rebuild them.

2. The dam or lodge should be checked daily in order to remove any debris which the beaver has deposited to rebuild it.

#### Trapping

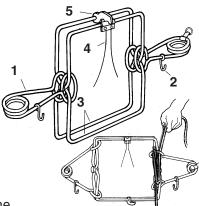
Beaver traps can sometimes be found locally by checking with your area hardware or sporting goods stores, but for many it will require ordering the traps online from a trap supply company (search for trapping supplies).

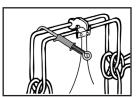
When new traps are purchased, they are usually coated with a lubricant which makes them slick and potentially dangerous. This coating can be removed by washing the traps in hot soapy water, rinsing, and then soaking the traps in a mixture of hot water and ice cream salt. Let the traps soak for a day or two, rinse with clean water, and leave the traps outside for several days. The traps will become rusty, which will make them safer, easier to handle, and less conspicuous when set. A coating of rust preventative flat spray paint can be applied, if desired.

### Body-gripping (Conibear®) traps -

The #330 size body-gripping trap (commonly called the 330 Conibear<sup>®</sup>) is by far the most effective trap for capturing beavers. If used properly, the device is safe, selective, efficient and, above all, easy to set. This trap (see illustration) consists of: (1) two springs, (2) two safety catches, (3) two jaws, (4) one trigger and (5) one trap lock, as shown below. The device is most easily set using a rope as shown or with commercially available setting tongs.

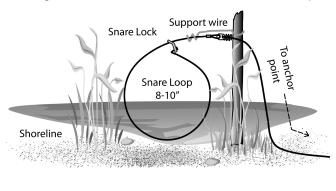
The most important features of the body-gripping trap are the safety catches. These should be left over the springs until the trap is set and you are about to leave the area. Body-grip trap safety devices commonly called "safety grippers" (see illustration to right) are recommended and can be purchased from trap supply companies. This device grasps the top of the trap to prevent the trap from completely closing should the trap accidently fire while being set.





Body-grip safety gripper in use

Snares (Cable Restraints) - Snares may be used to capture beavers when used for water sets. A snare (also called a cable restraint) consists of a length of wire cable formed into an 8 - 10 inch loop with a sliding one-way



locking device that the beaver walks or swims through pulling the loop closed. Snares can generally be placed in some of the same types of trap sets in which body-gripping traps are used. Snares must be securely anchored

and should have at least one swivel to prevent cable fraying. In many cases after catching a beaver, the snare cable will become kinked. This inhibits the free movement of the snare lock. Any kinked wire must be replaced to ensure proper trap functioning. Most of the snare's hardware can be reused by attaching to a new piece of cable. It is further recommended that a .22 caliber rimfire pistol be carried to dispatch any live beavers captured by a snare.

Various Sets for Beaver - Beavers, like most animals, are creatures of habit. This fact makes them relatively easy to trap once their habits are

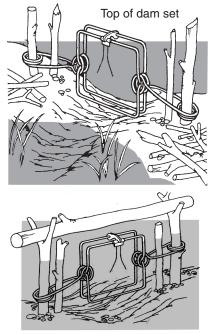
known. The beavers will have certain trails or crossings which, when located, make good places to set traps.

Beavers usually have a well-worn path crossing the top of a dam which separates ponds. A trap (body-grip or snare) set in this path will capture most beavers which cross the dam.

In shallow water beaver trails or runways can be located. These runways are usually clear of bottom debris, and due to the beaver's constant use, have the appearance of a narrow trough. A body-grip trap set in such a runway is usually effective.

If the water above these runways is deeper than 10 inches, a small log can be placed over the trap to force the animal to dive.

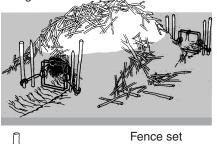
Beavers feeding on agricultural crops, such as corn or soybeans, can be easy to catch, because distinct, well-worn paths usually lead from the water out into the field. A body-grip r trap placed in the path at the water's edge will catch beavers.



Runway set

When beaver lodges or dens are located and the water is shallow enough to permit locating the entrances, a trap can be placed at each entrance. These

Lodge set





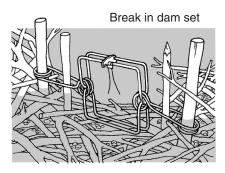
sets are extremely effective because (1) the traps are under water and inconspicuous, and (2) the beavers are sure to enter the lodge.

In some cases a fence will work when beavers are damming a culvert or overflow device and no lodge or den can be located. First, tear out all material blocking the pipe and remove it from the site.

Then place four posts in the ground and attach enough hog wire to build a fence which runs from the bank out in front of the pipe and back to land again. Once the posts are in the ground and the fencing is attached, cut three holes, one on each side and one in front of the pipe. Each hole is then blocked with a body-grip trap staked solidly to the bottom and secured to the fence or fence post. Any beaver which returns to rebuild the dam will circle the fence until it locates one of the openings and will then be caught.

Since beavers will also return to repair any breaks in a dam, another way to attract them is to break one or more holes in the dam only a foot or so wide and block these holes with traps (body-grip or snares). When the beaver returns to repair the dam, it will be captured.

Because the body-grip trap is a versatile and efficient tool, other ways of setting the device will become apparent as situations arise. But remember, this trap is a powerful device which, if not handled properly, can be dangerous. It is only as selective and safe as the user. Do not place where children or pets may encounter the trap.



#### **Disposition of Trapped Beavers**

The beaver is a traditional furbearer, and a market for the pelts does exist. Beaver pelts from the Southeast are comparatively low in value but, if handled properly, can provide a return for your trapping efforts.

Beaver meat, if prepared properly, is delicious. It can be barbecued, fried, or used in stews. However, as with all wild game, avoid contaminating the meat with the entrails or glands which lie at the base of the tail. Also remove as much fat as possible.

### DEPREDATION PERMITS

The beaver is classified as a furbearing animal in South Carolina. The season for trapping these animals is December 1 through March 1. However, there is no closed season on hunting beaver (a hunting license is required). Anyone planning to trap beavers should be familiar with the regulations which govern this activity. Information on these regulations can be found on the DNR web site at www.dnr.sc.gov or obtained by writing: Furbearer Regulations, S.C. Department of Natural Resources, P.O. Box 167, Columbia, S.C. 29202.



Beavers can also be taken year-round with a **Depredation Permit**. A depredation permit is not required when controlling nuisance beavers within 100 yards of a property owner's residence while on the same property or with written permission of the adjacent property owner(s). This depredation permit is issued by the S.C. Department of Natural Resources when beavers are damaging private or public property, timber or growing crops. To obtain a permit call your local DNR wildlife or law enforcement Regional Office.

For further information on the beaver, please visit *www.dnr.sc.gov* or call 803-734-3609, or write: **SCDNR Furbearer Project, P.O.Box 167, Columbia, S.C. 29202** 

# **DNR REGIONAL WILDLIFE OFFICES**

<b>Region 1 - Clemson</b> 311 Natural Resources Drive, Clemson	864-654-1671
<b>Region 2 - Florence</b> 295 South Evander Drive, Florence	.843-661-4767
Region 3 - Columbia 1000 Assembly Street, Columbia	.803-734-3886
<b>Region 4 - Charleston</b> 217 Ft. Johnson Road, Charleston	.843-953-5291

### **DNR WILDLIFE FIELD OFFICES**

Webb Center 1282 Webb Avenue, Garnett	803-625-3569
<b>Donnelley</b> 585 Donnelley Drive, Green Pond	843-844-8957
Santee Coastal Reserve 220 Santee Gun Club Road, McClellanville	843-546-8665
Dennis Center 305 Black Oak Road, Bonneau	843-825-3387

### DEPARTMENT OF NATURAL RESOURCES

P.O. Box 167, 1000 Assembly Street Columbia, S.C. 29202 803-734-3886

The South Carolina Department of Natural Resources prohibits discrimination on the basis of race, gender, color, national origin, religion, disability or age. Direct inquiries to the Office of Human Resources, P.O. Box 167, Columbia, S.C. 29202.