

WILDLIFE

management guide



Wildlife Management Section
South Carolina Department
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Edges

Edges (or ecotones) are areas where two or more habitat types, such as a forest and a meadow, meet. Edges also occur between different aged patches of the same habitat type.

Edges can occur naturally where there are abrupt changes in soil characteristics or where fire or windthrow destroy part of a forest, but most often edges are created by human activities, such as agriculture, timber harvest, or development.

WHY ARE EDGES IMPORTANT?

Edges are unique because they combine some of the characteristics of two or more habitats. Edges are inhabited by some of the animals and plants that are characteristic of each original habitat, plus species that are specially adapted to live in edges. Therefore, edges usually have more diverse wildlife communities than unbroken blocks of habitat. This increased diversity is known as the edge effect. The brushy nature of most edges provides nesting, brooding, feeding, and escape cover for a wide variety of animals. Predators often concentrate their hunting activities near edges because of the abundance and variety of prey animals that are attracted to this special habitat.

Edges are also important because they form a refuge for many soft-mast producing plants (fruits and berries) that cannot survive in mature forests or cultivated fields. Most of these plants are early successional species that cannot tolerate the shade and competition of a forest or the constant disturbance associated with cultivation and grazing.

Soft mast is an important source of food for many wildlife species during the summer.

Some important soft mast producing plants are listed below:

Trees

plum
dogwood
mulberry
persimmon
crab apple
hawthorn
redbud
honey locust
black locust
chinaberry
mountain ash

Shrubs/Vines

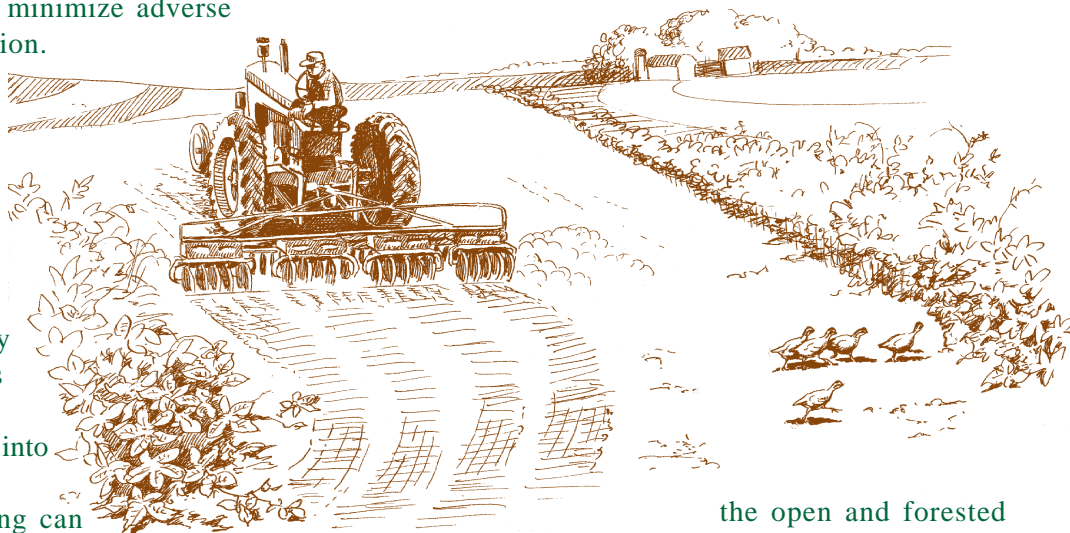
greenbrier
wax myrtle
blackberry
raspberry
dewberry
sumac
poison ivy
titi
gallberry
yaupon
serviceberry
strawberry bush
Virginia creeper
wild grape
passion flower
autumn olive
blueberry
huckleberry
beautyberry
honeysuckle
elderberry



EDGE MANAGEMENT

Landowners can increase the diversity of wildlife on their land by actively managing for edges. Parcels of land that already have forested and open areas interspersed are excellent candidates for edge management. Below are some suggestions for increasing the amount of edge on your property:

- When harvesting timber, make several small, irregularly shaped clearcuts instead of one large, regularly shaped clearcut. This greatly increases the amount of edge created per acre of timber harvested. Also retain strips of forest along streams.
- When using fire or herbicides to control understory vegetation in recently harvested areas, leave about 5 percent of the cut area untreated to provide brushy edges within the newly regenerated stand. These “skip areas” can be placed along logging roads, in areas of unstable soil, in wet areas, and in streamside buffer zones to minimize adverse impacts on timber production.
- Daylight logging roads by felling trees on either side of them. This creates edge conditions within forested tracts.
- “Feather” or “scallop” existing edges by selectively cutting trees several yards back into the forest. If possible, allow trees to fall into the open habitat and leave them on the ground. Cutting can be limited to cull trees to minimize impacts on timber production. Allow fingers of native vegetation to creep out into open areas.
- In farmed areas, allow native vegetation to take over fencerows, odd field corners, terraces, roadsides, and field borders. Trees and shrubs can be planted to speed up the process. Such edges are easy to create, cause little decrease in crop production, and greatly increase the variety of wildlife found on the farm. These narrow edges in open areas are not as diverse as forest-field edges, but they provide cover and soft mast for quail, rabbits, and other open-country wildlife, plus they serve as vital travel corridors between forested areas.
- Use the tops of trees cut during edge feathering to create brush piles in pastures, clearcuts, and other open areas. The value of brush piles can be enhanced by burying old culverts or drain tiles in them and by planting grapes or other mast-producing plants.
- Edges must be maintained by periodic cutting, mowing, discing, or burning to set back succession. It is best to maintain several different levels of vegetation in each edge. Mow or disc low vegetation nearest the open area every year, mow or disc medium-height vegetation midway between



the open and forested areas every two to three years, and cut or mow tall shrubs and saplings nearest the forest on a rotation of five to ten years. For the medium and tall levels, do not perform maintenance on more than one-third of an area in the same year. This ensures that some edge of each stage will be available at all times. Avoid edge maintenance from April to August, the period when many edge species are nesting.



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