

making a home for wildlife...

EDGE FEATHERING



benefits

Gradual edges are beneficial because their rich blend of vegetation provides shelter and food for many kinds of wildlife. Gradual edges are also important for upland game birds like the Northern bobwhite quail, which rely on shrubs to escape predators. In winter, they spend a majority of their time 70 feet or less from shrubby cover. A number of other species also thrive along such edges, including the Eastern cottontail, and many species of songbirds.

goal

Because edges in Iowa are often abrupt and provide limited resources for wildlife, the goal of feathering is to create a gradual edge that is wide enough to hold a good mix of plants of varying heights. In general, the wider and more blended the edge, the better it will be able to support the species you wish to attract.



Creating the shrubby areas on the edge between a grassland and forest provides escape cover and attracts quail and other species.

definitions

edge — An edge is the place where two different habitat types meet. For instance, an edge might consist of forestland next to cropland or wetland next to a field. Gradual edges generally harbor a great variety of plants and animals from each habitat, while abrupt edges tend to lack this “middle ground” of varying plant types.

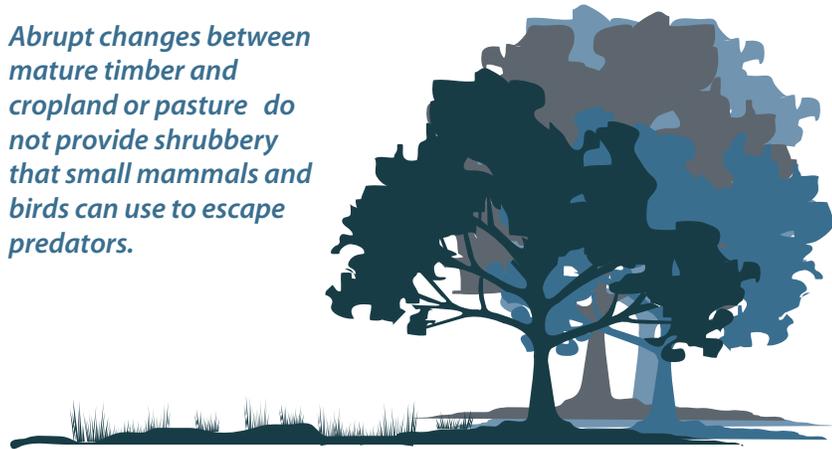
edge feathering — The act of creating a gradual transition between two habitat types. It is accomplished by cutting existing vegetation, such as timber, and/or by planting shrubs and grasses of varying heights. Edge feathering is a conservation practice used to make edges more hospitable for local wildlife.

purpose

Where forest meets field, or pasture meets wetland -- these are the areas where plants and animals thrive. Providing or enhancing these unique habitats can attract more wildlife to your property.



Abrupt changes between mature timber and cropland or pasture do not provide shrubbery that small mammals and birds can use to escape predators.

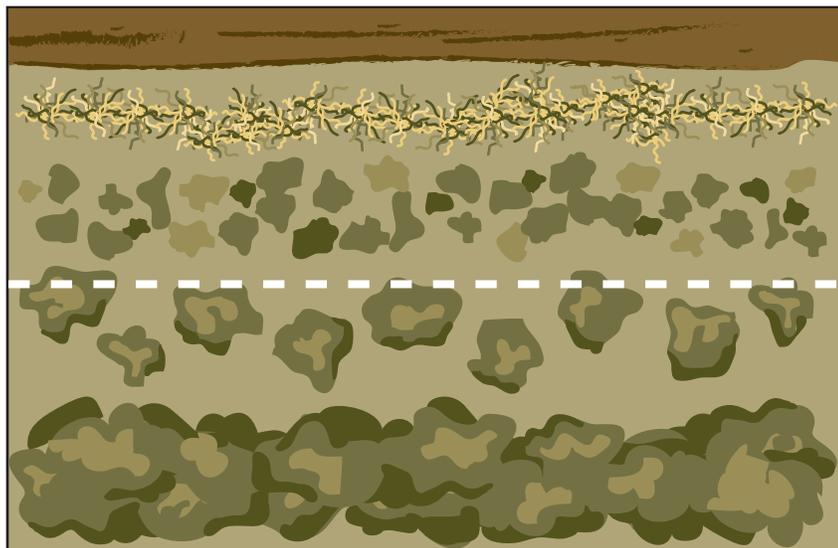


Edge Feathering from the side: Showing no transition between field and woodland.

Adding shrubs, tall native grasses and brush piles provides a gradual transition between woodland and field. This feathered edge provides winter and escape cover for many wildlife species.



Edge Feathering from the side: Showing a gradual transition from field to woods.



Edge Feathering from above: Showing a crop field edge, grasses, shrubs, small trees and mature timber.

how-to “get an edge”

There are two major ways to “get an edge.”

1. planting or revegetating an edge

One of the best ways to create an edge is to plant trees, shrubs and grasses into the field next to a mature stand of trees.

However, if dense brome grass or other sod covers the field, the grassland area may have to be sprayed or disked to establish desirable plants.

- If you choose to spray, use a full rate of herbicide.
- If you choose to disk, complete many passes on relatively flat fields so that the disked area is almost devoid of vegetation. For your safety, use caution when disking on steep slopes. Leave some vegetation in place and avoid disking up and down sloping fields to prevent erosion. If you are participating in federal programs, please check with your U.S.D.A. Natural Resources Conservation Service before proceeding.
- Plant a variety of tree, shrub and native grass species. Plant flowering or nut-producing trees such as dogwood, choke cherry, hawthorns and crabapples next to the existing woodland. Then plant shorter, shrubby species such as wild plum, arrowwood, serviceberry or hazelnut. Plant native warm season grasses and wild flowers furthest from the woods.
- For best results, complete the spraying or disking in the fall from Sept. 20 - Oct. 15.



“Hinge Cutting” is accomplished by cutting partway through the felled tree, leaving the tree attached to the trunk base. Positioning the felled tree perpendicular to the wooded area will provide the most benefit to wildlife.

Another way to create an edge is to allow the area next to a woodland to grow up in natural vegetation. This can be as simple as not mowing or cropping the field.

- Edge areas can also be improved by cutting down existing trees and placing the trunk perpendicular to the timber edge. The cut tree lying on the sprayed or disked area will create ideal habitat with many essential cover types. Annual broadleaf plants will provide food and brood rearing cover as they grow up amongst the downed trees which provide winter and escape cover.

2. thinning the timber

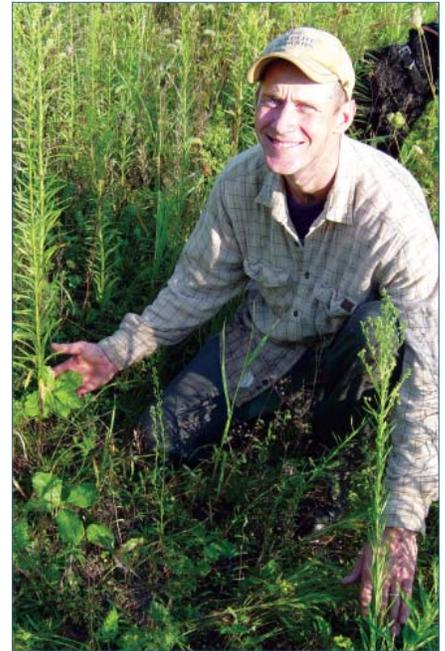
One of the most cost-effective and timely ways to feather a forest edge is by thinning the trees in that area. This involves cutting progressively fewer

amounts of timber from the abrupt edge into the forest. A good model to follow is:

- Cut 75% of the trees in the first 1/3 of the area near the outer edge, 50% of the trees in the second 1/3 of the area, and 25% of the trees in the last 1/3 of the area.

As you proceed:

- Selectively cut trees that have less wildlife and timber value while leaving more of the mast- or nut-producing trees like oak and walnut standing.
- If all of the trees on the timber edge are mature oak, walnut, or other species you do not want to cut, then you should complete the edge feathering in a different area or plant shrubs along the edge.
- As you get further into the woods, the trees that you cut might get hung up in the other cut trees and won't hit the ground. This is fine — they will fall eventually, but even if they don't, by cutting the tree you have allowed sunlight in to stimulate shrub growth.
- Another method to consider is “hinge cutting.” This entails cutting the tree in a way that allows a portion of the bark to stay connected, permitting the tree to stay alive and leaf out even while it is lying on the ground. While this can provide edge cover that is instantly useful, it is usually not necessary and will only be worthwhile when you are dropping larger trees.



“When I bought my farm four years ago it had one covey of quail and a handful of pheasants.

Since then I have done a bunch of edge feathering, spraying, disking, native seedings and prescribed burning.

Then last year I found five coveys of quail and harvested over 30 roosters.”

— Dray Walter
Taylor County



edge maintenance

Very little needs to be done to maintain a gradual edge once it has been established. Edge feathering should be completed about every 10 years, when the edge of your woodland starts to look like an abrupt change from grasses to mature trees. However, if you live in an area such as Southeast Iowa that gets more rainfall, you may need to edge feather every five years.



for more information

Managing Private lands, includes contact information for wildlife and private lands biologists:

<http://www.iowadnr.com/wildlife/files/privatelands.html>

Attracting Iowa Wildlife A Guide for Providing Habitat on Private Lands, includes information about wildlife species, shrub plantings and timber management:

<http://www.iowadnr.com/wildlife/files/plhabitatguide.html>

State Nursery Catalog, includes descriptions of small native trees and shrubs. Also has information about tree planting, weed control and a list of other nurseries:

<http://www.iowadnr.com/forestry/catalog.html>

Edge feathering provides the right mix of cover required by loggerhead shrike (top left) and ruffed grouse in Northeast Iowa (lower left), and other wildlife species.

Quail (above) need escape cover, winter cover, food sources and water located within a relatively small area. Quail chicks need to be able to move around easily. Patches of thin, weedy vegetation interspersed with bare patches of ground provide the best habitat for young quail.

