

General Woodland Wildlife Habitat Improvement Techniques

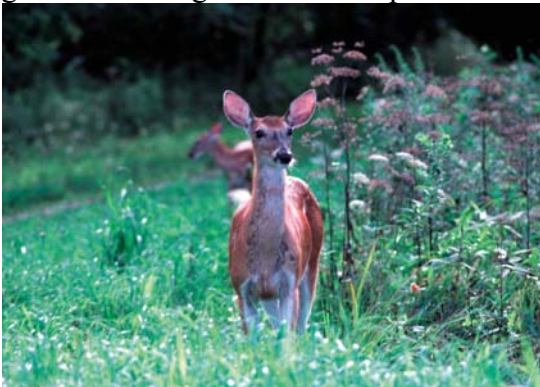
Most non-grazed Iowa woodlands and surrounding openings can be excellent wildlife habitat areas for a variety of birds and animals if there is a diversity of mixtures of over-story tree species and under-story vegetation. Whether or not you actively manage, the vegetative structure of your woodland will change over time. As this structure changes, your woodland will become more or less diverse and some species of birds and animals will benefit more than others. Consequently, you are basically left with two choices. If you want to optimize habitat development for the widest range of bird and animal species, you need to concentrate on maintaining as much vegetative diversity in your woodland as possible. If you want to maximize certain habitat improvement benefits for individual bird and animal species, you will need to target specific woodland management activities in specific areas to meet the special needs of those species.

More simply, wildlife populations fluctuate in response to available habitat. Managing habitat to provide the best and most food, cover, and water, is the most cost effective way to increase and sustain wildlife populations.

You can optimize general wildlife habitat diversity by keeping or by maintaining fully-stocked wooded areas with well-developed mid-story layers of woody vegetation for Neotropical migratory bird habitat. Woodland openings, especially along ridgetops, add wildlife “edge” for species of birds and animals needing those habitat requirements. Keeping large, mature trees for nut and acorn production and roosting, and thickets of heavy cover for ground nesting, hiding, and rearing young, improve habitat for deer, turkeys and squirrels.

Woodland wildlife habitat can be improved for different species by periodic brush cutting, understory burning, firewood cutting, selective tree thinning and tree harvesting. In addition, you can leave active den and nesting trees in the woodland as long as possible before cutting them for sawtimber or fuelwood.

The following practices will benefit deer and turkey specifically, as well as many other game and non-game wildlife species:



With active management your woodlands can be improved for a variety of wildlife species such as white tail deer and wild turkeys

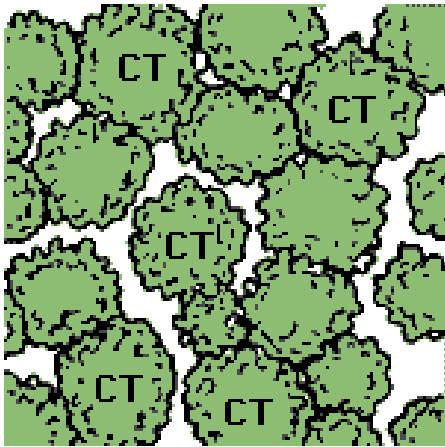
Grow Plenty of Nuts & Acorns: Seed produced by nut-bearing trees such as oaks and hickories are critical fall and winter food sources for many wildlife species. Acorns are the favored food of deer and turkeys, especially white oaks. Grow oaks and hickories as large as possible and retain them in the woodland as long as possible before harvesting them. At least 20 to 30 percent of a woodland should be kept growing mixtures of mast-producing trees. Shagbark hickories and red oaks begin to maximize seed production at 20” in diameter, while white oaks maximize seed production at around 26” in diameter. Black oaks increase seed production throughout their entire lifetime. Most oaks really don’t produce large quantities of acorns until they are 40 to 50 years old. In addition, most oaks don't produce large seed crops every year. Red oaks have large seed crops every 3-5 years, black oaks every 2-3 years, and white oaks every 4-10 years. Due to the variability associated with seed producing age and tree type, it is always desirable to favor a mixture of oak tree types.



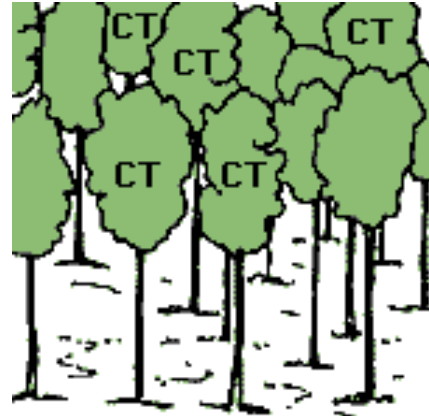
Hickory nuts (left) and red oak acorns (right) are excellent food sources for a multitude of wildlife species.

Keep Turkey Roosting Trees: Retain scattered large diameter trees on ridgetops and along lowland drainage banks for roosting trees for turkeys. Tree species really doesn’t make any difference.

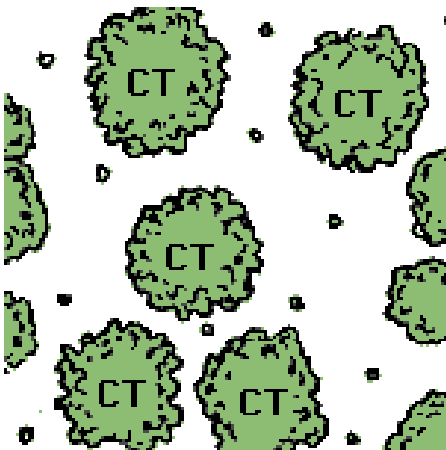
Thin Woodlands to Improve Food & Cover: Thin to increase tree crown size for nut and acorn production (“mast”) and to encourage woodland understory development. Periodic “releasing” of crowded oaks and hickory crop trees can improve mast-production 7-fold by causing tree crown expansion. You should always try to maintain 22 to 25 dominant and co-dominant oaks at least 14” in diameter per acre to maximize acorn production. Periodic thinning will also improve understory deer browse. The thinning residue (slash) plus increasing understory vegetation following thinning will greatly improve deer fawning and turkey nesting. To maximize thinning effectiveness, begin selecting and releasing crop trees when they are 4 to 6 inches in diameter and evaluate the woodland for additional thinning needs at 8 to 10 year intervals following each thinning.



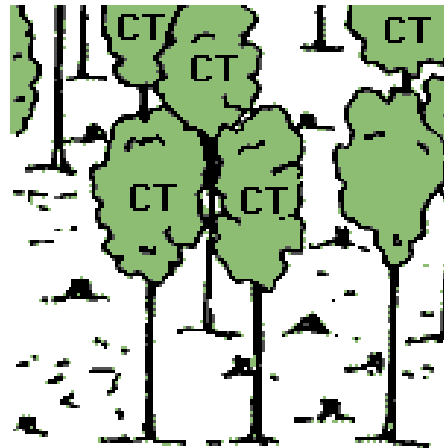
Aerial view of woodland before crop tree release treatment. CT denotes selected crop tree.



Side view of woodland before crop tree release treatment.



Aerial view of woodland after crop tree release treatment. CT denotes selected crop tree.



Side view of woodland after crop tree release treatment.

Provide Plenty of Den Trees: Retain active wildlife den trees in the woodland as long as possible. Any tree, dead or alive with a hole, cavity, or nest in it is used by wildlife. If you have a younger woodland with few cavity trees, you can make and hang nesting and den boxes.

Brushy Areas are Good: Maintain brushy areas next to wooded edges for nesting, fawning, and hiding cover. These areas can be kept brushy by periodically mowing or burning on 4 to 5 year cycles. Additional created openings of 1/2 to 5 acres in size, made long and narrow with irregular boundaries will improve wildlife dispersion throughout the management area. At least 10% of the habitat area should be comprised of these types of openings. The openings can be maintained by 3-5 year cycles of burning or mowing.

Maintain Food Plots:

Maintain or create wildlife food plots in existing open areas within and next to the wooded areas for additional food and cover. At least 5 to 10 percent of the area should be comprised of food plots. Food plots should be 2 to 5 acres in size, but they can be smaller as long as there is sufficient sunlight to grow the crop. The best food plots are long and narrow to maximize the “edge effect”. Food plots can be planted, or maintained as portions of larger existing grass fields by periodic light disking.

Planted Food Plots: There is no single food that is “best” for any species of wildlife. Variety is the key. In order to be a good food plot, the plot must produce food. Good food plots must be designed and planted properly and actively managed to provide the best results. Fertilization, liming, and weed control are all essential components of food plot management. Suggested foods to plant are alfalfa, localized grains, perennial ryegrass, ladino clover, white Dutch clover, red clover, and birdsfoot trefoil

Natural & Enhanced Food plots: Larger fields of brome grass and fescue can be greatly improved for wildlife habitat by light, periodic, strip disking. This periodic disking will stimulate annual plant diversity and increase seeds and insect populations that are used by quail and young turkeys. You can even broadcast things like Ladino clover into the disked areas to increase legume populations.

Protect Waterways: Maintain at least a 50 ft. wide corridor of trees on both sides of waterways and drainages to help control soil erosion and to provide cover travel corridors for wildlife.



Forested riparian buffers such as the one above help improve water quality, control soil erosion and provide habitat for wildlife.