

# Kip's Korner



## Habitat Management February 2008

Kip Adams, QDMA Director of Education and Outreach,  
Northern Region

Quality Deer Management (QDM) continues to increase in popularity across North America. As hunters develop a more complete understanding of QDM, the importance of habitat quality takes a larger role. Of QDM's four building blocks, herd management is often the first that hunters gravitate to, but habitat management quickly grabs the attention of many QDM practitioners and is often one of the most satisfying aspects of a deer management program. When asked for QDMA's perspective on habitat management, it is difficult to give an all-inclusive answer, but it is possible to provide a general overview of critical deer habitat components.

Quality habitat is important for bucks and does in all age classes. Does need nutritious forage to raise healthy fawns, bucks need it for large bodies and antlers, and both sexes require adequate cover to escape predation. Given the average deer eats 2,000 pounds of vegetation annually, it's easy to see a tremendous amount of forage is necessary to support even a low-density deer herd. Larger herds and herds managed to maximize body and antler growth and reproductive capacity require even more high-quality foods.

For this article, I'll separate habitat management into three general categories: forests, old fields, and food plots. We can easily separate these broad categories into smaller units, but for simplicity, I'll limit it to three. Forests include areas dominated by woody vegetation and include scrub and shrub habitats. Old fields include areas dominated by grasses, legumes, and forbs. These areas are in early successional stages and can include some small woody species. Food plots are areas in agricultural-type plantings. Natural vegetation management includes forests and old fields, and should be the focus of your habitat management efforts. Food plots should be used to supplement the natural vegetation.

## **Forests**

Forests dominate the landscape in much of the whitetail's range. These wooded habitats provide food and cover, and should include a diversity of stand types and age classes interspersed across the landscape. This diversity of stand structure helps provide year-round forage and cover, and is especially important at the geographic limits of the whitetail's range. For example, insufficient winter cover from spruce/fir/hemlock stands in northern New England can preclude deer herd growth even if adequate spring, summer and fall habitats exist. Young stands are important from a forage and cover perspective. Mature forests are important for thermal cover and mast production, but they only produce an average of 50-100 pounds of browse per acre. Early successional stands may produce 1,000-2,000 pounds of browse per acre, and they also provide the low ground cover necessary to protect fawns from predation and provide adults with secure bedding sites. For these reasons, a mix of age classes is important.

Proper forest management may be achieved by techniques ranging from timber harvesting to prescribed burning to quality vegetation management (QVM). QVM is a popular southern forestry technique that involves spraying an herbicide to control undesirable hardwood brush, conducting a controlled burn to remove dead vegetation, and fertilizing the forest to encourage new growth.

Research has demonstrated QVM can dramatically improve habitat quality for whitetails.

Structure within the forest is also important. Tops from felled trees and brush piles provide security for whitetails, nest and den locations for other animals, and they can also protect seedlings from being browsed. Open park-like understories may look clean but they offer little for deer and other wildlife species. If you can see 50-100 yards in the woods, or if the woods are easy to walk through, then the understory layer is too open and deer would benefit from additional low-lying structure.

## **Old Fields**

Old fields provide food and cover, and should represent a minimum of 1-5% of a property. Some areas in the Midwest and Plains states are dominated by old/agriculture fields, but many areas in the whitetail's range lack an adequate amount of this habitat type. Proper management of old fields ensures abundant food from legumes and forbs, and native warm-season grasses (NWSG) provide excellent escape, bedding, thermal and fawning cover. NWSG have been popular in the Midwest for many years and are being used at an increasing rate in the Northeast.

Old fields can be maintained by prescribed burning, disking, mowing, crushing with a roller chopper or bulldozer, fertilizing, applying herbicides, and/or a combination of these techniques. The preferred technique(s) will be dictated by your location. For example, prescribed burning is a valuable tool used throughout the Southeast but used infrequently in the Northeast due to liability and smoke management concerns. Dr. Craig Harper from the University of Tennessee will discuss managing old fields for improved food and cover in July at the QDMA National Convention.

## **Food Plots**

Food plots provide food, and species such as corn also provide excellent cover. Research has demonstrated measurable improvements in body weight and other physical parameters when 1% of an area is planted in high-quality food plots. I recommend planting 3-5% of an area to ensure abundant forage and guard against poor weather, insects or other losses. The goal for a food plot program should be to provide year-round nutrition. There are many planting options, but a good rule of thumb is to plant 60% of your food plot acreage in cool-season perennials (clover mixes),

20% in cool-season annuals (brassicas), and 20% in warm-season annuals (corn, soybeans, etc.).

You can alter these percentages as necessary based on your location. For example, Southern managers generally plant a little heavier percentage of warm-season annuals. If you run short on summer food, plant additional warm-season annuals. If you need more winter forage, plant more brassicas and/or corn.

Regardless of plant type, you should distribute food plots across the landscape. Plots typically range from < to 5 acres, and long irregularly-shaped plots maximize the amount of edge habitat. If you have cool-season plots larger than 5 acres, divide them into multiple plots and select plant species to maximize seasonal use by deer. Warm-season plots tend to be larger as it is common for deer to destroy small corn, soybean or cowpea plots before they become established. Agricultural fields, abandoned fields, log landings and logging roads can all be productive food plot sites. You may even choose to carve food plots into forested areas. Such work can be expensive and labor intensive, but exact location and design can be specified to have the plot double as a strategic hunting location. This can be especially important when trying to harvest mature bucks. Once you've chosen your sites, prepared and amended the soil, selected seed varieties and planted the plots, what do you do next? You PRAY for rain! You can do everything right and your plots can fail if they don't receive adequate moisture. This reiterates the importance of focusing on natural vegetation management and using food plots to supplement - not replace - that habitat work.

Habitat management on private lands is accelerating at an incredible pace. QDMA members own and manage over 13 million acres in the U.S. Combine that with land being managed by other conservation organization members and the acreage is astounding. Proper habitat management for deer provides year-round cover from hardwood and softwood tree species, old fields and NWSG. Proper habitat management also provides year-round food from hard and soft mast, forbs, vines and shrubs, hardwood and softwood browse, and food plots. A diversity of species, stand types and age classes is necessary to provide this array of forages and cover. The carrot for many QDMA members - habitat work is better deer hunting, but good deer habitat benefits many other species as well.

Kip's Korner is written by Kip Adams, a certified wildlife biologist and Director of Education and Outreach for the Northern Region for the Quality Deer Management Association (QDMA). The QDMA is a non-profit wildlife conservation organization dedicated to promoting sustainable, high-quality, white-tailed deer populations, wildlife habitats and ethical hunting experiences through education, research, and management in partnership with hunters, landowners, natural resource professionals, and the public. The QDMA can be reached at 1-800-209-DEER or [www.QDMA.com](http://www.QDMA.com).



**more information on QWTV on The Outdoor Channel!**

[Click Here](#) for



In an effort to better communicate with QDMA Supporters the QDMA will be sending email alerts, special member only offers, updates and even management tips. We respect our members/supporters and under no circumstances will your email address ever be shared or sold. If you have suggestions or ideas that you would like to see included in these email transmissions [Click Here](#) and reply with Suggestion in the subject line. You do have the option to opt out of our email communication at any time. If you wish to have your email address removed from our database [Click Here](#) and respond with Remove in the subject line.

**Thank you for supporting the QDMA!**

## Quality Deer Management Association

PO Box 160  
170 Whitetail Way  
Bogart GA 30622  
Phone: 800-209-3337  
[www.qdma.com](http://www.qdma.com)  
[kadams@qdma.com](mailto:kadams@qdma.com)