11. WILDLIFE FOOD PLOT MANAGEMENT

Forest openings may be created artificially through tree harvest or they may occur naturally due to insect damage, tree disease and mortality, drought, flooding, tree fall, lightning strikes, ice storms, wind, and wild fires. Regardless, openings result in rapid and extensive growth of herbaceous vegetation from increased exposure to sunlight on the forest floor. This growth typically includes sources of nutritious food for some wildlife such as grasses, forbs (herbaceous plants), raspberries, and blackberries. Thus openings enhance the overall habitat value of the existing landscape by providing areas for foraging, resting, courtship displays, nesting, and brood rearing. For some species of wildlife, the presence of these forest openings is one of the most important factors in their abundance.

Herbaceous forest openings generally fall into two categories: (1) naturally regenerating openings with mixed forest grasses and forbs, raspberries, and ferns, and (2) cultivated food plots. Natural openings tend to be temporary in nature and over time they will develop into mature forest. These habitats require regular attention and management over time, so you should be careful not to create food plots that are too large for reasonable future maintenance and management. Keep in mind, however, that food plots over 1 acre in size are not eligible for UVA management plans in Vermont.

Openings as small as a 1/4 acre provide benefits to a variety of wildlife, including white-tailed deer, wild turkey, cottontail rabbit, black bears, ruffed grouse, woodcock, songbirds, owls, and some reptiles and amphibians. Larger blocks of small shrub and herbaceous habitat (e.g., 2 to 5 acres) are more effective in providing value to some species of wildlife, but you should also provide ample amounts of *edge habitat*, or transition zones between openings and forest, to maintain protective cover for larger species.

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MANAGEMENT GUIDELINES

Generally speaking, food plots should be long and irregularly shaped, and it's best to distribute them throughout your property rather than concentrating them in one area (this assumes you have sufficient space for multiple food plots). The best food plots are planted in long strips adjacent to good escape cover such as hedgerows or on the edge of forest cover. Remember to maintain adequate buffers from waterways and wetlands when tilling soil to create food plots (a minimum 100-foot buffer is recommended).

By using both annual and perennial crops you will provide a food "buffet" for many wildlife species during all seasons and enhance the natural vegetation that is already present.

As a rule of thumb, 5 percent of your property could be planted to food plots, of which 40 percent should be annuals and 60 percent should be perennials. Ideally, food plots should be at least 800 square feet and should receive approximately 4 hours of sunlight a day.

Cultivated food plots are not recommended in the woods and should be restricted to existing field edges where introduction of non-invasive, nonnative plants will not pose a hazard to forest biodiversity. Interior forest food plots should allow for natural establishment only of native forbs, berries, shrubs, and trees. You can cut these plants back periodically to maintain food value over time. Start with existing openings, such as log landings, logging roads, field edges, and old fields to reduce the time and effort required for maintenance. One of the most important first steps in establishing a food plot is to test the soil on the site you are interested in managing. Sampling and testing of the soil can help to determine what needs to be done to ensure good growth of your plantings. "Field Crop" soil test kits are readily available from University of Vermont Extension Offices that will provide you with information on measurements such as pH, organic matter, phosphorus, and potassium.

Soil pH, usually between 6 and 7, is a key factor in developing an effective food plot. If a soil test reveals that the pH is low, lime or other similar products should be gradually added to the soil, without applying too much in any given year to avoid excess runoff into streams.

PLANT SELECTION

Plant a variety of crops that target the particular species you are trying to promote. Annual crops such as corn, wheat, and rye provide a high yield in a short period of time. Wheat provides forage for grazing wildlife during the winter months and produces a beneficial seed head that is highly favored by songbirds. Annual crops left to go fallow also create good nesting habitat for birds, and waterfowl. Perennial crops such as alfalfa, chicory, and clover will re-seed, and spread, providing high-quality forage for a number of years if properly maintained. By using both annual and perennial crops you will provide a food "buffet" for many wildlife species during all seasons, and enhance the natural vegetation that is already present.

Figure 11.1
Tools used to spread seeds

PLANTING

Be sure to purchase a seed that exclusively targets wildlife rather than general agricultural seeds because most wildlife are able to tolerate higher protein levels then domesticated animals, and higher protein is the ultimate goal for planting food plots.

Spreading of the seed and fertilizer is typically accomplished using a cyclone spreader, drop-seeder, or grain drill. A single person can spread seed and fertilizer with a hand-crank spreader. Once the seed and fertilizer are spread, the mixture needs to be lightly disked or dragged into the soil. This can be done by using a shallow disk harrow behind a tractor, or by dragging a piece of chain-link fence or tree bows behind a tractor or ATV. With optimal growing conditions, you should expect to see plant growth and wildlife activity almost immediately. Consider using an exclusion cage, a wire cage that protect the plants from grazing wildlife, to serve as a gauge to see how much wildlife is using the plot and then determine how much maintenance is needed.

MAINTENANCE

Management of these cultivated food plots doesn't end once the seed has been planted. Many factors contribute to the prolonged success of both perennial and annual crops. For perennials, once the food plot has begun to establish and growth is well on its way, you should plan on regular high mowing two to three times during the summer months. Mowing above the lowest growth node on plants such as clover helps to keep the plants young and tender as well as provide the most protein out of your plant. Periodic mowing also works to keep competing weeds to a minimal reducing the need for herbicides.

Overall, establishing a wildlife food plot can be an enjoyable and rewarding experience. By using all available information, you will be able to create a successful and sustainable food source that wildlife will use for many years to come.

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