

Wildlife Habitat in Filter Strips (Supplement to Job Sheet 393)

USDA – NATURAL RESOURCES CONSERVATION SERVICE – NORTH CAROLINA



Photo courtesy of Ken Taylor, North Carolina Wildlife Resources Commission.



Photo courtesy of USDA Natural Resources Conservation Service.

Filter strips can be developed to create valuable cover and food resources for wildlife that inhabit grassy and brushy habitats, such as cottontail rabbits, yellow-breasted chat, and black rat snakes. Well-managed filter strips may also provide foraging opportunities for typical forest wildlife, such as striped skunks, great horned owls, and whitetail deer. This job sheet will help you design a filter strip that integrates wildlife habitat needs into this practice.

The importance of properly managed filter strips to wildlife include:

- ◆ An increase in the availability of food resources such as seeds and insect prey (important for many wildlife species, e.g., during the first few weeks of life, the diet of species like quail and turkey chicks is composed almost entirely of insects).
- ◆ Links between forests and field interiors, expanding the amount of useable wildlife habitat.
- ◆ Critical overwinter and nesting cover for a variety of grassland wildlife.

Filter Strip Establishment

- ◆ For wildlife habitat purposes, the ideal filter strip will appear unkempt and be composed of a variety of plant species.
- ◆ A filter strip managed for wildlife will attain a height of 2-4 feet. It will be comprised of planted species, for example, switchgrass and shrub lespedeza, as well as volunteer vegetation such as switchcane, goldenrod, and broomsedge (See attached table of Wildlife Filter Strip Plantings).
- ◆ The Southeast Quail Study Group recommends the following for replacing tall fescue with wildlife plantings:

Step 1: Mow, graze, or preferably burn the fescue in late winter for a spring treatment or late summer for a fall treatment.

Step 2: Allow the fescue to green-up to a height of at least six inches.

Step 3: Spray the field with one or two quarts per acre of glyphosate (Roundup™) or 3 WSP (water soluble packets) of Plateau™, 6-7 ounces of surfactant, and ten gallons of water per acre. Always check the product label to insure that the mixture used is adequate for the site being treated. In spring treatments wait two weeks after the initial spraying. If there is still green fescue, spot spray the problem areas. For fall treatments, spray during fall green-up then wait until the next spring and spot spray if needed.

Step 4: After a good kill is achieved, establish wildlife-friendly vegetation.

To get the most wildlife benefits out of a filter strip, consider the following management practices:

- ◆ The filter strip width will meet the minimum requirements of the NRCS Conservation Practice Standard. For wildlife purposes, filter strip width is recommended to be a minimum of 20 feet. Where a filter strip for wildlife will be used as an equipment turn-row, the filter strip width should be sufficient to allow a minimum of 20 feet of undisturbed habitat.
- ◆ Periodic disturbance of filter strips for wildlife habitat is necessary to stimulate growth of desirable vegetation and to eliminate encroachment of woody vegetation.
- ◆ As a rule of thumb, disturbance should occur within a filter strip every 3-5 years. However, if visual observation suggests more or less frequent disturbance activity is required, then adapt the schedule accordingly.
- ◆ Although disturbance is necessary, not more than 50% of all filter strip habitat should be disturbed in any one year. In addition, never disturb all of the filter strip habitat serving a single field in the same year.
- ◆ Prescribed burning and light disking are the preferred methods, while mowing is least preferred.
- ◆ In order for a filter strip to act as both a filter and as wildlife habitat, consider establishing a two-zone filter strip. The zone closest to cropland should be comprised of vegetation sufficient for removing sediment, organic matter, and other potential pollutants from runoff. The second zone can be managed for native vegetation or planted to recommended mixtures (see Suggested Filter Strip Plantings attached).

Filter Strip Management for Wildlife		
METHOD	TIMING	NOTES
Prescribed Burning	1 February through 15 April	burn prior to spring green-up; insure firebreaks are properly installed to contain fire
Light disking	1 February through 1 April	use disking to chop woody vegetation and lightly scarify the soil surface; leave a minimum of 30% residue
Weed Sweep [™] herbicide appl.	15 April through 15 June	select herbicide to control target species and follow label directions for environmental concerns
Spot spray herbicide	15 April through 15 June	select herbicide to control target species and follow label directions for environmental concerns
Mowing	15 September through 1 April	mowing should be done after August to avoid nests of quail, rabbits, turkeys and other ground nesting wildlife; mow to maintain a minimum of 12 inches of cover with 18 inches preferred

SUGGESTED FILTER STRIP PLANTINGS BENEFICIAL TO WILDLIFE

PLANTING DATE	MIXTURE/RATE
1) 15 September through 1 November.....	Small grain planting allowed to develop into native vegetation
2) 15 September through 1 November.....	Small grain/switchgrass mix (40 lbs. wheat or rye, 5 lbs. switchgrass)
3) Fall/Spring.....	Small grain planting overseeded with Kobe or Korean lespedeza
4) January through-April.....	10 lbs. Kobe, 5 lbs. partridge pea, 40 lbs. wheat or rye, 4 lbs. little bluestem
5) May through August.....	5 lbs. browntop millet, 5 lbs. Kobe, 3 lbs. 'Atlantic' Coastal panic grass, 3 lbs. switchgrass, 3 lbs. little bluestem
6) September through December.....	40 lbs. wheat or rye, 5 lbs. switchgrass, 2 lbs. Ladino clover
7) 1 April through 15 June.....	Switchgrass - 7 lbs. drilled, 9 lbs. broadcast
8) 1 April through 15 June.....	'Atlantic' Coastal panic grass - 10 lbs. drilled or broadcast
9) 1 April through 15 June.....	Eastern gamma grass - 8 lbs. drilled only
10) May.....	5 lbs. switchgrass, 4 lbs. Atlantic' Coastal panic grass, 3 lbs. Kobe/Korean Lespedeza
11) Late February through mid-April.....	3 lbs. reseeding soybeans, 5 lbs. Kobe/Korean lespedeza, 5 lbs. red clover, 5 lbs. partridge pea
12) September through October.....	18 lbs. Shilo orchardgrass, 40 lbs. wheat or rye, 3 lbs. Ladino clover, 5 lbs. crimson clover
13) Sept.-Nov.....	10 lbs. Kobe lesp., 40 lbs. wheat/rye/oats, 4 lbs. little bluestem, 3 lbs. innoc. white clover, 3 lbs. unhulled shrub lespedeza, 2 lbs. orchard grass, 5 lbs. switchgrass
14) April-June.....	15 lbs. browntop millet, 15 lbs. sudex, 5 lbs. Kobe lesp., 3 lbs. hulled shrub lesp., 3 lbs. 'Atlantic' coastal panic grass, 3 lbs. switchgrass, 3 lbs. Eastern gamma grass, indian grass, or big bluestem

Additional information is available from your local NRCS office, North Carolina Cooperative Extension Service, North Carolina Wildlife Resources Commission, and various conservation organizations.

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