

Herbaceous Seeding for Wildlife

Grassy fields and small clearings, where grasses and clover predominate are habitat types often lacking in the extensive forests of the unorganized townships. These areas provide nutritious forage for, deer, bear, grouse and many other wildlife species, often at times when high quality feed is lacking. Woodcock also use open fields for breeding and roosting, a vital habitat component. The establishment of grasses in forest clearings will also slow forest succession on the site and serve to maintain this open habitat for a longer time. Herbaceous seeding is also used to reduce soil loss on erodable sites.

Winter roads and log landings disturbed by forest operations are good sites for herbaceous seeding, especially those adjacent to deer, wintering areas or, stream crossings. Wunz (1987) gives a good review of various techniques used for creating herbaceous clearings. He also evaluates costs, recommends seeding mixes and discusses how to select sites. Some of his sites remained in herbaceous vegetation for fourteen years.

Herbaceous Seeding Objective

Establish at least one acre of herbaceous openings per one square mile of land base.

Herbaceous seeding procedure

- 1) Specify minimum one acre log landings at locations suitable for herbaceous seeding in all timber harvest contracts.
- 2) Conduct seeding operations annually on winter roads and log landings immediately following timber harvest operations.
- 3) Preferred seeding dates are from May 1 through August 10 (as early as possible), although seed mixes with winter rye may be used through September 10 and a "dormant" seeding may be done through October 10 if "Aroostook" winter rye is used.
- 4) Prepare sites by grading and tracking with heavy equipment to expose mineral soil and remove logging debris. (Note: Tracking refers to running over, the entire area with lag tracked equipment such as a bulldozer, to create a corrugated pattern in the soil into which the seed will fall, thereby rendering dragging and mulching unnecessary.) Dragging with an ATV can be effective if ground conditions limit heavy equipment access.
- 5) If native vegetation has invaded the site prior to seeding, spray with a broad spectrum herbicide such as a glyphosate formulation to eliminate competition and provide a dead mulch.
- 6) Seed with a cyclone type seeder (hand or ATV type) using the recommended mixes below. Legumes should be inoculated prior to seeding..
- 7) Test the soil to determine pH and fertility. Apply lime and fertilizer using the standard rates below.
- 8) Drag the site to cover seed only if it was not tracked or mulched.
- 9) Apply straw or hay mulch at 40 to 80 bales per acre only on very dry or erodable sites.

Recommended Herbaceous Seeding Mixes

Mix #1: This is the preferred mix for most situations since it will produce a good sod which is resistant to invasion by woody vegetation on a variety of soils under various light conditions. These grasses will provide green forage in early spring and late fall.

Quantities are pounds per acre: Asterisks are legumes which should be inoculated:

Orchard grass-	6
Kentucky bluegrass	6
TallFescue	6
Ladino clover *	1
Birdsfoot trefoil *	10
Annual or winter rye	10

(This is the famous "Huber Mix" and can be ordered by name through Blue Seal, Bangor (947-6326))

Mix #2: This is the erosion control mix supplemented to improve its wildlife value. Caution! This mix contains creeping red fescue, which has minimal wildlife value and can dominate other grasses in sunny locations. It will provide good results in most situations; is easy to obtain and can be kept on hand for quick spot applications.

Conservation mix or Roadside mix from Agway 40-60

Ladino clover * 1
Birdsfoot trefoil* 10
Annual or winter rye 10

Mix #3: This is recommended for sites where no fertilizer can or will be used.

Deertongue 10
Birdsfoot trefoil * 10

Mix #4: Use this mix in shady areas only as this combination will dominate other grasses in sunny locations.

Creeping red fescue 20
Birdsfoot trefoil * 10

Mix #5: This mix can be used in rough areas such as hummocks stump piles or rocky or erosion prone sites on the edges of log landings seeded to other species, but use it sparingly. Five pounds on the edge of a one acre clearing is sufficient. Use equal amounts of the following species: Crownvetch * Flatpea *

Lime and Fertilizer Recommendations:

Use at the rate determined by a soil test or apply at the following standard rates:

1) Lime
<5.5 pH 3 tons/acre
5.6 to 6.0 pH 2
6.1 to 6.5pH 1

Most economical method is bulk spread by contractor.

2) Fertilizer:

Average sites 5-10-10 400 to 900 lbs/acre Poor sites 16-16-16 400 to 800 lbs/acre

Maintenance of Openings

No maintenance should be required if the initial site preparation is thorough. However, liming at 1 ton per acre every 5 to 7 years will help keep the site productive. Also, 350 to 500 lbs per acre of fertilizer applied 2 to 3 years after establishment and then every 5 to 10 years thereafter will help as well. Mow every 1 to 5 years to prevent invasion by woody plants if desired. Openings may be completely rejuvenated by herbiciding with a glyphosate formulation and then reseeding, liming and fertilizing.

Recommended Equipment:

Cyclone seeder
pH test kit
Drag
Herbicide sprayer
Fertilizer spreader
"Ferti-blast" gun (see Elliott, p.33)

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