

PLANT & PEST ADVISORY

FIELD CROPS/LIVESTOCK EDITION \$1.50

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Prepare Now for Late Summer Pasture and Hay Planting

Daniel Kluchinski, Mercer County Agricultural Agent

Of any time of year, late summer is one of the best times to plant pasture and hay crops. Cooler weather and reliable rainfall generally occurs during this time of year, providing advantageous conditions for germinating seeds and young seedlings. In addition, annual weed pressure is not as great a problem compared to spring plantings.

For successful establishment of forage and hay plantings, plan and act now to get fields prepared. The most important factors to consider are soil pH and fertility, weed control, variety selection, and planting date. Following these steps will help increase the likelihood of a successful fall planting of forage and hay crops:

1. Test your soil. Take soil samples for pH and fertility analysis. Soil sampling should be done first to allow adequate time for the samples to be analyzed and the results and recommendations returned to you. Applications of limestone and fertilizer, if required, should be applied as recommended prior to planting to help improve soil conditions. Don't forget that most hay and forage species prefer pH range of 6.0 to 6.5, while alfalfa requires a pH range of 6.5 to 7.0 for optimum growth. If large quantities of nutrients are required, they are best incorporated prior to planting to increase fertility and availability in the root zone of the crop.

2. Control weeds. When necessary, weeds and in particular perennial weeds should be controlled prior to seeding. An investment in weed control at this time will help to reduce future weed problems. Use of non-residual herbicides such as Roundup (glyphosate) will eliminate herbicide/crop rotation restrictions. Herbicide selection will depend on the plant species to be planted. Check in the 1998 Pest Management Recommendations for Field Crops guide or contact your county agricultural agent for recommendations.

3. Select appropriate crops and varieties. Choose hay and forage species and varieties that best suit your needs and the field conditions where they will be planted. These factors include soil pH and drainage. For example, alfalfa should be planted on well drained soils with a high pH. Timothy, reed canarygrass, alsike and Ladino clover are better suited for wet areas. Choose varieties that are recommended for New Jersey by Rutgers Cooperative Extension. Consult your Field Crop

SEE PLANTING ON PAGE 3

Field Crops Weekly Pest Summary - 7/23

Field Crops Working Group

Alfalfa

Potato leafhoppers continue to plague fields across the state, however, overall numbers seem to be declining. Still, Matt Myers, RCD/USDA reports that he was sweeping as many as 30 leafhoppers per sweep in fields in the center of the state. The typical pattern has been that leafhopper numbers begin to decline about this time for fields in the south.

Moisture stress is critical in some fields across the state. Farmers should be aware that drought-induced boron deficiency can occur, especially on lighter soils. This yellowing may be confused with leafhopper damage.

Corn

Corn rootworm numbers seem to be variable across the state. Some fields in the south have already seen peak numbers. So far, no field has been reported to be over threshold.

Corn also has been under moisture stress. Some fields show uneven growth, but otherwise corn generally looks good.

An unusual weed was found in a field near Florence in Burlington County. Brad Majek, Rutgers Weed Specialist, identified the weed as umbrellaweed, a member of the 4 o'clock weed family. It grows tall and erect, with smooth stems, is a perennial and should respond to standard herbicide treatment for perennial weeds in corn.

Soybeans

Fields generally look good across the state. So far there have been no reports of spider mites. Matt Myers reports of one field that was stunted after an herbicide treatment. □

Established Hay Fields: Production Costs and Returns

Jeremy Singer, Ph.D., Field and Forage Crops

In my last article, I highlighted some of the initial findings from a grass hay demonstration we are conducting this summer at the Snyder Research Farm. I presented return to nitrogen management for the 3 nitrogen levels we are evaluating in timothy and orchardgrass. Now, let us examine total production costs for established hay fields.

Again, costs are calculated using the Pennsylvania 1998 machinery custom rate guide which includes ownership, labor, fuel, and repair and maintenance costs. Because costs are calculated for established fields, seed and other costs are not included. If you know the variable costs (seed, soil testing, fertilizer, and herbicides) incurred for establishment, you can include them for a more accurate figure. I will include the machinery costs associated with seedbed preparation and planting for those of you that want to determine establishment as well as production costs.

Costs:

Plowing, Moldboard (stubble) – \$11.70/acre

Plowing, Chisel - \$11.40/acre

Plowing, Disk – \$11.30/acre

Disking, Tandem, with harrow or cultipacker - \$11.90/acre

Harrowing - \$9.20/acre

Seeding Alfalfa, clover, grasses - \$12.00/acre

Mowing/conditioning - \$10.60/acre

Raking - \$6.20/acre

Tedding - \$6.00/acre

Baling (including twine) - \$0.37/bale (approximately 50 lb. bale)

Round bale \$6.20/bale

Spreading bulk fertilizer (dry) - \$5.60/acre

To calculate production costs, simply add up the costs for the different operations involved in making hay. Mowing/conditioning, tedding, raking, and spreading dry fertilizer totals \$28.40. Using the yield figure of 1.28 tons/acre from second cut orchardgrass (assuming 10% moisture content) in the 50 lb. nitrogen treatment from the grass hay demonstration at the Snyder Farm, and assuming bales weigh approximately 50 lb. each, baling costs totaled \$18.94 per acre. If bulk ammonium nitrate fertilizer costs \$215/ton, putting on 50 lb. of actual nitrogen costs \$13.67. Assuming grass hay can be sold for \$120/ton, which is what hay producers are receiving according to the [New Jersey Farm Facts](#) publication put out by the New Jersey Agricultural Statistics Service, orchardgrass returns \$93 per acre.

If we consider returns for the 0 nitrogen treatment, we can subtract the costs of fertilizer and bulk fertilizer spreading, however, our second cut yield in that treatment was only 0.46 tons per acre (assuming 10% moisture). At \$120 per ton, our return would be \$26 per acre.

These calculations do not take storage costs into account. The purpose of this exercise is not to provide an absolute cost and return figure, but rather, to provide a simple means to estimate what it costs you to produce hay. Using your own yield numbers and hay prices will generate a more accurate estimate. □

Two Grant Programs For Northeast Producers

Applications are now available for the Northeast Region Sustainable Agriculture Research and Education (SARE) Program's 1999 farmer grants. Northeast SARE now offers two kinds of grants to producer-initiated and managed projects that will advance knowledge about alternative production and marketing practices.

"These grants provide a wonderful opportunity for farmers interested in evaluating new ideas," says Northeast SARE Program Coordinator Fred Magdoff. "Many farmers and growers have had an idea but didn't have the time or the resources to fully test it. Here's a program which helps farmers to try something new that may end up significantly helping their farms."

Through the seven-year old Farmer/Grower Grant Program, SARE helps producers conduct farm-based experiments to answer their own production and marketing questions. Farmer/Grower Grant proposals may address any food, non-food or forest crop production or marketing issue. Project activities may include small research trials, educational activities and demonstrations.

Through its two-year old SEED (Special Evaluation, Education and Demonstration) initiative, Northeast SARE will provide grants to producers willing to farm-test selected, alternative practices. Previous SARE-supported research has shown that these practices improve farm profit-ability, reduce pesticide use, protect soil, and/or enhance quality of life.

The goal of both programs is to develop and refine systems and practices that promote stewardship of natural resources, prevent agricultural pollution and improve farm profitability.

Northeast SARE will award up to \$150,000 through its producer grant programs. Grants will be awarded on a competitive basis to farmers in the 12-state region. In the past, grants have ranged from \$300 to about \$8,000.

Reviewers will give preference to proposals that clearly define local sustainable agriculture problems or issues and propose innovative solutions. Projects must be led by one or more producer, include a professional technical advisor (an extension agent, for example) and out-line a plan for sharing gained information with others in the community.

Any producer within the Northeast is eligible to apply. The Northeast region includes: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, West Virginia and Washington D.C.

All farmer grant applications must be postmarked by December 11, 1998. Decisions will be announced in March 1999. To obtain a grant application, visit our website at <http://www.uvm.edu/~nesare/>, call 802-656-0471 or write Northeast SARE at 10 Hills Building, University of Vermont, Burlington Vermont, 05405-0082. □

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Recommendation Guide or field crop agent for assistance with such selections.

3. Plant at the right time. Research conducted at Penn State evaluated the performance of forages planted after the recommended fall planting dates. Dry matter yield of alfalfa, red clover, birdsfoot trefoil, and reed canarygrass were reduced the following season when compared to the same species planted at the recommended planting dates. In New Jersey, planting should be done between mid-August and mid/late September. This means that now is the time to start planning for fall seedings of hay and forage crops.

Following these production recommendations can help to increase the success of establishing forage and hay crops on your farm. For additional information or assistance, contact your county agricultural agent. □

Deer Fencing Installation Seminars

The Rutgers Snyder Research & Extension Farm, in cooperation with the New Jersey Department of Agriculture and the Division of Fish, Game & Wildlife will be holding a seminar on August 4, 1998 at the Snyder Research & Extension Farm located in Pittstown, NJ and on August 5, 1998 at the Rutgers Agricultural Research & Extension Center located in Bridgeton, NJ.

The seminar will focus on selection and installation of high tensile woven wire fencing (HTWWF). Topics will include: Post and wire selection, post and wire installation (pounding vs. auguring), wire tensioning, etc. University as well as industry personnel will be on hand. HTWWF, when properly installed, can provide 25 plus years of near no-maintenance fencing.

HTWWF will be provided to New Jersey farmers who qualify for the fencing through the Department of Agriculture-Agriculture Economic Recovery and Development Initiative Deer Fencing Program. The trend is developing in the deer fencing industry, moving from high tensile electrified fence, to high tensile woven wire fence, due to better performance and low maintenance cost.

Please call the Snyder Research Farm at (909)730-9419 if you are interested in attending one of the two seminars. □

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