

**Washington County Ag Report
May 18, 2004**

Contributors are Sandy Buxton, Colleen Converse, Aaron Gabriel, Laura McDermott, and JJ Schell.

Quote

“Never teach a pig to sing; it wastes your time and annoys the pig. – Paul Dickson

Announcements

FIELD CROP SCOUTING, COME EARN A PESTICIDE RECERTIFICATION CREDIT BY SCOUTING WITH ME FOR ONE HOUR:

Tuesday, May 25 at 11 a.m., Dick Tooley, Toolite Farm, 459 Dekalb Rd., Granville.

Tuesday, June 1, at 11 a.m., Albert Marns Farm, Hendee Road, Kingbury

Saturday, June 12th, 9-4, Christmas Tree Growers Workshop, Sunny Crest Tree Farm in Kingsbury. NYS DEC Pesticide Credits will be available. Cost is \$30/person. Pre-Register by June 10th. Call 668-4881 to register.

Tues – Thursday, July 20-22, 2004 Dairy Tour to Pennsylvania – visiting progressive and profitable farms and New Holland factory in PA. Stay tuned for details!

September 25 – October 2, Haygrove High Tunnel Tour, will feature Haygroves home farm with 220 acres of strawberries, raspberries, cherries and lilies produced under tunnels. The latest developments in the Haygrove Company’s multi-bay tunnels, season extension, mechanization and spectral filter horticultural films will be showcased. Other stops include Hilliers Nursery, Intercrop Farms (leading salad / vegetable producer), Edward Vinson Plants Ltd. (plant breeder / small fruit grower) and Hurst Farm (direct marketer / tabletop strawberry producer). The price of \$799 is based on double occupancy (\$1199 single) and includes 7 nights lodging, coach transportation in England, and two dinners sponsored by Haygrove. Airfare is not included. Sign up deadline is July 15, 2004 and space is limited. To join call 866-HAYGROVE.

FYI:

The Regional Farm and Food Project is beginning a group mentoring program to begin meeting in may contact RFFP at 518/271-0744 if you are interested. Farms participating in our so far include: Chuck Phippen - seasonal, grass-based dairy farm in Hoosick, NY and Mary and Bob Pratt, sheep and goat farmers in Valley Falls, NY.

Midwest Commodity Prices - from the Wall Street Journal

Corn per bushel	\$2.84/bu	Cotton Seed Meal per ton	\$200/ton
Soybean per bushel	9.12/bu	Corn Gluten Feed	82/ton
Hominy Feed per ton	82/ton	Wheat, soft white	NA/bu
48% Soybean meal per ton	292/ton	Tallow per pound	.19/lb

These prices are provided only to show where the general market trends are moving and to help you determine appropriate ration ingredients. Local prices will vary due to shipping, processing, and discounts.

Weather Data – 2004 and average of 1999 - 2003

	Argyle		Easton		Whitehall		Jackson	
	2004	Average '99 – '03	2004	Average '99 – '03	2004	Average '99 – '03	2004	Last Year
Rain Past Week	1.04	1.10	1.25	1.08	1.80	1.21	1.27	1.35
So far this month	2.38	2.13	2.28	1.88	2.39	1.90	2.16	1.90
Total since April 1 st	4.28	3.90	5.17	3.98	4.52	4.99	5.93	3.96
GDD Base 41 Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	188	89	184	96	199	107	187	97
Since April 1 st	479	418	560	473	627	529	494	450
GDD 86/50 [hi temp + low temp]/2 - 50 High's >86°F are set to 86°F, low's <50°F are set to 50°F								
Past Week	128	60	125	68	136	70	123	64
Since April 1 st	339	295	399	352	416	358	370	342

Soil temperature in a planted corn field, loam soil, 5/18 @ 1 pm was 72⁰F.

DAIRY NOTES:

As the time to harvest first cutting quickly approaches (some of you might have already started) there are three things you need to remember when putting up good haylage: quality, timeliness, and safety. When it comes to quality it is necessary to monitor moisture content, particle length, as well as the effectiveness of the packing tractor. Monitoring moisture content is crucial because if you have mowed more hay than the chopper can harvest than the feed going into the silo is going to be dry, which doesn't pack as well allowing air to enter to disrupt the normal fermentation process. This is especially true if you have experimented with wide swathing when you mowed your hay. Particle length is crucial to rumen function and packing density. So if you are hiring your harvesting done the custom operator usually cares about how fast he or she can finish your farm and get on to his next client leaving you to deal with the aftermath of feeding your cows poorer quality feed. So to combat these issues work closely with your custom harvester or monitor your own forage harvester and make sure knives are sharp and shear bars are adjusted properly. Remember that once the feed is in your silo you lose the ability to change it. Packing is crucial in bunk silos and drive over piles to prevent the incorporation of oxygen into the feed to prevent spoilage. Problems arise when trucks and wagons unload faster than the packing tractor can keep up allowing for pockets of less dense silage. The benchmark for quality packing is a layer of no more than six inches of loose feed under the packing tires at any given time. If the layer is greater than six inches you can either slow down the rate at which you harvest or incorporate another packing tractor. Timeliness is also important because usually when the window for optimum forage quality opens it doesn't take long for conditions to change which affect the quality of feed entering the storage facility. Adjust harvesting schedules to meet your labor and equipment capabilities. For example if it takes you a week or more to harvest first cutting start early to ensure proper NDF levels in the feed when you finish. Finally in your quest to harvest higher quality forage than last year remember to do it safely because a small mishap can take you out of the equation for months even years hurting the overall sustainability of your business. Remember shields are there for your protections and maintain equipment at proper

intervals. Drowsiness leads to mistakes so if you need to take a break take it because your life is more valuable than a few loads of lower quality silage.

FARM BUSINESS MANAGEMENT: In thinking about some issues that are very key right now one thing comes to mind that is difficult to remember. In the rough and tumble world it is hard to imagine that the actions of the next 2 weeks to 1 month really could affect the profitability of the farm for the next year. For dairy people, it is not how we think about managing the farm but it is partially true. Poor feed and crops that don't get in can result in feeding the cows the wrong (or expensive) stuff for the next year. While ordinary management is needed all year long, remembering this short-term focus is important to the system

CROPS

Soil Quality: Fewer passes of tillage equipment can save time and improve crop yields by promoting good soil tilth. Today Don McEachron explained to me his system for planting corn. On the front of his planter he has a single tool bar with a row of spring-tooth harrow tines. He plants his corn right after the field is plowed without any secondary tillage (except for the toolbar in his planter). This system works well because the fields are plowed very well and he has gravel and loam soils. Perhaps it may not work as well on sticky clays, except under perfect conditions. Although, it may work dandy on fall plowed clay soils. Don also has seed firmers on his planter, which he has liked for the past 3 years.

Alfalfa: Begin harvesting pure alfalfa stands. Today alfalfa, according to the alfalfa stick, is at 37% neutral detergent fiber. If it takes a week to harvest alfalfa, then your average NDF will be about 40%; right on target. **Mow into a wide swath!** Wilt haylage as fast as possible so that the nutrients are not lost. The plant will continue to burn up sugars until it is dried to about 40% moisture, or until it is fermented. Tom Kilcer has been working on this technique and has numbers to show that it improves forage quality. Especially since we are getting showers every couple of days, we need to dry haylage fast and chop the same day as mowing if possible. **The alfalfa weevil is active.** The pictures below show damage by the larvae, and the stages of development – young larvae, large larvae, pupa, and adult. The adult is about 3/16" long. I found small and large larvae, as well as adults. Be sure to check alfalfa regrowth for feeding by larvae. Right now, damage is minimal. To determine severity, pick 50 stems from throughout the field and determine the percent of stem tops that have feeding damage. If >50% have damage, then harvest early.



Field Corn: Corn is up. I have only seen one plant cut by **black cutworms (BC)**. There has been a large BC population in the Midwest. The moths are carried here by storms. So, we need to monitor our fields until the plants are 6 inches tall. BC are most common in the weedy areas of fields. If 5% of corn seedlings are cut, then a treatment is justified. Usually only a spot treatment is needed – the affected area plus a 20ft border area. The pictures show BC leaf feeding and a cut plant. The worms are active at night. They must be killed when they are small. Insecticides do not kill the large worms.



Grasses: On May 11, pre-boot Orchardgrass was at 54% NDF, 32% ADF (acid detergent fiber), 18.2% protein, 64% TDN (total digestible nutrients), and 0.62 Mcal/lb (calories). This is a sample (five clumps) in just one field. So, it is just a rough guide. Grass harvest has begun this week, which is good, since we want grass between 50 and 55% NDF. Harvest orchardgrass first, then reed canarygrass, then brome, then timothy. **Mow into wide swaths** to quickly dry down the forage and chop the same day to avoid thunder showers. Topdress nitrogen (50 – 75 lbs) after first cutting.

Pasture: Pastures look good. Orchardgrass heads are popping up all over. Mow pastures so that regrowth is uniform and to remove seed heads. Wait no more than 6 days after grazing to clip pastures. Regrowth will be retarded if you wait too long. Clip to about 3 inches high. Cows do not like grazing with seed heads hitting their eyes – it is irritating and can promote pinkeye.

VEGETABLES

TIPS FOR SUCCESSFUL PEPPER AND TOMATO PRODUCTION WITH PLASTICULTURE by Dr. William J. Lamont Jr., Penn State wlamont@psu.edu

1. Use raised, plastic covered beds (4 to 6" high) in the field compared to flat beds to insure better warming of the soil and water and nutrient management in the field.
2. When laying plastic in the field, make sure soil is at least 85% of water-holding capacity
3. Wait at least 2 to 3 days after laying plastic mulch in the field before transplanting pepper/tomato plants through the plastic to allow for increased soil temperatures

4. Consider use of labeled herbicide broadcast over the field prior to raising beds and laying plastic mulch if field you are using to plant tomato/pepper has a history of extremely high annual weed pressure or populations.
5. Use actively growing, insect-free pepper transplants that are between 6 and 10 weeks old from seeding for peppers and 5 to 7 weeks old for tomatoes.
6. After transplanting pepper/tomato plants through plastic mulch, monitor soil moisture level underneath the plastic mulch with a tensiometer and maintain moisture level by use of drip irrigation system.
7. Monitor tomato/pepper plants for aphid and whitefly populations since they can rapidly reproduce and vector viruses to young pepper/tomato transplants and reduce total marketable fruit yield.
8. Remove row cover or mulch from low tunnel when flowers appear on the crown set of pepper/tomato plants.
9. Fertigate with low levels of nitrogen (5 to 7 lbs/A) throughout the growing season.
10. Apply one pound per acre Boron pre-bloom stage either through the drip irrigation system or as a tank-mix with fungicide spray.
11. Reduce water application to pepper/tomato crop within 2 weeks of the bulk harvest of fruit in the field to improve fruit quality.

Smart Marketing Series: Shortcuts to Measuring Crop Profitability: Are They Misleading?

By David Conner Cornell University (edited)

Knowing whether a crop is profitable is a crucial piece of information. Yet for diversified vegetable farms measuring this can be a daunting task. Many organic farmers in the Northeast use a rule of thumb of \$30 per pick-pack hour (every labor hour spent harvesting and packing produce should result in at least \$30 in sales revenue). Data collected over 2 seasons on 7 farms casts doubt on the usefulness of this rule. This doubt is based on two main arguments: (1) \$30/hour may not cover the total cost of production, and (2) a key underlying assumption of this rule that all production costs associated with raising a crop (excluding harvest and packing) are roughly equal for all crops is violated. The results of these analyses should provide a caution against relying too much on this shortcut measure of crop profitability. This entire article can be found at http://hortmgt.aem.cornell.edu/smart_marketing/ (May 2004) or contact the extension office.

Hardening and Holding Transplants: Don't harden off or hold transplants at too low a temperature. Low temperatures can cause detrimental effects to the plants such as stunting, catfacing in tomatoes and buttoning of broccoli and cauliflower. When hardening and holding transplants, the recommended minimum temperature for cole crops is 55°F and for vine crops, tomatoes, eggplants and peppers is 60°F. (LI Fruit and Vegetable Update)

Cucurbits: Cucumber beetles have been spotted in the northern end of the county so make sure to begin scouting. They usually appear at the edges of the field first. Young plants with less than 5 leaves are most susceptible and should be scouted at least twice a week.

Herbicide: Assail Insecticide Receives NY Registration: Jeff Heuther, of Cerexagri, has informed us Assail insecticide has just received NY registration. The active ingredient,

acetamiprid, is one of the neonicotinoids (group includes Admire and Provado). There are two Assail products: a 70WP for use on pome fruit, leafy vegetables, cole crops and fruiting vegetables (such as tomatoes) for control of aphids, whiteflies and Colorado potato beetle (potato uses are not yet approved); and the 70WSP product labeled for grapes to control leafhoppers and aphids. (LI Fruit and Veg Update)

Greenhouse: Finally some nice warm weather on a weekend. Unfortunately managing these radical changes in temperature can be a real challenge, especially maintaining a watering schedule. Pest problems also tend to explode with the onset of warm temps. Aphids specifically have been flourishing. I realize that when you have customers in the house you cannot easily spray, but at least encourage help to remove infested plants from sales area. Set up a “sick bay” that is taped off and then you might be able to spray that limited area. Aphids are not good for business.

Landscape: We have been receiving calls about lots of worms in trees. Most of these appear to be either **spring** or **fall cankerworms**, which are common native pests of deciduous forest, shade and orchard trees. These insects periodically cause serious defoliation in the Northeast and range over most of the United States and southern Canada. There is a close resemblance between the two species in all stages. The female moths are wingless; the caterpillars are often called inchworms, measuring worms or loopers. There is only one generation a year. The caterpillars of both species appear on trees in early spring. They destroy the young leaves and buds of a wide range of common deciduous trees, but prefer elm and apple. By the time the larvae finish feeding, only the major veins and midribs of the older leaves remain. Trees may be completely defoliated. If this happens for 2 or 3 years in succession, trees may die or be seriously weakened. This is an important leaf-feeding pest in areas where Dutch elm disease is present, because defoliation renders an elm very susceptible to attack by the bark beetles that spread the fungus causing the disease. Eggs stay on trees throughout the winter and hatch in the spring. Egg-hatch varies from late April to mid-May depending on weather conditions. It normally coincides with the opening of elm buds. **Newly hatched fall cankerworm larvae are less than 1/16 of an inch long, and spin silk threads that allow them to readily blow from tree to tree. They reach full-grown length in about four weeks. Larvae then drop to the ground to pupate in the soil before emerging as adults later in the season.** This habit of hanging from the trees so that they get in pedestrians' hair, on clothing etc., is why we are receiving so many calls.

Another insects of note include the **Eastern Tent caterpillar**, which can be controlled to a small degree by pruning out the web when most of the caterpillars are inside. Do not try to burn out the web. You will do more harm to the tree than the will the insect.

The other significant caterpillar in the region is the **Forest Tent caterpillar**. We had a large population of these pests last year, and as they exhibit kind of a "boom and bust" population dynamic, we will see more this year and possibly next, but then the population will crash. These insects overwinter as eggs. In late April to late May they hatch and migrate to the tops of trees to feed on developing leaves. The feeding continues until the caterpillars mature and then they congregate and spin a silken mat. They pupate and emerge as adult moths in late June. Despite the facts that there are many naturally occurring parasites that attack this insect, they occasionally exist at populations that threaten forest health. Treat young larvae with Bt subsp. *kurstaki* or call us for information on other chemical control options.

Wildlife: According to the U.S. Fish and Wildlife Service (USFWS, 2002), resident or non-migratory Canada geese may have multiplied from an estimated population of 15,000 domestic and semi-domestic birds that were released from commercial flocks that were once used as live decoys in the mid-30's to over one million resident birds in the Atlantic Flyway alone. Since 1991, the average resident population in the Atlantic Flyway has grown at a rate of 8 % per year. In the spring of 2001, the Mississippi Flyway had an estimated 1,371,000 resident geese and an annual population growth rate of 6 % a year.

The risk of nutrient contamination by waterfowl was reported to increase when: 1) birds are densely populated; 2) smaller bodies of water with limited dilution capacity were involved 3) prolonged residency occurred; 4) and when larger birds have populated the area. Waterfowl that stay and feed within a lake or wetland are not generally considered a major problem to water quality since no new nutrients are being added to the ecosystem and all the nutrients are being re-cycled in the feed consumed and by the waste excreted. However, a recent study of the impact of waterfowl droppings on the water quality of an urban lake in Wilmington, NC estimated that waterfowl contributed 27% of the total P in the lake. In this study, the waterfowl that contributed the most P (21%) were cormorants that feed in a nearby river and roosted in trees over lake at night. It was determined that all water fowl contributions accounted for 25 to 34% of the total phosphorus loads during a three-year study: however, 87% of the P was estimated to be recycled by all waterfowl (including ducks and coots) feeding on food sources originating from the same lake. Finally, a separate study determined the geese in fed on a nearby golf course and deposited an average of 0.61 grams of Total-P per goose per day into the lake during the evening roosting period. It also was of interest to note that the study reported phosphorus inputs from geese to be nearly 5 X higher than storm drain contributions from surrounding residential/commercial areas during the same time frames.

The two repellents on the market are MA (methyl anthranilate) sold as ReJexit or Goose Chase (available to homeowners) and anthroquinone (not for homeowners) considered a more active molecule derived from MA. These products have been mostly used by landscape or golf course managers.

A Cornell University graduate student investigated about 8 methods of hazing the geese population to determine efficacy. The two most effective methods were a high powered laser (5cm beam that shoots 350-400 m) used at night to exploit the geese sight fidelity and border collies. A separate study translocated 100 geese about 150 km and released them. Most of the adult birds returned to the same area, the young birds establish their sight fidelity very young and then are able to return to their new home often. In the end, hazing will be an on-going process. Source: Electronic Turf Newsletter, 4/26/04. Paul Curtis, Cornell Natural Resource Program

Sincerely,

Aaron D. Gabriel
Extension Resource Educator
Crops and Soils