

**Washington County Ag Report
August 10, 2004**

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

**“Bravery is the capacity to perform properly even when scared half to death.”
-- General Omar Nelson Bradley**

Announcements

Wednesday, August 18, from 1 p.m. until 3 p.m. Attention graziers Cornell Cooperative Extension of Washington County is sponsoring its annual summer pasture walk at the dairy farm of Gordon Searles. Current year grazer issues will be addressed as well as issues related to declining components and heat stress.

Thursday, August 19, 11 a.m. – 2 p.m. Heifer discussion group meeting – A Technical Specialist from Merrick Animal Nutrition will be discussing the differences between milk replacers and whole milk and its effect on calf growth and development in the upstairs meeting room in the Washington County Municipal Center. The talk will also cover the importance of feeding the calf to optimize health and to prevent the onslaught of pathogens. Lunch will be provided with generous support from Merrick Animal Nutrition. Please call the office at 1-800-548-0881 to reserve your spot.)

Sunday, August 22, 2-4 p.m. Growing a Family Farm. Windy Willow Farm, Amsterdam, 200-acre farm produces pasture-raised sheep, hogs, and poultry along with hay, small fruits and vegetables. Starting with limited resources and off-farm income they have grown their 4-year-old operation at a healthy, sustainable pace. Contact Regional Farm & Food Project at (518) 271-0744 or farmfood@capital.net (Subject: Farm Tours) for more details.

Wednesday August 25, at 1:00 p.m. - The Northeast Buckwheat Growers Association 10th Annual Buckwheat Field Day in Batavia, NY. The event is free, and preregistration is not necessary. More information is available on the web at www.nysaes.cornell.edu/hort/buckwheat/ or by calling Dr. Björkman at 315-787-2218.

Thursday, Aug. 26, 5-7 p.m. Heirloom and Specialty Tomato Variety Meeting, Vegetable Research Farm NYS Ag Experiment Station, Geneva. Come see and taste 116 heirloom and specialty tomato varieties from the US, Europe and Mexico! For a list of the varieties ahead of time contact Carol MacNeil at 585-394-3977 ext. 33 or crm6@cornell.edu by Tuesday, Aug. 24th.

The 2004 Cornell Field Crop Guide is now available On-Line at:
<http://work.ipm.cornell.edu/fieldcrops>

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	0.67	1.51	0.35	0.70	0.02	0.91	0.34	2.04
So far this month	0.67	1.93	0.40	1.32	0.14	1.46	0.34	3.94
Total since April 1 st	18.81	15.96	18.03	15.66	16.00	16.87	17.60	15.86
GDD Base 41 Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	177	227	174	231	204	235	172	252
Since April 1 st	2655	2689	2708	2770	2993	2954	2687	2759
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	117	162	116	159	140	168	113	179
Since April 1 st	1815	1837	1887	1903	2056	2026	1861	1898

Midwest Commodity Prices - from the Wall Street Journal

Corn per bushel	\$2.16/bu	Cotton Seed Meal per ton	\$168/ton
Soybean per bushel	6.04/bu	Corn Gluten Feed	62/ton
Hominy Feed per ton	68/ton	Wheat, soft white	3.97/bu
48% Soybean meal per ton	204/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.

Dairy: Does adding lime to your cows' stalls prevent environmental mastitis? Milk producers often ask their veterinarians the question, especially at this time of year when cows are more susceptible to environmental mastitis due to hot and humid conditions. Research has tried to address this concern. As with all good research, however, it probably ends up posing more questions. Researchers in Canada have shown that adding hydrated lime to sawdust or shavings increased bedding pH and reduced its water content. This hindered bacterial multiplication. Daily replacement of sawdust in the back one-third of the stall also reduced bacterial numbers. One herd that changed bedding daily reduced clinical mastitis cases. Adding lime to bedding reduced bacteria numbers in the bedding for the cows, but the effect lasted less than 48 hours. By day six, bacteria counts were the same in all three groups. Moisture content of the bedding increased to the same degree for all the cows studied. Similarly, when the researchers examined bacteria numbers on teat ends, counts were slightly lower in the group that got lime in the bedding, but this effect only lasted until the second day. The bacteria most reduced were the Klebsiella sp. and coliforms. However, even for these types, the effect lasted only a short time. Reducing bacteria numbers of bacteria in bedding is important but remember it's only part of that environmental mastitis equation. Not only do you have to keep bacteria numbers low, but also you must keep them out of the teat ends. Even herds with low bacteria levels will have more mastitis if they have highly susceptible teat ends of cows.

Note: If you are interested in checking the intensity of light in your dairy facilities, which has been shown to have a positive effect on milk production please call the office and speak to me, JJ Schell, to set up a visit to your farm. We have a light meter here at the office now to measure different forms of light and their subsequent intensities.

FARM BUSINESS MANAGEMENT: I read in the paper and heard the report that Senator Schumer has proposed federal legislation concerning the need to have background checks and fingerprints on people (though they acknowledge it will be mainly farmers) who purchase large quantities of ammonium nitrate (fertilizer) because it is a substantial component of truck bombs. My concern is the paperwork nightmare that may have to happen for the farmers but won't really stop a terrorist from accumulating enough fertilizer for a bomb. The bombs they generally talk about are about 1500 pounds of fertilizer – which is only 30 bags. Something a consumer or two could easily pick up from several stores over a few days when purchasing one bag at a time well below the radar screen. Make sure that you are aware of what is happening with your elected officials.

CROPS

Alfalfa: Summer seedings should be completed by now. Harvest continues to go in spurts with the rain showers. Potato leafhopper will migrate from one field to the next. So, with only some fields being harvested, check to be sure that the uncut fields are not being attacked by migrating PLH. If you see yellowing, the damage has occurred. You should also check regrowth of cut fields. PLH damage today will hurt yields later on, even next year's first cutting. Now is a good time to apply potassium fertilizer, as well as phosphorus. Be sure to soil sample fields that will be planted to alfalfa next spring. If you send in your sample now, it will give you time to have lime applied this fall.

Field Corn: There has been one report of severe European corn borer damage. Unfortunately, there is little to do for ECB when we see damage. We cannot predict next year's population and damage from what happens this year. ECB resistance is bred into conventional hybrids. Ask your salesman, which have the resistance, or choose Bt corn for ECB control.

A 2002 to 2003 Cornell study (Bill Cox and Jerry Cherney) examined corn silage harvest moisture from (70% to 65%) and forage quality for corn stored in bunker silos. The brief conclusions are that if July and August are dry (as in 2002), forage quality may be better when corn silage is harvested at 65% moisture to increase starch concentration. In 2003, it was wet during July and the first part of August, and harvest moisture (70 – 65%) did not affect forage quality (milk per ton). The complete article is at

<http://www.css.cornell.edu/extension/WCU/WhatsCroppingUpNewsletter.html>.

Grasses: Now that autumn is getting near, how should we manage our grasses? After talking to other CCE staff and referring to some reference books, here are some recommendations. Close (less than 3 inches) and frequent (more than 4 cuttings) can stress grass stands. If you are taking 4 or more cuttings, you should be leaving 4 inches of stubble so that sufficient leaf area remains for regrowth. Since snow mold is a threat to grass stands in the winter and spring, it is best not to have too much foliage on the grass going into the winter. Snow mold is a mold that rots out the grass crowns when there is snow on the ground and air temperatures are warm (most often in March and April). The timing of the last cutting is not important as long as the stand is healthy and not stressed. Late summer is a good time to apply phosphorus and potassium fertilizer. Be

careful with nitrogen in the fall. If you cannot harvest because of wet soils, a lot of forage left in the field will form a mulch and increase susceptibility to snow mold; plus excessive nitrogen makes plants succulent and less winter hardy. Orchard grass is the least hardy of our common perennial grasses.

Pasture: As days (and sunlight) shorten, energy content of pastures will decline. It is good to send pasture samples to a lab for forage analysis. Rations can then be adjusted accordingly.

Weeds: (from Ken Wise, Eastern NY IPM Specialist) **Are your weeds sending you a message?** Did you ever think that weeds could be sending you a message? Yes, they can send you a message! Many times weeds can be indicators of the condition of your soil. The following are a few weeds that can indicate soil conditions in your fields:

Quackgrass	Soil compaction at the soil surface
Milkweed/thistles	Deep soil compaction, milkweed favoring moist land, thistles growing in drier conditions with low humus levels
Chickweed	Incomplete decomposition of organic matter
Ragweed	Unavailable potassium
Docks/sorrels	Waterlogged or poorly drained acidic soil
Lambsquarters, Pigweed, nettles	High fertility or humus, unless weeds are pale and stunted, then low fertility
Hawkweed	Acidic soils

VEGETABLES

Spray Coverage – Over the past few weeks we have been evaluating spray coverage on local farms with water sensitive paper. Andrew Landers, Cornell’s Pesticide Application Technology Specialist has been advising us. The meeting last week in Sodus demonstrated the technique and reviewed the results. Two sprayers using flat fan nozzles at 70 psi and 50 gpa were compared with a sprayer using hollow cones at 210 psi and 45 gpa. Onions and potatoes were sprayed with each. The first thing learned from the results was that some spray booms are too close to the top of the crop. Where they were too low the tops of plants in between the nozzles had no spray coverage at all! Adjust boom height so that the spray is overlapping when it reaches the part of the plant you want to protect. Using extended range flat fans, which deliver spray in a fan 110 degrees wide, rather than the standard 80 degrees, will reduce this problem. The second thing learned was that the sprayers with the flat fan nozzles, operated as they were, produced large droplets that didn’t provide adequate coverage of the leaf surface. Lots of small drops will give better protection. They did, however, give coverage all the way down to the bottom of the crop. Increasing pressure some could decrease droplet size without sacrificing too much coverage near the ground. The third thing learned was that the very high pressure of the hollow cone nozzles produced such tiny droplets that not many reached the bottom of the plants. Coverage was excellent on top but not very good down below. Such high pressure isn’t needed and produced a result opposite of that desired. What we’ve learned is that many sprayers could use some fine-

tuning. (Carol Mcneil OWYS Veg Update)

Fall Cover Cropping: As your fields finish up with crops, be prepared to turn under crop residues and sow a cover crop as soon as you can. This will help improve soil quality by adding organic matter, reducing erosion, and even avoiding compaction from the force of raindrops, which can be significant. Options include crops that will winterkill and be able to work in next spring such as annual ryegrass or oats. If you want to grow some of your own nitrogen sow 20 pounds of hairy vetch around the end of August, mixed with a bushel rye or oats. Let this grow until mid- to late-May next spring to get the most N out of it. For ideas on a variety of cover cropping options, including permanent beds, intercrops, no-till and spaders, order the video called Farmers and their Innovative Cover Cropping Techniques at:

www.uvm.edu/vtvegandberry/Videos/videos.html (VT Veg and Berry news)

Edited From the Vegetable Pest Status Report August 4, 2004 By John Mishanec, IPM Vegetable Program

Corn Earworm Alert: (check the last e-mailed ag report or the gold post card sent in the mail last week for details) Corn Earworm were being caught at a rate of 2 per night which is a 6 day spray interval as of 8/4/04.

Potatoes

Late blight alert!!! With all the rain, it is no surprise we are starting to have an epidemic of late blight. There are confirmed late blight outbreaks in many locations in western NY, Pennsylvania and Maine. Late blight has also been reported in Tioga and Delaware counties here in eastern NY. Get out there and scout your fields. Late blight can happen even when the fields have been sprayed. New growth and stems, which may not have adequate spray coverage, are both susceptible. Traditionally, we look for large, the size of a half-dollar, black spots on the leaves. Early in the day, before the moisture dries up, the spot will have a ring of white spores. Harder to find is late blight on stems. Spores may land on the axle of where the leaflet meets the stem and germinate there. The stem turns black for about a half-inch both above and below where the leaflet meets the stem. You may not even see any of the large black spots on the leaves if the crop has been receiving regular sprays. Do not confuse stem late blight with bacterial soft rot. With bacterial soft rot, the whole stem will turn black, mushy and wilt. This is usually caused by some damage to the stem or water getting into a corn borer hole. Scout your fields where moisture is present - low spots, spray rows and along the tree line. If you think you may have late blight call your local Cooperative Extension office or e-mail me at jjm27@cornell.edu Photos are accessible in the Disease Factsheet section online at <http://vegetablemdonline.ppath.cornell.edu/>.

For organic growers, I received a recommendation for organic **leafhopper** control by using a product called pyganic. It gave good hopper control last year in a trial by Ruth Hazzard in Mass. I have been told it is also expensive. For conventional growers, lots of products will do a good job against the leafhopper, check your recommends.

Keep an eye out for **squash bugs** in your vine crops. If you see them building, it may be wise to include an insecticide in your first fungicide spray.

Greenhouse: Very important to keep an eye on fall mums for problems with **leafspot** diseases. There are a number of fungicides that can be used to control fungal and bacterial leaf spots, but again, you should catch them early! Also, you should have made the final pinch on those mums by last week.

For cut flowers, especially zinnias, we've seen plenty of **bacterial leafspot**. There is a lot of information that these persistent bacterial diseases are seedborne, so treating the seed with a dilute bleach treatment may reduce this problem tremendously.

Landscape: An interesting question about how to control snails in ponds was answered in the University of Maryland Weekly report. We have actually had this inquiry before from a home gardener that ended up emptying the garden pond in order to get the **snails** under control. The following may help commercial folks who help maintain ponds:

“...snails causing the problem, then it's because of an excessive population. Usually they scavenge off algae or decaying plant debris, and don't cause problems with healthy plants. The quickest way to reduce the snail population is to float lettuce or cabbage leaves in the pond overnight. The snails love them. Remove the leaves in the morning with the attached snails and repeat the process until no more are trapped. This works for most snail species. Chevreur's Salt (copper based product) can be used, but I have no experience with this. Generally I stay away from recommending any type of chemical application for small water gardens as the natural system balance can easily be disrupted. Happy snail hunting!” This from Laurie J. Fox, Horticulture Associate at Virginia Polytechnic Institute and State University

In the field I have seen loads of damage from **slugs and grasshoppers**. Grasshopper damage looks a lot like slug damage, but will be occurring higher on the plant than you might expect from slugs, also, the feeding area is jagged and uneven.



Grasshopper damage on ornamental foliage plant.

Millipedes and centipedes seem to be occurring in very high numbers this year and I assume that's because of all the moisture – they are trying to escape it. Millipedes mainly feed on decaying vegetation--and will only occasionally attack plant roots directly. They are sometimes found in higher numbers along the mulched borders of ornamental beds, in the corners of fenced areas or any place where organic matter accumulates.

There is loads of **Japanese beetle** damage on all kinds of plants. These are very tough to control with pesticides, especially when we have been having so much rain. Trap crops have been suggested as a reasonable alternative – a few roses sacrificed doesn't seem like to bad an idea to me, but homeowners may need to be educated in this principle of pest control.

Sincerely,

Aaron D. Gabriel
Extension Resource Educator
Crops and Soils