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## Washington County Ag Report August 30, 2005

Contributors are Sandy Buxton, Sandy Ferry, Aaron Gabriel, and Laura McDermott. Thanks to Connie Havens for compilation and formatting.

**“Men for the sake of getting a living, forget to live.” -- Margaret Fuller**

### Announcements

**Thursday, September 8<sup>th</sup> – Coach Bus Trip to Wave Hill Gardens and Stone Barns Center for Food and Agriculture.** Sponsored by Master Gardeners of Washington County, but opened to the general public. Cost is \$50/person for guided tours and transportation. Please call 746-2560 for more information on this trip, or check out our website at <http://www.cce.cornell.edu/washington/washington.html>. Registration is due by August 25<sup>th</sup>, but trip should fill quickly.

**Tuesday, Sept. 13, 10 a.m. – 1 p.m. – Grazing by Necessity: “Something Had to Give”** – at (Cliff and Brud) Cressy Family Farm, Florence, VT. The Cressys have transitioned their dairy to a grazing system with 140 mixed-aged cattle on 60 acres. Sponsored by Vermont Grass Farmers’s Assoc. Call Jennifer Colby (802-656-0858) or Aaron (800-548-0881) for directions. Bring your own lunch.

**Saturday and Sunday, Sept. 17 & 18, 2005 Small Farm Expo in PA** – a conference on topics related to beginning, part time and small farmers. For more info check out [www.smallfarmexpo.org](http://www.smallfarmexpo.org)

**Wednesday, Sept. 21, 12:30 – 3 p.m. – GRAZIER MEETING: Alternative Watering Systems for Livestock on Pasture** – at Salu Farm, Keith & Lisa Saunders, 72 Mc Cormick Rd., Greenwich. Robert De Clue, Chenango Co. SWCD, will show and discuss solar water pumps, nose pumps, ram pumps, and other systems.

**Saturday, September 24 at 10:00 am – Small Vineyard Field Day Event**, Rob McDowell’s Vineyard, Beekmantown, NY (near Plattsburgh). To register call Kevin Iungerman at 885-8995.

**October 6, 2005 at 7 p.m., CCE Albany County, Voorheesville - Ancient Forests in Modern Times.** Join Fred Breglia from Landis Arboretum and David Yarrow from Champion Trees to learn about the elder arbors that live in our area. Fred and David will share fascinating facts about the "old timers" including where they are and why they have been so successful at surviving. Please call Billie-Jo at 765-3512 by October 4th to register. Cost is \$10.

**October 8 - NYS Nursery/Landscape Association Region 3 - Used Equipment Auction**, held at HURB Landscaping, 4278 Albany St., Albany, NY 12205. An opportunity for members to buy and sell used equipment. Preview at 7:00 a.m., Auction starts at 8:00am. Sellers must

register and get info on bringing items to sell. For more info contact: Jerry Parmenter 765-5002, or Brian Fleury at (518) 438-9823

**November 15-17 - Empire State Green Industries Show** (formerly the Turf and Grounds Expo) Programs will be offered from the NYS Turfgrass Association, NYS Nursery/Landscape Association, NYS Arborist-ISA Chapter, Inc. and the NYS Flower Industries. Credits will be offered for courses; 41.25 DEC Category specific credits; 3.75 CORE credits; 2.05 GCSAA education points and 22.5 ISA continuing education units. Riverside Convention Center, Rochester, NY Contact: NYSTA (800) 873-TURF, [www.nysta.org/greenshow/home/html](http://www.nysta.org/greenshow/home/html).

**Will you disturb more than one acre of land for a construction project?** If so, then you may need a SPDES permit from NYS DEC. There are several agricultural exemptions, but you need to follow the law to avoid fines. Joe Driscoll and Bob Kalbfliesh at Washington County SWCD have information on the regulations. Call them, 692-9940, ext. 3. AG

**Weather Data – 2005 and average of 1999 - 2004**

	Argyle		Easton		Whitehall		Jackson	
	2005	Average '99 – '04	2005	Average '99 – '04	2005	Average '99 – '04	2005	Average '03 – '04
<b>Rain</b> Past Week	<b>1.55</b>	0.68	<b>1.00</b>	0.73	<b>0.29</b>	0.45	<b>2.60</b>	0.37
So far this month	<b>4.96</b>	4.19	<b>3.25</b>	4.24	<b>1.64</b>	3.82	<b>4.55</b>	4.93
Total since April 1 <sup>st</sup>	<b>20.14</b>	18.91	<b>17.87</b>	19.13	<b>17.34</b>	19.31	<b>20.12</b>	13.01
<b>GDD Base 41</b> Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	<b>194</b>	194	<b>191</b>	193	<b>209</b>	202	<b>188</b>	191
Since April 1 <sup>st</sup>	<b>3487</b>	3275	<b>3499</b>	3353	<b>3996</b>	3583	<b>3545</b>	3308
<b>GDD 86/50</b> [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	<b>132</b>	134	<b>129</b>	134	<b>147</b>	143	<b>129</b>	133
Since April 1 <sup>st</sup>	<b>2401</b>	2244	<b>2445</b>	2310	<b>2766</b>	2470	<b>2483</b>	2284

**Midwest Commodity Prices - from the Wall Street Journal**

Corn per bushel	\$1.89/bu	Cotton Seed Meal per ton	\$140/ton
Soybean per bushel	5.85/bu	Corn Gluten Feed	55/ton
Hominy Feed per ton	47/ton	Wheat, soft white	2.72/bu
48% Soybean meal per ton	185/ton	Tallow per pound	.18/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.

Advertising accepted in accordance with rules of Cornell Cooperative Extension and subject to final determination of acceptability by the Executive Director. Advertising space is limited to subscribers only.

## **Trading Post**

**For Sale:** New hydraulic hoses 3/8" with JIC ends 4' to 9' long, \$1/ ft.  
JIC to 1/2" pipe fittings \$1 each. 495-0531

**For Sale:** Gathering chains for John Deere 1 and 2-row corn heads, used but good shape \$25 each. 495-0531

**For Sale:** Dion Forage Wagon with gear 16 ft. (2 beaters) \$3250.00, Kinzee 4-row corn planter w/monitor, insecticide boxes, no-till capability. \$3000.00. (802) 325-3478.

### **DAIRY NOTES:**

New York State Agriculture Commissioner Nathan L. Rudgers announce recently that the state submitted 7,500 livestock premises for registration with the National ID program. A test batch of 1,027 equine premises and a second batch of 6,500 cattle premises. They hope to have all 20,000 livestock and poultry premises registered by March of 2006. Following successful submission, registered premises will receive a letter of notification, registration certificate, and a wallet size laminated card. This packet will also include procedures for correcting or amending registration information.

**FARM BUSINESS MANAGEMENT:** The recent problems in Lowville remind us of the need to be aware of what is going on around the farmstead. Sometimes it is hard to pay attention to some of the pesky details and think that because you have a CAFO plan or a mastitis or calving protocol or a business plan that everything is going to be handled. The reality is that there are forces constantly at war that can cause havoc around your farm. The goal is to be able to keep an eye on things and anticipate where problems are going to crop up. Excessive rain has one effect while the hot, dry summer that many of us endured has a different. Trying to stay aware of the issues that each situation can cause is mentally challenging. But trying to think of situations from a risk management perspective may help keep the possibilities in mind.

### **CROPS**

**Soil Health:** The community of soil organisms is very complex just to think about, much less trying to study or measure. However, folks at Cornell (George Abawi) have developed an assay (or procedure) to indicate if soil pathogens are present in soil. Simply take some soil that you want to evaluate, put it in a couple of pots, and plant a snap bean variety that is susceptible to root diseases. Snap beans are susceptible to *Rhizoctonia*, *Pythium*, *Thielaviopsis* and other root diseases common among vegetable and other crops. To compare roots, you should also grow some beans in good potting soil. After the beans grow a few leaves, compare the root systems. This is a simple and effective way to evaluate the biological health of soil. AG

**Cover Crops:** This is the time of year to be thinking fall cover crops. Planting cover crops is important to protect the soil from erosion through the winter, establish soil structure after compaction from harvest operations, and feed your soil organic matter. Winter rye scares many farmers because it can grow so tall and be such a nuisance in the spring. If you fall into that group, then try winter wheat. It does not grow as early or as tall as rye in the spring. AG

**Alfalfa:** Evaluate alfalfa fields for longevity. Those fields that you want to keep next year should be adequately fertilized with potassium. Allow at least 42 days of growth between the last two cutting. Now that we have some rain, soils will be soft. So, be careful about spreading manure and damaging crowns.

**Field Corn:** Corn development is very variable. Some folks have started chopping already. Check your fields because severely drought stressed corn shut down and did not recover after the rain started up again. Hopefully the other corn will fill the ears out more completely with the recent rains. Stressed corn has lots of fungi growing on dead and half dead leaves. The fermentation bacteria will have lots of competition once the crop is chopped. Be sure to use inoculant or preservative at harvest. **The most important harvest decision you can make is to harvest at the correct moisture (65% - 68% depending on storage type).** Take the time to chop some plants and dry them down. It only takes 20 minutes in a microwave. When you run plants through a chopper, the first few plants will not give you an accurate sample since much of their moisture will be left behind wetting the insides of the chopper. So, run some plants through the chopper first to get it wet, then take your sample.

**This will be a good year to plant a cover crop after harvest since we will have a somewhat early harvest.** Winter rye can be planted until mid-October safely, and until Oct 31 if we have a warm November. Winter wheat should not be planted after early October. Let's have a "green winter". Right after harvest, broadcast rye seed (2 ½ bu/ac), spread manure, then disc just deep enough to control the manure odor.

**Stop! Check for Corn Ear Rot** (Ken Wise, NYS IPM) Are you ready with the chopper or combine? STOP; check for corn ear rots first! Some kinds of fungi can create mycotoxins that are toxic to livestock. Taking a few minutes to check a field for certain ear rots can help you determine if you want to feed your field of corn to livestock. Pull back the husks on several plants and look for the presence mold growing on the ear of corn. The following are specific symptoms of certain ear rot diseases that can be found in NYS:

[Fusarium Ear Rot](#) appears as a white-to-pink or salmon-colored mold. This mold can begin with bird, deer or insect-damaged kernels. Fusarium ear rot may contain *fumonisin* which are mycotoxins that can be toxic to livestock.

[Gibberella Ear Rot](#) symptoms are pink to reddish colored mold. This disease starts near the tip of the ear and progresses down toward base of the ear. Gibberella can produce vomitoxin and zearalenone which is toxic to many kinds of livestock.

[Diplodia Ear Rot](#) symptoms appear as a thick white mold that usually starts near the base of the ear. This disease can also appear on the plant as raised black fruiting bodies on moldy husks or kernels. *Diplodia* does not produce any known toxins.

[Cladosporium Ear and Kernel Rot](#) symptoms appear as greenish black, blotched or streaked kernels scattered over the ear. This disease can also infect kernels that have been damaged by insects, birds, deer, hail, or frost. The disease can progress after the grain is harvested and stored.

[Penicillium ear rot or blue eye](#) symptoms range from a powder-like green or blue-green mold that is on and between the kernels and normally on the tip of the ear. If this disease progresses in storage it is referred to as blue eye because the germ is a bluish-green color. Penicillium ear rot can produce a mycotoxin called ochratoxin.

If you discover certain ear rot diseases make notes of the hybrid, tillage methods, rotation history, and planting date. By doing this you can avoid the disease occurrence in the future. The

following is the effectiveness of specific management practices for corn ear rots:

<b>Corn Disease Variety</b>	<b>Resistant</b>	<b>Crop Rotation</b>	<b>Clean Plow Down of Residues</b>	<b>Fungicides</b>
Ear Rots	2	2	2	4

1= highly effective, 2= moderately effective, 3=slightly effective, 4= not effective, 5 = not usually economical,

Reference: Purdue University Field Crops Pest Management Manual

While there isn't any practical solution for coping with ear rots this late in the current season proper fertilization, timely weed control and reductions in insect pest pressure can help reduce risk of disease. For example: European corn borer (ECB) resistant Bt corn is at lower risk for injury by this insect. Lower risk means fewer ECB tunnels into stalks and less potential for fungi to infect through wounds and cause stalk rot. Also avoid continuous planting of corn under conservation tillage where stalk rot can be prevalent. If you are harvesting corn grain make sure you clean the grain bins. Keeping the proper temperature, moisture content and good aeration in the grain bin can reduce storage molds from developing. It is important to have regular Harvest silage at recommended maturity and moisture level, and pack silage tightly and exclude air rapidly inspections of the stored grain. This is essential to minimize risk of developing insect and mold associated storage problems.. Consider using organic acid preservatives if you can't exclude air or reduce moisture. If you had a lot of stalk rot and were growing for grain consider chopping earlier for silage to minimize lodging and combine losses. There are kits you can purchase to test your corn for different toxins on your own farm. The following are places where you can also test your corn:

Dairy One Forage Lab in Ithaca: For more information, call the lab at 1-800-496-3344 extension 172.

The Cornell College of Veterinary Medicine's Nutritional and Environmental Analytical Services Lab: More information is available on the web ([www.vet.cornell.edu/public/neas/](http://www.vet.cornell.edu/public/neas/)) or from lab manager Joe Hillebrandt at 607-257-2345

**Grasses:** We should have good growth for a fall harvest of grasses. Generally it is good to take a fall harvest. Here are some considerations. Intensive cutting management (every 28 days) can wear grasses out. So give them some time to replenish their roots. Too much unharvested forage going into winter can make grasses susceptible to snow mold (which will kill them). Perennial ryegrass is very sensitive to having too much unharvested forage in the fall, since it can smother itself, also. On the other hand, depending on the winter, bare ground may not be good either. Try not to be extreme with too much or too little unharvested foliage.

**Pasture:** Grasses and legumes will growth lush in the fall with cooler temps and rain, now that it has come. Remember that the days are short, so energy levels of the pasture will not be as high as in the spring.

## **VEGETABLES** –

**Solanaceae: Early Blight** has become much more prevalent in the county. This disease is difficult to control now, because the material that you use needs to have the appropriate Post Harvest Interval (PHI). Quadris, Amistar and Bravo have a 0-day PHI. Please check out our website ([www.cce.cornell.edu/washington](http://www.cce.cornell.edu/washington)) for a great fact sheet on other tomato disorders – we have seen an abundance of **blotchy ripening** and **russetting** this year along with **shoulder cracking** and **yellow shoulders**. Many of these disorders have a nutritional component that is magnified by uneven moisture, which on the exceptionally warm dry days of this summer have been hard to avoid even with trickle irrigation.

According to John Mishenac, the Eastern NY Regional IPM Specialist, **Bacterial canker** is showing up in a lot of fields. John advises growers to “look for dry, dark brown spots along the edges of the leaves. You will also see the very symptomatic spots on the fruit. Spots will be small, the size of the pinhead with a white halo around the spot. Early blight looks somewhat similar with brownish bronze colored lesions on the leaf but you will not find spots on the fruit with early blight. Often the problem is spread out through out the entire planting. This means the problem occurred in the greenhouse. Tomato transplants are most susceptible to the spread of bacterial problems when they are in the greenhouse. The plants are grouped together in a tray and watering will easily spread the canker bacteria from plant to plant. Symptoms do not show up right away. Often if there is trickle irrigation, the plants will grow fairly well till a heavy fruit load and hot weather start to stress out the plant. That's when you will most often start to see symptoms. I have seen growers save a crop with frequent copper sprays. Plants need to be practically blue-green. Copper plus mancozeb is the recommendation for conventional growers while plane copper can be used by organic growers. You have to get a lot of product on the plants to offer good protection to the existing fruit.”

John also reports that **Verticillium wilt in peppers** is showing up in fields throughout the region. Look for the telltale sign of ½ the leaf turning brown. Plan to rotate away from solanaceae for the next few years.

Continue to scout for **late blight** in your potatoes. Concentrate on low areas and along hedge rows. Check cull piles for volunteers that haven't been sprayed. Late blight produces large black spots on the leaves. If you find something you think is late blight, call our office at 1-800-548-0881 or you can call John Mishenac at 518-434-0016.

**Potato leafhoppers** are being found in fairly large numbers According to John Mishenac, leafhopper is a dangerous pest because you can have yield loss and not even see the problem. Later, when the leafhoppers build up in numbers, you will see the edges of the leaves turn black and eventually, the whole leaf turns black and dries up. John Advises the following protocol for scouting for these pests: Now that the plants have some size, when you look for leafhoppers, flop the plants into the row and shake. The leafhoppers will fall into the row and you can assess how many you have per plant. Look for small, light green wedge shaped nymphs about an eighth of an inch long. The threshold is 15 nymphs per 50 leaves. For organic growers, there are no good controls for leafhopper. If you have had any luck with an organic product, let me know and I will share it with everyone. For conventional growers, Phaser and Thionex are the insecticides least toxic to ladybird beetles. This is important for **aphid** suppression.

**Cucurbits: Downy Mildew** was confirmed on pumpkins in Eastern NY 2 weeks ago. Prof. Tom Zitter from Cornell was scouting fields in Rensselaer County and said that the effects of the disease is not likely to be as large a problem because many of our pumpkins are already turning. The primary concern is for future years spray programs now that Downy is established in the area. To scout for Downy mildew, look for small, quarter inch angular spots on the leaf. There will be many, many spots on the leaf, over a wide area. At first they will appear pale yellow but then turn brown. Like late Blight, we would like to have confirmation on sightings of Downy Mildew, so give us a call at 1-800-548-0881 if you think you have this disease. **Powdery mildew** is quite common.

During the same eastern NY scouting session, **Phytophthora Blight** was confirmed in Schoharie Co. with the infected plants confined to low areas of the field where runoff water accumulated and stood for a while. Water likes to settle in the wheel track rows in fields. Anywhere water is standing, phytophthora is a possibility. If you have low spots or standing water, it is better to separate those spots from the rest of the field so you don't spread the disease. You want to disk a buffer area around anywhere you find the disease to stop water from traveling.

Across the state pumpkin growers have reported **flower drop or low pollination** due to hot weather. This is especially problematic for cucurbits and Prof. Chris Wien from Cornell has the following recommendation for encouraging bee activity: "Hive rental is recommended for fields of 10 acres or larger, and should be used at the rate of 1 to 3 hives per acre. From 8-10 bee visits provide enough pollen, but these have to occur between dawn and around noon, when the flowers close. In hot weather, fruit set percentage may also be low, although we have little exact information on what is happening. Prolonged hot weather will prevent proper development of female flowers in some varieties, leading to delayed fruit formation in hot locations. Day temperatures in the 90's, followed by night temperatures in the 70's for more than a week are enough to cause this disorder in 'Howden'."

### **Determining Effective Cover Crop Seeding Dates**

(Source Volume 16, Number 16 August 18, 2005 UMASS VEG Notes)

Well-established cover crops are effective in reducing residual soil nitrate after the harvest of corn or other crops, and nitrate released from applied manure. They hence minimize the nitrate leaching to ground water during the fall and winter months. Numerous studies have also shown that effective cover crops prevent erosion and loss of reactive phosphorus in runoff from fall applied manure. Our studies and those of others have shown that cover crops also reduced nitrate leaching in subsurface soil layers. However, the ability of the cover crop to absorb nitrate from the soil is affected by the degree of colonization of the soil by roots. Cover crop seeding date is important for adequate canopy and root development before cool weather slows or stops growth. In an earlier study at the University of Massachusetts Agronomy Research Farm this was shown to be mid-September or earlier for southern regions of New England. Later seeding dates in most years will result in less than adequate leaf growth to reduce the erosive force of rain and runoff, and the small root growth will not contribute much to stabilizing the soil or for nutrient uptake.

The mid-September seeding dates for cover crops were established for their effectiveness for erosion control. Whether effective dates for erosion control are similar to effective dates for preventing leaching are unknown. However, any delay in establishment of cover crops beyond the effective date will increase the amount of nitrate and phosphorus leaching. Very little is known about the factors controlling growth and actual effectiveness of cover crops planted at different dates on ground water quality. It has been reported that cover crops planted in August had 50% more nitrogen accumulation than cover crops planted in mid to late September. Our results from 2004, which was milder than the normal fall, seem to confirm these reports for both rye and oat cover crops. Also, rye retained more of the accumulated N through the winter than oat.

#### **ORNAMENTALS :**

**Turf:** Dr. Frank Rossi reminds us that the fall fertilization season is upon us. There are two excellent tools interactive tools that might make this important task easier. First is a Fertilizer Calculator available from Professor Cale Bigelow and the Turfgrass Program at Purdue University in Indiana. The fertilizer calculator is located at: [http://www.agry.purdue.edu/turf/fertcalc/Fertilization calc.html](http://www.agry.purdue.edu/turf/fertcalc/Fertilization%20calc.html) . Some of the features the authors would like to point out include: 1.) It was designed to look like a fertilizer label so that you simply have to enter information off the label (e.g. the fertilizer analysis, bag size, price, etc.), then enter the size of the area to be treated and target fertilizer rate. 2.) It is important to read the text properly, for example if you are entering the size of the area to be treated (e.g. 12,000 square feet) you need to enter 12000 without a comma. For fertilizer rates ½ pound needs to be entered as 0.5, etc 3.) It works for more than just nitrogen, and phosphate (P) and potash (K) applications can also be calculated.

Another helpful tool is available from Purdue to help with turf ID. You can find that at <http://www.agry.purdue.edu/turf/tool/index.html>.

#### **Update on 2,4-D Safety**

Written by David Chinery, Regional Turfgrass Educator, Source August 2005 Branching Out Newsletter.

The following article was released by the EPA and CropLife Magazine on the assessment of 2,4-D and the risks to human health.

#### **EPA Completes 2,4-D Review Process**

The EPA has released its comprehensive assessment of the herbicide 2,4-Dichloro phenoxyacetic acid (2,4-D) under the agency's reregistration program. EPA's decision document concluded that 2,4-D does not present risks of concern to human health when users follow product instructions as outlined in the agency's 2,4-D Reregistration Eligibility Decision (RED) document. "The EPA's assessment of the human and environmental scientific data reinforces a growing number of regulatory decisions and expert reviews that conclude the use of 2,4-D according to product instructions does not present an unacceptable risk to human health or the environment," said Don Page, assistant executive director of the Industry Task Force II on 2,4-D Research Data. "EPA's comprehensive findings are consistent with decisions of other authorities such as the World Health Organization, Health Canada, European Commission, and recent studies by

the U.S. National Cancer Institute." The agency's announcement and release of the RED on 2,4-D completed a 17-year review process. Over the course of this study, the Industry Task Force II on 2,4-D Research Data developed and submitted to EPA over 300 good laboratory practice toxicology, environmental, and residue studies which EPA scientists reviewed to assess the herbicide's safety under the Federal Insecticide, Fungicide, and Rodenticide Act and the Food Quality Protection Act. Source: EPA and CropLife Magazine

Sincerely,

Aaron D. Gabriel  
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Crops and Soils