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Washington County Ag Report
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Contributors are Sandy Buxton, Aaron Gabriel, and Laura McDermott. Thanks to Connie Havens for compilation and formatting.

Quote

"People seem not to see that their opinion of the world is also a confession of character."
-- Ralph Waldo Emerson

Announcements

Tuesday, July 5 – 6:00 – 8:00 p.m., Hoophouses: What do they offer the Fresh Market Farmer? This meeting will be held at Ted and Jan Blomgren's Wind Flower Farm, 585 Meeting House Road, Valley Falls. The Blomgren's have several different styles of hoophouses and experience growing a wide variety of crops in them. They will also be reporting on results of a SARE grant on cut flower quality in hoophouses. Directions will be forthcoming, but please give us a call if you plan on attending – 746-2560.

Weather Data – 2004 and average of 1999 - 2003

	Argyle		Easton		Whitehall		Jackson	
	2005	Average '99 – '04	**2005**	Average '99 – '04	**2005**	Average '99 – '04	**2005**	Average '03 – '04
Rain Past Week	**1.37**	0.75	**0.85**	0.79	**1.66**	0.71	**1.19**	2.14
So far this month	**0.01**	0.29	**0.00**	0.25	**0.54**	0.13	**0.02**	0.23
Total since April 1st	**4.49**	2.08	**3.92**	2.48	**4.91**	3.06	**4.24**	2.09
GDD Base 41 Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	**48**	63	**68**	70	**92**	90	**54**	107
Since April 1st	**207**	192	**235**	239	**348**	270	**224**	247
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	**22**	53	**43**	57	**51**	63	**39**	84
Since April 1st	**162**	146	**195**	187	**221**	188	**201**	195

Midwest Commodity Prices - from the Wall Street Journal

Corn per bushel	$1.89/bu	Cotton Seed Meal per ton	$105/ton
Soybean per bushel	6.12/bu	Corn Gluten Feed	53/ton

Hominy Feed per ton	62/ton	Wheat, soft white	3.95/bu
48% Soybean meal per ton	197/ton	Tallow per pound	.23/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.

Ag Report is adding a "Trading Post" section this year to give subscribers a chance to sell, trade, or buy ag related things. It can be employment, equipment, animals, feed, fencing, or lots of other things. A subscription gives you the opportunity to list as many items as you like. If it gets out of hand, then we will put a limit on it. Call each week for up to three weeks to have an item re-listed. Please keep ads to 15 words or less as a general guideline. Please call, fax or e-mail your ads.

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

Equipment for Sale:

- Holland Plastic Mulch Layer with drip irrigation and dry fertilizer attachment $1550.00
  Call 747-2316
- Hay rake Ford 3 point hitch $500.00. Call 747-2316

For Sale:

- Farm Truck for Sale
  1996 3/4 ton Ford
  Pick up HD, Low mileage
  Call Shushan - 854-3436

Help Wanted

- Part-time calf feeder wanted. Willing to negotiate on schedule. - **Hartford**, 632-5975.
- PT Dairy farm position. Barn chores 3:30-7:30 eves, 1 day on weekend. – **Granville**, 642-2361.

Animals for Sale

- Chickens – Rhode Island Reds – just starting to lay, or Leg Horns. $5.00/each, 50+ get volume discount (800 total); 2 registered Nubian does, 1 registered Nubian buck. – **Warrensburg**, 623-2823.

DAIRY: An interesting commentary from Kent Henderson, DVM in the Farm Report from Miner Institute about overage heifer loss. "The losses appeared negligible because age at first calving is listed at 25 months with a goal of 24 months. However. averages can be deceiving. Eight of the heifers raised and freshened were over 28 months old at calving. At $1.50-3.00/day heifer costs the farm had a loss of $1,440 to 2,880… A larger loss to the farm came from the beef sale of six of the heifers who did not get pregnant – another $6,000." Make sure that you look at some of the numbers behind the averages to make sure you are not just looking at the extremes sometime.

FARM BUSINESS MANAGEMENT: Because there has been a couple of questions recently, I thought I would include some information from Farm Employment Issues for Tax Professionals by Dale Grossman and Jason Minard. "Under NYS tax law, employers are required to submit Form NYS-45 (Dept. Tax & Finance). This form is used to verify eligibility for public assistance and benefits under the Social Services Law, to locate absent parents and establish child-support obligations and to verify eligibility for insurance benefits administered by the Department of Labor."

The name, Social Security number, and gross wages of every employee must be reported. In addition each farm should have a completed W-4 farm and I-9 for the files. Failure to provide or complete the necessary documentation can result in financial penalties.

CROPS

Soil Quality: COMPACTION: We all notice the reduced growth of winter grains in the wheel tracks caused by fertilizer carts applying springtime urea. I stopped to examine plants in and out of the wheel tracks in one such field. The reduced growth seems to be from soil compaction rather than crown damage or killed plants. As best as I could determine, the plant population in and out of the wheel tracks were the same and the plants in the wheel tracks did not look physically damaged. Using a penetrometer (an expensive metal rod with handles to test soil compaction), it was obvious that the soil within the wheel tracks was compacted compared to between the wheel tracks. The root mass of plants with the same number of shoots was smaller for plants within the wheel tracks and larger on plants between the wheel tracks. I am *not saying* applying fertilizer is bad. This is just an obvious lesson on the effects of soil compaction – often a necessary evil. We need to think on how we can minimize it.

HEAD LANDS IN VEGETABLE FIELDS: The unplanted area at the end of vegetable fields can often get muddy, and abused by lots of traffic. One option is to plant these areas to Italian ryegrass (*not annual ryegrass).* Italian ryegrass is a biennial, so it will not produce seed the year that it is planted. If you get a less winter hardy variety, it will then winterkill at the end of the season.

Beneficial Insects: I saw a syrphid fly already (also called flower flies or sweat flies) – a good bug for all crops. They lay eggs on foliage and the maggot that hatches will eat aphids. For natural enemies to keep pests insects under control (from the human perspective), they need to build up their population early (before the pest population gets too large), and they must reproduce fast enough to match the population growth of the pest. Often, we need to help these two processes for natural enemies to suppress pests to levels low enough that we humans can tolerate. The beneficial bugs are just looking for a meal, they have no intent on controlling pests below our economic injury levels.

Alfalfa: Early seedings are just starting to emerge. Alfalfa planted now will be at risk of insufficient soil moisture for proper establishment. If you are still planting, be sure to have a firm seedbed so that moisture can properly "wick up" to the seed near the surface. I saw some leaf feeding on alfalfa, which has grown 6 – 9 inches now. Probably, the alfalfa weevil adult caused the feeding damage. They have awoken from their winter sleep and are laying eggs. We will worry about controlling the larvae that hatch in a week or so, rather than killing the adults.

Field Corn: ***Importance of Fungicide Seed Treatments-Corn,*** Ken Wise, NYS IPM. "Prevention is the key to control early season corn diseases! Using a fungicide planter box treatment will help prevent corn seed from many different early season diseases. Sound planting practices, such as use of certified seed, good seed bed preparation, good seed soil contact, and appropriate planting depth, help promote stand establishment and help avoid seedling blights and emergence diseases. Watch for foliar diseases in continuous corn fields if contaminated residue from last season is present. For more information on early season disease management visit our web page on Field Corn Diseases." http://www.nysipm.cornell.edu/lfc/fieldcrops/fieldcorn/disease.html

In most years there is insufficient moisture to take a first cutting on a hay field and then plant corn? If that is your plan, then harvest as early as possible. To kill the sod before no-till corn, remember that you should apply glyphosate (Roundup) to grasses that have regrown to 6 inches.

No-till corn works best on fall-killed sods. The key to success is for the soil to be loose and uncompacted. No-till will work on any soil type if the conditions are right. Any little mistake will magnify into a really poor stand. The two mistakes I see the most are planting into wet soil and planting on compacted soil. Too much plant debris that keeps the soil cold or inhibits planter performance can also hurt.

Grasses: An excerpt from "Focus on Forage", Rich Lutz, Pioneer International – "USDA forage researchers have proven that proper timing of grass harvest may be more critical with grass than legumes. As NDF increases with maturity, the energy content of grasses declines faster for grasses than legumes. Grasses past the stem elongation stage are at a digestibility disadvantage because lignification of the stem cell wall doubles as the plants mature. During this same period, lignification of legume cell walls increase by only 15 – 20%. Their research compared immature (late May) and mature (late June) cuttings of grasses (bromegrass and orchardgrass) and legumes (alfalfa). Maturity caused a 53% reduction in potentially digestible cellulose in grass compared to only a 22% decrease in legumes."

The message here is that we should harvest pure grass stands first, then mixed grass/alfalfa, then pure alfalfa. However, if you get behind in your field sequence, jump to the fields that are optimum for harvest and proceed from there – leave behind a field or two if necessary. This is better than harvesting all your forage slightly behind schedule.

Soybean Rust: We have our own New York Soybean Rust Information Center, thanks to folks at Cornell: http://www.ppath.cornell.edu/soybeanrustny/default.htm. There are other useful sites as well. This website is devoted to soybean rust and has an article about a biofungicide **registered for organic soybeans**, http://www.stopsoybeanrust.com/mc_home.asp. Here's yet another Asian soybean rust forecast and tracking site, this one from Syngenta: http://www.farmassist.com/soybeanrust/home.aspx

VEGETABLES

Last week there was a mention of asparagus weed control which sparked even more questions, so here is more specific information from Dr. Robin Bellinder, weed scientist at Cornell University about herbicides for that crop. **Post-spear herbicide choices for asparagus**: Sencor-utilitarian, probably the cheapest, will control the standard small-seeded broadleaf weeds and will suppress a few annual grasses. Sandea-focus should be on nutsedge control as it is

expensive and low rates will control this well. Will additionally control pigweed, ragweed, and velvetleaf, galinsoga. Clarity-(this is Banvel)-will control or suppress many annual, biennial, and even some perennial broadleaf weeds that frequently are found in asparagus fields, e.g. curly dock, thistles, bindweeds, golden rod, and dogbane. Can be used twice but not more than a total of 16 oz/season. Has a 24 hr PHI.

Also from Dr. Bellinder: **Use of Command under plastic**: The problem with all crops (squashes, peppers) is root exposure. You want to ensure that the roots are planted below the chemical layer to avoid severe stunting. Command rates for peppers is 0.67 to 2.67 pts/A; winter squash is 0.67to 2 pts; summer squash is 0.67 to 1.33 pts

The recent weather change back to more seasonal cool and moist norms is the perfect situation for **seed corn maggot**. This pest is usually more problematic in fields with high organic matter content. According to Vern Grubinger's Vermont Vegetable and Berry News, planting depths should be as shallow as possible to hasten germination. Plow heavily manured or cover-cropped land early, so it will be less attractive to the egg-laying flies. Thoroughly mix in organic matter when preparing the soil and allow the soil surface to dry because the insect is attracted to decaying residues and moisture. When possible, delay planting until the first generation is pupating (probably early June). Seed treatments are available against seed corn maggots, which include Lorsban, diazinon and Counter. All 3 of these are restricted use chemicals and will require a pesticide applicator certification in order to apply.

The Vermont newsletter also reported an interesting anecdotal approach to controlling **cutworms**. In addition to deterring cutworms by cultivating fields in the spring, then delaying seeding to starve the cutworms, some growers report control by mixing a concentrated Bt solution with bran and molasses and making patties of the material and placing them along the crop rows. Cutworms are particularly bad when they follow a sod rotation, so consider that when planning rotations. Insecticide treatments should be made later in the day because cutworms tend to be nocturnal. Also, treatments can be limited to the field edges where the damage is likely concentrated and then a 20-40 foot buffer around that area.

There have been a fair amount of **flea beetles** on early crops. Row covers make an excellent barrier, but that doesn't mean that you should ignore them. If the beetles are inside the cover feeding it will be very disappointing when you finally take it off. Make sure edges are well sealed.

The recent drop in temperature s may result in yellow, **chlorotic corn**, even under the plastic. Corn is a C4 plant, which describes a pathway that carbon takes through the corn leaf during the process of photosynthesis and respiration, but suffice to say that warm temperatures are needed for corn to make chorophyll. As long as temperatures don't get so low to cause chilling or freeze injury, the corn will rebound when warm temperatures return.

Greenhouse: Annual Vinca has a reputation as a difficult annual to grow. The problem is that vinca is best grown at higher temperatures (70 °F nighttime) and must be kept on the dry side. The pH should be 5.4 – 6.0. While trying to keep this plant on the dry side some growers keep the fertilizer applications infrequent. Once the roots hit the bottom of the pot you need to keep the fertility up and maintain a soluble salt level of 1.0 -1.2 mS/cm using the saturated paste method of 2:1. Under fertilized plants will exhibit poor color and poor growth. **Wave Petunia** is another plant that is a fabulous performer, but growers have often wondered how to keep them from growing so much that they form a mat on the bench. According to Maryland growers, most people are applying B-nine at 5000 ppm starting after the plug is placed in the pot and repeating

for 3 applications. To help bring the plant into flower, hold the plants slightly on the dry side until flowers show. Once the plant has reached the size you want an application of Bonzi will hold the plant. The question is how much Bonzi do you apply? Some growers are applying a drench of 5 -10 ppm. If the plants are held inside most growers are going with the higher rate. If the petunias are outside then use the higher drench rate. When using Bonzi on petunias grown indoors, growers are using 30 - 40 ppm. For plants held outdoors then 20 -30 ppm appears to be a range that is effective in holding the plants. (From: TPM/IPM Weekly Greenhouse IPM Report, University of Maryland Cooperative Extension).

Landscape: When is Roundup not just Round-up?:
Dave Chinery in the Capital district did a survey of available "Round-up" non-selective herbicide formulations and found some new additions:

- **Roundup Concentrate Plus** contains 18.0% glyphosate and 0.73% diquat dibromide. This formulation is designed primarily to increase the speed of kill and visible symptoms.
- **Roundup Super Concentrate** contains 50.2% glyphosate. The "typical" Round-up formulation used to have 40% active ingredient not sure why this is so high other than you will add less when you use.
- **Roundup Ready To Use Plus** contains 2.0% glyphosate and 2.0% pelargonic acid. This combination is also designed to increase speed of kill but does not significantly enhance control. The pelargonic acid is the same active ingredient on Scythe and can have an objectionable vomit-like smell.
- **Roundup Ready To Use Extended Control** contains 1.0% glyphosate and 0.03% dithiopyr. As the name implies this is a combination of non-selective control with pre-emergence control. Therefore it is not recommended for lawn applications where re-seeding is expected.
- **Ortho Season Long Grass and Weed Killer** contains 0.25% glyphosate and 0.25% oxyflurofen**.** Again a combination of non-selective round-up and pre-emergence control but will not provide pre-control of broadleaf weeds only grasses.
- **Ortho Basic Solutions Weed and Grass Killer** contains 18.0% glyphosate. Standard formulation of round-up for non-selective control.
- **Ortho Ground Clear** contains 5.0% glyphosate and 0.08% imazapyr**.** As the name implies a strong pre-emergence is added to round-up for excellent pre-emergence control of grasses and broadleaf weeds. There could be some issues with surface movement of the pre-emergence on soil or pavement with the potential for root-uptake and injury from the imazapyr.
- **Ortho Basic Solutions Liquid Edger** contains 0.75% glyphosate. Standard ready to use formulation of round-up for non-selective control.

Sincerely,

Aaron D. Gabriel
Extension Resource Educator
Crops and Soils

Table 3.7.2. Labeled application timing for corn herbicides (shaded cells)

Corn Herbicides	EPP**	PPI**	PRE**	SPK-2 Leaf VE-V1	EPO 4–5 Leaf V2-V3	MPO 6–7 Leaf V4-V5	LPO 8+ Leaf V6+	Maximum Height Broadcast
*AAtrex/Atrazine	■	■	■	■	■	■		12 in.
*Accent				■	■	■	■	20 in.
Aim	■		■	■	■	■	■	V8
Banvel/Clarity			■	■	■	■	■	36 in.
Basagran				■	■	■	■	
Basis	■		■	■	■			6 in.
*Beacon					■	■	■	20 in.
†*Bicep II Magnum	■	■	■	■	■			5 in.
†*Bicep Lite II Magnum	■	■	■	■	■			5 in.
Buctril					■	■	■	before tassel
Buctril + *Atrazine					■	■		12 in.
†*Bullet	■	■	■	■	■			5 in.
Callisto			■	■	■	■		30 in.
2,4-D	■		■	■	■			8 in.
†Dual II Magnum	■	■	■	■	■			5 in.
Exceed					■	■	■	30 in.
†*G-Max Lite	■	■	■	■	■			12 in.
†*Guardsman MAX	■	■	■	■	■			12 in.
Hornet WDG	■	■	■	■	■	■		20 in.
*Laddock S-12				■	■	■		12 in.
Liberty				■	■	■	■	24 in.
†Lightning				■	■	■		20 in.
Lorox			■					.
†*Lumax	■		■	■	■			5 in.
*Marksman			■	■	■			8 in.
†*Micro-Tech	■	■	■	■	■			5 in.
NorthStar					■	■	■	20 in.
†Outlook	■	■	■	■	■			12 in.
Permit				■	■	■	■	layby
Princep	■	■	■					
Prowl/Pendimax			■	■	■	■	■	30 in.
Python	■	■	■	■				1 in.
Resource					■	■	■	V10
Roundup WeatherMax	■		■	■	■	■	■	30 in.
Sencor				■	■	■	■	
*Shotgun	■		■	■	■			8 in.
Steadfast				■	■	■	■	20 in.
*Steadfast ATZ				■	■	■		12 in.
Stinger				■	■	■	■	24 in.
Yukon				■	■	■	■	36 in.

*Restricted-use pesticide; may be purchased and used only by certified applicators or used by someone under the direct supervision of a certified applicator

†Not for use in Nassau and Suffolk Counties; pesticide labels that indicate "Not for use on Long Island, N.Y." mean that use is prohibited in Nassau and Suffolk Counties only.

**EPP=Early Preplant, PPI=Preplant Incorporated, PRE=Preemergence