

**Washington County Ag Report
September 14, 2004**

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

“No success can compensate for failure in the home.” -- David O. McKay

Announcements

Please print, fill out, and mail in our evaluation at the end of this report or see the Word document attached to the e-mail.

Sept. 24 - 26. Common Ground Country Fair. Maine's largest Ag fair, by the Maine Organic Farming and Gardeners Assoc. Minimal entrance fee, large diversity of organic farming and sustainability booths and demos. www.mofga.org or call 207/568-4142.

Sept. 24, Oct. 22 & 23 – Livestock Nutrition and Healthcare – in Burlington, VT. A course to help you raise healthy ruminants through good preventive care, nutrition, and the use of treatments which are natural or approved for use on organic farms. Sponsored by NOFA-VT, SARE, and USDA Risk Management Agency. For details and to register call Sarah at 802-933-6965. Pre-register by 9/17. AG

Friday, Sept. 24, 11 am – 2 p.m. – Raising Meat Goats on Browse: From Kidding to Market – near Brattleboro, VT. Sponsored by Vermont Pasture Network. Call Gwyneth Harris, 802-728-5561 or Candice Huber, 802-656-5459. AG

September 28 & 29th - Agricultural Assessment School, 8-5:00, for Tax Assessors eligible for 15 CEV's. For more info, call 272-4210

Sunday, Oct. 10, 2 – 4 p.m. – Commercial Potential of Old and New Fruit Crops for Small Farms – in New Paltz. Contact the Regional Farm & Food Project, 271-0744. AG

Tuesday, Oct. 26, 9:30 am – 3 p.m. – Field Crop Dealer Meeting – at the Comfort Suites, Clifton Park. Cornell faculty discuss their latest research on field crops. CCA and Pesticide credits available.

Oct. 28-30 The Agriculture Development Council of Chenango County is offering a hands-on cheese-making course for beginners to be held at the Morrisville State College Agri-Business Center in Morrisville. Participants will be able to make up to six cheeses during the daylong sessions. Peter Dixon, a Vermont-based cheese consultant, will teach the workshop. Dixon has served as a consultant for many specialty cheese operations, including Shelburne Farms, Vermont Shepard, Guilford Cheese Company and Cato Corner Farm. He is part owner of Westminster Dairy, a farmstead cheese business. Cost of the workshop is \$250, if payment received by Oct. 1, and \$275 after. Costs include lunch and snack. To register or for more information, call 334-5841 extension 11 or email rjs58@cornell.edu.

Oct. 29-31. 2004 Cornell Sheep & Goat Symposium. Livestock Pavilion on the Cornell University campus in Ithaca. Practical information on management and marketing, health,

computer software, and adding value to wool. Additional information about the program is at: www.sheep.cornell.edu/sheep/calendar/symposium/program.html

Midwest Commodity Prices - from the Wall Street Journal

Corn per bushel	\$2.04/bu	Cotton Seed Meal per ton	\$143/ton
Soybean per bushel	5.49/bu	Corn Gluten Feed	61/ton
Hominy Feed per ton	54/ton	Wheat, soft white	3.96/bu
48% Soybean meal per ton	185/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	1.30	0.27	1.30	0.40	1.60	0.29	1.40	0.00
So far this month	1.30	0.68	1.30	1.02	1.60	1.13	1.40	1.70
Total since April 1 st	27.91	19.71	26.33	18.98	26.34	21.13	23.93	18.51
GDD Base 41 Growing Degree Days = [hi temp + low temp]/2 – 41								
Past Week	182	179	188	179	193	188	167	139
Since April 1 st	3625	3619	3689	3741	4052	3938	3634	3665
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	120	122	126	123	131	126	110	93
Since April 1 st	2477	2467	2560	2569	2805	2701	2500	2517

Weather Data Comments: Temperatures this summer have seemed a bit cool, yet our growing degree-days for corn (GDD 86/50) are about average – Why? Corn grows its fastest at 86 °F. Hotter than that, and it does not grow any faster. Notice on the formula on the weather table for GDD 86/50. Temperatures above 86 °F are set back to 86 °F to calculate the growing degree-days. Also, if the temperature dips below 50 °F at night, the low temp for the formula is raised to 50 °F for the GDD calculation. However, the GDD 41 used for alfalfa growth does not adjust the “extreme” high and low temperatures for the calculation. GDD 41 may be more useful to compare one season to another.

DAIRY: Sometimes when nutritionists and dairy producers evaluate the effectiveness of a ration they utilize production records and feed analyses with out even looking at the cow. Cows thrive on consistency and any little change in their routine can have an effect on health, production, and growth. This is why it is so important to observe the whole cow environment when evaluating the effectiveness of rations and deeming if changes are necessary. Interacting with the cows is the only way to understand their environment and involves looking at bunk

management, water availability, body condition, cow comfort and so on. Using your senses watch how the cows exit and enter the parlor and check to see that they are not apprehensive to enter or look uncomfortable while being milked. Observe cows as they return to individual pens or interact with other cows out in the pasture for painful walking or long periods of lying time. Check to see that cows are utilizing stalls properly and don't hesitate to drop down to her level to get the perspective on their comfort. Utilizing a piece of paper, walk down the feed bunk and note the cows that are eating or walk through the stalls to observe cows chewing their cud. A cow that is provided a comfortable place to lie down, ruminate, get off her feet, and rest is important for keeping her healthy and productive.

FARM BUSINESS NOTES:

As the milk price continues to drop and producers polish their crystal ball and watch for price forecasts, it is hard to predict where everything is going to settle out this year. Forage quality is variable, the U.S. and global grain markets are in a state of flux and all of this is leading to uncertainty. Producers need to stay aware of what is going on.

VEGETABLES:

Solanaceae: Keeping Your Potatoes Cool: A major problem in many storages is allowing the temperature in the center of the potato piles to go into the 70's or even 80's. This often occurs when night temperatures are warm, in the 50's and lower 60's, and growers do not ventilate. Bringing cooler outside air into a storage and exhausting the warm air is necessary during the curing period to remove respiration and field heat and to supply oxygen. **Temperatures above 60°F should not be allowed to build up within the pile.** Check temperatures on the top and center of the piles. If these storage temperatures are above the temperature of the outside air, ventilate the storage. An exhaust fan is ideal for removing warm air from the top of the storage and bringing in cooler outside air. An exhaust fan should be sized at one-quarter cfm (cubic feet per minute). For example a 20,000-cwt. storage should have an exhaust fan rated at 5,000 cfm. (LI Fruit and Veg Update)

LOCAL GROWERS OFFER BULK SEED BUYING SERVICE (Mike Collins and Pete Johnson in the Vermont Veg and Berry News) We are two organic Vermont vegetable farmers, frustrated with the high cost of seed, starting a seed bulk-buying service, Organic Seed Services of Vermont. We will limit our overhead, saving 30 to 40% on seed cost. Organic and conventional seeds will be available. To guarantee availability of the most popular varieties, reserve seed early. You can order this Fall until early January. For more info visit www.organicseeds.cjb.net, e-mail seeds@sover.net. Or write to: Michael Collins, 463 Daigel Rd., Putney VT 05346.

Edited from Veg Pest Status Report 9/10/04 By John Mishanec, IPM Veg Program

Sweet Corn. We caught very few **moths** last week in the traps and it is possible the flights are just about over. Moths can live up to two weeks after they arrive and with the continued storms coming up from the south it is probably advisable to continue with your silk sprays. Talking with a number of growers, they agree a **5-6 day schedule** has provided good protection from **earworm** and other insect pests. With the decreased trap catch numbers, we can probably stay

with the 5-6 day schedule or even stretch it out to seven. Once the silk is brown, you can stop the sprays for that field.

Tomatoes In years past, Capital District growers have experienced **late blight** on late season tomatoes. With all the rain and all the late blight around us, I would not be surprised if late blight comes in on late tomatoes. If you see black shoulders on your tomatoes and large black spots on the leaves, you probably have late blight. Contact your local Cooperative Extension office to have someone come out and confirm the disease. At this point in the season, if you get late blight, it probably is not worth the expense of using the expensive fungicides to limit the spread of the disease. Another factor is late blight will not over-winter and re-infect your crops next year unless it comes up in cull piles or volunteers. If you get late blight, destroy the crop now so it doesn't potentially spread to a neighbor's crops and deep plow the residue. In the spring, keep an eye out for volunteers. *(note: there has been two unconfirmed late blight incidences on tomatoes in Washington County. One in the central and one in the southern part of the county)*

Vine crops In many of the pumpkin fields there has been good set going on. There are a lot of smaller, softball sized pumpkins on the vines. The wet weather is keeping the plants going and the fruit is sizing up quickly. Normally, this second and third set does not amount to anything but this year I think it will. Walk your fields and assess your near maturing pumpkins. If you feel you need more yield, you may want to continue your protective fungicide spray schedule another week or two. The extra yield from the second and third set may be valuable to your total earnings from the crop.

Downy mildew has been found in scattered locations throughout eastern NY. Look for a checker board appearance on the upper leaf surface. From Tom Zitter and Meg McGrath, Cornell: To control this disease it is critical to use systemic fungicides early. Ridomil is the standard control. Previcur Flex and Curzate, systemics, are now labeled in NYS. Always tank-mix them with a protectant like Bravo/Echo or maneb/mancozeb. From: LI, CCE - 8/27 -

Powdery Mildew: Symptoms of powdery mildew have become severe on the underside of pumpkin leaves in production fields examined recently, while the top side is generally free of symptoms. This suggests the timing of broad-spectrum protectant fungicide applications has been good (thus good control on the upper leaf surface), but that Quintec and Nova have either not been applied at the appropriate timing (not started when powdery mildew first appeared and/or too long a spray interval between them), Nova has not been used at the highest label rate, or resistance to the DMI fungicides has reached a level that Nova is no longer sufficiently effective. These fungicides are not effective for managing established powdery mildew and this use can lead to selection of resistant pathogen strains. Thus Quintec and Nova are not recommended where powdery mildew is severe (average of more than about 30% of lower leaf surface with symptoms). Sulfur or JMS Stylet-oil is a better choice in this situation. These materials have provided better control of powdery mildew on lower leaf surfaces than other protectant type materials. Note that JMS Stylet-oil and chlorothalonil applications should be separated. (There's a report of good control with Quintec locally).

CROPS

Soil Quality: What can you do about compaction from silage harvest? Once corn silage harvest is over, you may want to plan ahead to do some **frost tillage** this fall and winter. It is a good

way to do field work in the “off season” and correct *surface* compaction. When the top 2 to 3 inches of soil is frozen and free of snow, it is a good time to run a chisel for tillage. The frozen soil supports the tractor. The freezing actually dries out the soil because as ice crystals the water is coming off of the soil particles. Usually there are a couple of days in the fall and a couple of days in late winter when the conditions are right for frost tillage. You have to monitor conditions closely, have your machinery ready to go, and then jump on the opportunity to work the soil under the proper conditions. The freezing and thawing loosens up compacted soils. Call me if you have any questions. AG

Cover Crops: What more can I say, *cover crops are the right thing to do.* AG

Alfalfa: Do not harvest any alfalfa until it has gone fully dormant. A short article from Carl Albers (CCE Stueben Co.) is attached.

Field Corn: Corn harvest is under way. Stop and check whole plant moisture using the microwave or some other method. Milk line indicates the dryness of the ear, but the ear contains only half of the total dry matter in a corn plant. The stalk and leaves contain half the dry matter. So you need to check whole plant moisture for proper ensiling. Silage for bunkers should be 68% moisture and no more than 70%; for bags it should be a couple of points drier. For uprights and bags it should be 65% moisture. **There is an abundance of corn silage - Should you cut your corn silage high this year?** Tom Kilcer advises “no” and I agree. The crop may be big, but it will not be silage until it is in storage. One hurricane can prevent you from bringing in your crop. Especially for forage type silage hybrids, the lower stalk is still good feed. Our haylage is mostly fair to poor again this year – so you may need to feed a high corn-silage diet. Comments from Ken Wise (IPM Specialist, Cornell) are on a separate page about molds in ears and stalks. The corn I have seen looks healthy, despite all the rain this season. Remember, once we get a hard freeze, corn silage quality takes a dive and molds and mycotoxins take a jump. **However, be safe when you harvest. There are lurking ruts and washouts from rains earlier this season.**

Grasses: It is okay to harvest grasses late in the season. In fact, having too much grass left in the field may promote snow mold, which can kill out a stand or parts of it.

Sincerely,

Aaron D. Gabriel
Extension Resource Educator
Crops and Soils

Stop! Check for Corn Ear Rot! (from Ken Wise)

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. The cool and wet conditions we have had most of the summer have been good for certain ear rots to establish. 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 birds, deer or insect-damaged kernels. Fusarium ear rot may contain *fumonisin*s, 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 progressing 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 progress 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.

Remember if you can reduce stress on the plants with proper fertilization, timely weed control, and reductions in insect pest pressure, the disease risk will be reduced. For example: European corn borer (ECB) resistant Bt corn has lower risk of insect injury to the corn. This means there is less potential for fungi to infect through wounds caused by ECB tunneling. 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 inspections of the stored grain. This is essential to minimize risk of developing insect and mold associated storage problems. Harvest silage at recommended maturity and moisture level, and pack silage tightly and exclude air rapidly. 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/) or from lab manager Joe Hillebrandt at 607-257-2345.

Check For Stalk Rots! (from Ken Wise)

It is important to monitor your fields for stalk rots as you prepare for harvest. If you have an infection of stalk rot it can cause the plant to die early losing grain or silage yields. Stalk rots are caused by many different fungi that enter the plant. They occur when the plant is under stress or when it may be injured by insect pests, hail, deer and bird damages, drought or soil saturation, lack of sunlight, extended cool weather, and the lack of fertility. The following are symptoms of specific stalk rots:

[Anthracnose stalk rot](#) symptoms may appear after tasselling as vertical, tan to reddish brown, water-soaked lesions (streaks) in the stalk rind. Lesions become large, dark brown to shiny black. Fields with high amounts of anthracnose leaf blight (both diseases have the same causal agent) should be checked for indications of anthracnose stalk rot.

[Diplodia stalk rot](#) symptoms may appear as numerous black pycnidia in the lower internodes of the stalk. The black dots are the size of a pinhead or smaller. When conditions are wet a white mold may develop on the stalk surface.

[Fusarium stalk rot](#) normally starts just after pollination and symptoms appear later in the season. When you cut open the stalk, the pith appears as a whitish to pink (salmon) color. There are also distinctive brown streaks on the lower internodes.

The first symptom of [gibberella stalk rot](#) is the onset of grayish-green color of the leaves. The stalk will turn dark green to tan near the base of the plant. The pith of the stalk becomes soft and will appear as a red to pinkish color.

[Pythium stalk rot](#) normally appears as a decay of the first internode above the soil. The pith will become soft, turn brown and appear water-soaked. Many times the stalk can twist and/ or lodge. Even though it may have lodged the plant will stay green for several weeks because the vascular tissue is not destroyed.

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

As with most diseases that attack corn, if you can reduce stress on the plants you most likely can reduce the occurrence of certain stalk rots. Having a sound fertility program based on soil testing is important for keeping a corn plant healthy. Select a hybrid with resistance to certain diseases and good standability that is adapted to your region. Some of these stalk rots can produce mycotoxins that can be toxic to livestock. You should consider having silage tested for certain mycotoxins if you had fields with stalk rots this season. For more information on corn diseases checkout our online publication: [IPM for Corn Diseases](#)

Fall Cutting Of Alfalfa

Carl Albers

Sources: Jerry Cherney, Department of Crop and Soil Sciences, Cornell, Julie Hansen, Department of Plant Breeding and Genetics, Cornell, and Ev Thomas, Miner Institute, Chazy, NY.

I recently was asked what the latest thinking on fall cutting of alfalfa was and used this opportunity to talk with the specialists listed above about harvest timing and how it might affect the crop. Jerry Cherney suggested that if you use a modern, disease resistant alfalfa variety, maintain proper pH and high fertility, and the site has good drainage, then there “should be at least 42 days (6 weeks) between the last and next to last cuttings.” Jerry added, “After September 15 there is a slightly increased risk of winter injury if cut at lower than a 6-inch stubble height.” Dr. Cherney went on to say that if a stand is stressed, less cutting in general will reduce the risk to the crop. He says it is better to have 6 weeks between a September cut and the previous cut, then to have 6 weeks between a September cut and a hard freeze.

Dr. Julie Hansen runs the Forage Testing Program at Cornell. **Julie says try to avoid harvesting legumes during the last 2 weeks of September (last 3 to 3.5 weeks in Northern New York). This year it is important to avoid harvesting late in September because of the wet soils - root disease pressure that alfalfa has been under. If the Cornell forage harvesting crew runs behind, they will delay cutting of younger stands until after the first of October. They will harvest fields that are in the last year of production during the middle of September or later, since winter survival is not an issue with these fields.**

Ev Thomas, agronomist at the Miner Institute in Chazy, NY says “a new concern is the positive ID of brown root rot in NY State.” Alfalfa plants collected from numerous farms in his area tested positive for BRR. One farm that cuts in October every year lost 800 acres of alfalfa over the winter, and his fields tested positive. One of the recommended practices to reduce the effects of BRR (as opposed to prevention) is to be cautious about late season harvests. Ev says that he would be especially careful about new seedings. He said that “while we've cut new seedings three times (third cut in October), this was on really good alfalfa land”

On the subject of leaving accumulated forage growth in new seedings, Dr. Hansen says she thinks it best to harvest after a hard frost if you weren't able to cut **early in September**. She added that they try not to leave too much growth on the fields over winter to reduce the risk of smothering the crop. **Additionally, if a plot trial has lots of regrowth, meadow voles can move in and tunnel under the plots. In some areas, deer take care of the regrowth, and if there is heavy deer feeding – then cutting just adds an additional stress on the crop.**

Dr. Cherney says that it is common practice on a commercial basis to leave accumulated forage going into winter and that many people believe that leaving this material to catch snow is a good thing. He knows of no instances where people knew they lost an alfalfa stand due to significant growth left on the field in the fall of the year. Dr. Cherney cautioned that perennial ryegrass will

get significant mold increasing the potential for winter damage if accumulated forage is left in the field going into the winter.

Ev Thomas, says that he doesn't get concerned at all about a good crop of alfalfa smothering itself over winter. According to Ev what almost always happens is that freezing weather knocks many of the leaves off the plants before they lodge. Ev says that often the plants don't lodge at all, and stick up through the new growth the following year. He added that this can reduce quality in the first cut, but unless there's a real pile of alfalfa left standing he doesn't think this is a huge problem.

In the case of seedlings that were planted this summer, Ev Thomas suggests that clipping if they are weedy is a good idea to prevent weed seed production. Ev suggested that clipping high, if you are not removing the forage, will help to reduce the risk of smothering the alfalfa seedlings.

We Need Your Response – 2004 “Ag Report” Evaluation

Please fill out this survey and return it by mail or email.

(Use the back side for additional comments.)

What commercial enterprise do you manage? (circle one or more)

Livestock Field Crops Vegetables Ornamentals/Turf Fruit None

Will you subscribe to the “Washington County Ag Report” next year? YES NO

Did you receive the “Ag Report” by email this year? YES NO

If yes, were you satisfied with this method of delivery? YES SOMEWHAT NO

What suggestions do you have to improve delivery by email?

Would you be interested in having a “classified ad” section in the “Ag Report” for subscribers to place free ads for items and services? YES SOMEWHAT NO

How else can we improve the “Ag Report”?

We are scheduled to have a local dairy tour in 2005 for dairy producers. Do you have suggestions for topics to address or farms to visit?

What are the most critical issues facing agriculture in Washington County?

How many times each year do you talk to your Town Supervisor? _____

Is CCE ever part of your conversation? OFTEN OCCASIONALLY NEVER