

Farm Flashes

May 2007

Cornell Cooperative Extension
of Oneida County

Crop Shorts

By Jeff miller

Hay

Alfalfa stand evaluation: Alfalfa stand populations can be negatively impacted by a number of factors:

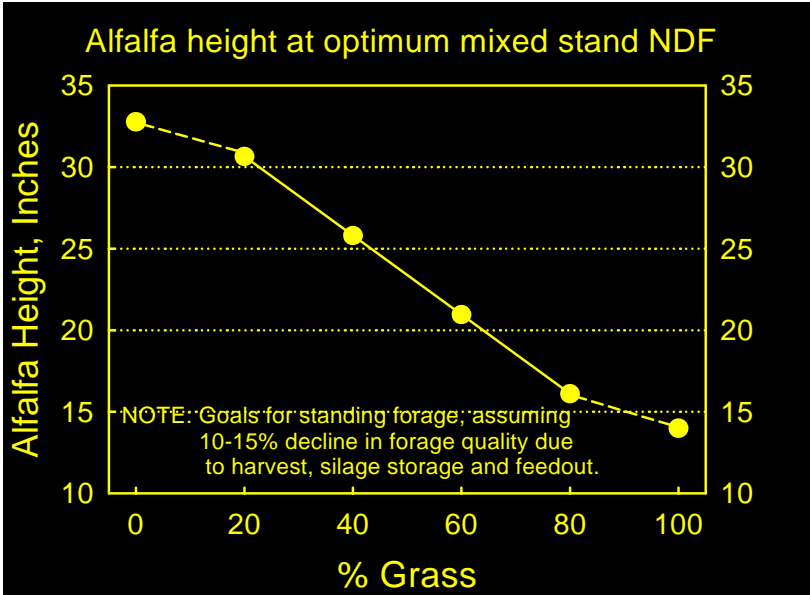
- Potato leaf hopper infestation in the previous season can rob root reserves causing winter kill
- Diseases like phytophthora root rot, bacterial, verticillium or fusarium wilt can infect plants and reduce populations
- Flooding or ice sheeting can kill plants in low lying pockets within fields
- Frost heaving can expose crowns to freezing temperatures increasing alfalfa mortality

Alfalfa has a great ability to compensate where populations decrease. When given room it sends out more shoots increasing the amount of biomass produced by each plant. Even so, there is a point where a grower has to make a decision in how to manage a stand; that occurs when your average alfalfa plant population is 4 crowns or less per square foot. If there is adequate grasses in the field the grower can manage the sward as a grass stand or make the choice to rotate to another crop.

This measurement of population can be done easily by making a 1'x1' square using 1" pvc pipe, counting the live crowns of alfalfa within the square at 5 randomly selected spots within a field to identify the average number of alfalfa crowns per square foot in the sward.

Timing hay harvest for highest quality. For the past several years CCE has clipped samples from local hay stands, sent them to Dairyone and received the results back in 24 hours. We do this once a week starting in May and report the results to over 90 local farms and Ag businesses by email. (If you want to get this information and additional information on pest outbreaks in Oneida County as they occur send me an email jjm14@cornell.edu and I will put you on the list). This is a great alert but isn't localized enough to identify specifically when your fields are nearing optimal quality. A quick method that can be used in predominantly grass stands is to split your grass stems with your pocket knife and find where the inflorescence is in the stem. Start this in early May and follow the progress of the inflorescence up the stem, planning harvest near the boot stage: just before the inflorescence comes out of the stem. For the few of you that have clear stands of

For the rest of us that have mixed swards of alfalfa and grass you can use the chart below for a good estimate of when to hit each field on your farm. (See chart below) There are 2 characteristics to measure: alfalfa height and your estimate of the percentage of grass within the stand. Measuring the alfalfa height is easy. Estimating the percentage of grass isn't as easy. If you are like me or for that matter most people, we over estimate the percentage of alfalfa. Below are 3 pictures of mixed swards and the percentage of grass to help you calibrate yourself.



17" tall 20% grass



18.5" Tall 50% grass



13.5" tall 75% grass

Wide swathing hay can save time and money and produce higher quality hay crop silage. Wide swathing of hay is mowing so that the resulting swath is 90% or more of the mowers width. Not all mowers are able to accomplish this task. Hay mowed in a wide swath without conditioning will dry down to 65% moisture very rapidly. In fact local producers like Gary and Jeremy Teel are mowing in the morning and chopping in the afternoon.

Increased quality:

- When you mow and chop in the same day very little of your hay gets rained on
- Research results show more energy remains in the hay crop silage because there are less losses to respiration
- Quick drying and fermentation reduce the amount of soluble proteins leaving more protein in a fraction that is more compatible with ruminant digestion
- Growers that wide swath state that they can harvest more fields in a timely fashion because they only need a single day for harvest rather than be stuck looking for two consecutive good weather days for mowing and chopping.

Increased savings:

- Wide swathing requires 3 operations: mowing, raking and / or row merging and chopping vs conventional narrow swathing which is 2 operations mowing and chopping. The first step (wide swathing) reduces the time it takes for the forage to dry down to a suitable moisture for ensiling, the second step: row merging- taking multiple rows and putting them in a single row saves a great deal of chopping time. Whether its 2 rows to 1 for first cutting or 3 or 4 rows to 1 for 2nd and 3rd cutting. That low horse power tractor on the row merger or rake saves a great deal of fuel \$\$\$ by reducing how long the chopper is running.
- Increased quality of hay crop silage reduces purchased feed costs
- Farmers like the Teels exclaim how much time they save by wide swathing. There isn't an 18 or more hour lag between the time you mow a field and chop it. Gary said that the time they save gave his son the opportunity to do custom hay harvest for neighbors. Another farmer might use this time to do a more timely spraying of herbicides in corn fields increasing the yield and profitability of their corn crop.

Disk Mower

Most of our local equipment dealerships have offered programs on how to maintain and set up equipment. I attended Clinton Tractors Hay clinic a week ago along with 20 local farmers. They had a couple of very knowledgeable people talk about key maintenance tips and proper set up of equipment for operation. I asked Bob Durant to give me the following highlights:

The piece of equipment they used to highlight these tips was a New Holland 1411 Disk Mower:

- Set up mower on tractor to be used with the mower. Set up the hitch so it is level. Check the hitch distance from tongue to center of holes in hitch of mower 14" 540PTO 16" 1000PTO,
- Grease CV joints 18-20 pumps daily- this could save \$1500 on the replacement of a CV joint



- Make sure moving parts have covers for your safety and the safety of your kids
- Drain and refill oil on the disk units annually, use an 8090 non-foaming oil
- Check blades often, 14 or 16 degree blades work for many farmers, “v” knives are more durable if rocks are an issue
- Follow procedure in owners manual to set up float settings to be as light as possible yet do a good job of mowing
- Run the machine, if it has conditioners check the condition of the forage. Over conditioning can reduce leaves (quality) and cause parts to wear out more quickly.

Baler maintenance tips

- Make sure everything is running free
- Check to make sure that chains are tight and oiled
- Look over twine guides; if they have grooves then replace them
- Check your timing (timing marks or owners guide)
- Change hydraulic filter annually
- Look belts over for wear and replace if necessary
- Check and replace pick up teeth if necessary
- Check slip clutch, block of wood and bar could save your driveline
- Check shear bolts; make sure they are tight

If you change to a different tractor, check that the machine is as level as possible and that the driveline is as straight as possible.



Clinton Tractor Hay Clinic

Wheat

Check field populations:

- Make *spring* stand counts at greenup of the plants to determine if winter damage has reduced the initial plant population obtained in the fall. Count only whole plants, not tillers. Fields with stand counts below 15 plants per square foot have less than 75 percent yield potential and probably should not be kept but used instead for planting corn or soybeans. If stand counts are adequate to keep but somewhat reduced from optimum, consider early nitrogen application. To determine the number of plants per square foot, use the following steps:

- Step 1.** Use a yardstick, or cut a dowel rod to a 3-foot length.
- Step 2.** Place the measuring stick next to an average-looking row, and count all plants in the 3-foot length of the row. Record the number.
- Step 3.** Repeat the counting process in at least five other locations well spaced around the field. Record all numbers.
- Step 4.** Average all of the plant stand counts from the field.
- Step 5.** Calculate plants per square foot with the following equation:

- ⇒ Plant number = (average plant count × 4)/row width in inches
- ⇒ Apply N at 40-60 lbs acre
- ⇒ Check for diseases

Stagonospora nodorum blotch: I found *Stagonospora nodorum blotch* on the lower leaves in a rye cover crop at the Cornell Research Farm at Valatie on Friday April 20. Splashing rain or thunderstorms can move spores from soil surface on to the plant. This fungal pathogen may also reside in residue on the field surface. In wheat, greatest yield losses occur when the flag leaf and the next two lower leaves become infected by the time the wheat flowers in late May. Leaf lesions begin as very dark brown flecks or spots, sometimes with a yellow halo. These small irregular lesions expand into oval light brown lesions with dark brown centers. As lesions enlarge, they become dark brown and the centers turn grayish-white in color as tiny brown or black dots (pycnidia) develop within them.

Powdery Mildew: While I have not seen Powdery Mildew this year, it is a common disease of cereal grains in NYS. Powdery mildew forms a white to gray, fungal coating on the above-ground parts of the wheat plant. Lower leaves are usually the most severely infected because of the high humidity in the lower canopy. As disease lesions age, small black fruiting bodies (cleistothecia) develop with in white infected areas. Powdery mildew is favored by wet and humid days with moderate temperatures of 60 F or above. Powdery mildew is disseminated by airborne spores.

Leaf Rust: Leaf Rust does occur in NYS and is commonly found in Late April through June. Rust lesions are small, circular, and vivid orange in color. They may occur on stems, but are most common on the upper surface of leaves. Leaf rust is favored by warm and humid weather with thunderstorms in June. Leaf rust is disseminated by winds which carry the airborne spores great distances. Temperatures between 60 F and 80 F are optimal for disease development.

Soybeans

- Check seeds/lb on tag and calibrate planter accordingly
- Recent results from Cornell trials have shown that growers can roll back planting rates without compromising yield: consider planting 30" row beans at 160,000/ac and 15" or less down to 180,000 seed/ac
- Double inoculate beans: full rate of liquid with full rate of peat innoculum applied to seed just before planting
- Don't plant until soil temperatures are 60F
- Plant at 1-1.5" depth
- Don't over till soil to avoid crust development and population reduction
- If you are going to use cruiser treated seed, consider splitting a field to compare yield with and without cruiser treatment
- Mark your calendar at planting and be prepared to apply glyphosate between 3-4 weeks after planting. Remember to adjust rates of glyphosate based on label recommendations for the product you purchase. Apply in 8-10 gals of water per acre. Make sure you add spray grade ammonium sulfate.
- If you haven't already bought seed, local growers have had good results with 1.6, 1.9 maturity groups at many locations in the county and 2.1 maturity in areas with longer season. There hasn't been great differences in yields between 1.9s and 2.1s.

Corn

Refuges for Corn that has corn root worm BT gene:

(The refuge requirements are more strict for CRW than for ECB, so if CRW requirements are followed, your all set for both pests)

- Plant at least 20% of corn acres with a corn hybrid that does not contain Bt technology for CRW
- The refuge can be treated with soil insecticide or seed applied insecticide, but NOT with other Bt insecticides

- Plant the refuge within the field or in an adjacent corn field (your neighbors corn field is NOT considered your refuge!)
- Options for the configuration of refuge include:
 - Adjacent to Bt corn field (not further away than a road, path, or ditch)
 - Field end rows or field perimeter
 - Mixing of non-Bt seed with Bt rootworm seed for inter-planting is not permitted

New herbicides labeled:

Impact

- Active ingredient topramezone
- a pigment bleacher like Callisto
- post emergence application only
- 0.75 fluid oz/ac
- should be tank mixed with atrazine at 0.25-1.0 lb a.i. /ac for best performance
- apply from spike stage of corn to 45 days prior to harvest, when grasses are 2" and broadleaf weeds are 2-4" tall
- apply in minimum of 10 gals of water/ac with methylated seed oil or crop oil concentrate and a nitrogen source
- excellent activity against many summer broadleaf annuals like velvetleaf, pigweed, common ragweed, common lambsquarter and wild mustard, good burndown activity against giant foxtail and crabgrass and partial control of green and yellow foxtail and fall panicum, atrazine would add control of pigweed, barnyardgrass and witchgrass

Resolve

- Active ingredient rimsulfuron
- ALS inhibitor; this active ingredient also in basis and steadfast
- Added to current Preplant or preemergence or postemergence program for added burn down or residual activity
- Resolve can be added to many current combinations

Recent work by Russ Hahn doesn't indicate that it has any distinct advantages over more familiar residual herbicides

Rotational Grazing

About 7 years ago Jackie Hilts worked with Ray Paddock, a dairy farmer in Remsen to help him identify what kind of savings he was accruing by rotational

grazing. Jackie helped Ray pull together all his costs for the winter months (feeds, electricity, bedding, labor, etc) and compare them with those same costs during the pasture season when he rotationally grazes his milking herd. When all the numbers were crunched they identified that he was saving \$21,000 during that 6 month period on pasture. Costs are significantly higher today than they were 7 years ago- so Ray is saving even more today.

At a recent event that Bill Paddock, Oneida Co. SWCD pasture specialist organized at Steve Pick's farm in Westmoreland, Steve talked about the economic benefits he receives from rotational grazing. Steve participated in CCEs Farm Business Summary sharing all of his financial records with CCE staff. In the program all of the expenses and revenue lines are consolidated so that dairy farmers can compare their individual costs and revenues with other farms of like size throughout N Y state. Steve shared that his purchased feed costs represent only 7% of his costs of production, 12% during this recent period of low milk price. Pete Mapstone, a dairy farmer from Madison County was invited to the event to tell the group how he uses rotational grazing on his farm. The Mapstones milk 250 head. Pete stated that his animals are on pasture 20 hrs each day during pasture season. They have been actively cross breeding their Holsteins with Jerseys and other color breeds with the goal of developing hearty livestock that produce well on pasture. Both farmers shared a great deal of practical information on pasture renovation and maintenance, development of a rotational grazing system, ration changes to optimize use of the pasture forage and many other topics. If you have an interest in exploring the idea of rotational grazing on your farm contact Bill Paddock at Oneida Co. SWCD 736-3316, Heather Sweeney 736-3394 ext 122 or Jeff Miller 736-3394 ext 120 at CCE of Oneida Co.



May To Do

General:

- * Walk fields to check tile flow, check and clear drainage outlets. Look for line breaks.
- * Observe wet areas and plot on aerial photo of farm for future drainage considerations and crop decisions
- * Maintain crop records by field, including variety, planting date, pesticides used, nutrient inputs including manure, etc.
- * Watch for early season weeds: winter annuals, chickweed, henbit, field penny cress, shepherd's purse, giant ragweed, lambsquarters, Pennsylvania smartweed, common sunflower

Alfalfa and Small Grains:

- * Evaluate established legume stands for winter damage, determine average alfalfa stand count, adjust crop plans if necessary
- * Monitor alfalfa for Alfalfa weevil as weather continues to warm
- * Check winter grains for adequate stand and plant vigor, monitor for crop stage, insect and disease problems

Corn:

- * Prepare land for corn if it is dry enough and begin planting the first week of May if it is dry

Pastures:

- * Check and mend fences as needed.
- * Check crop growth
- * Review/Plan rotation system

Storage:

- * Plan where forages should be stored for optimum allocation next feeding season

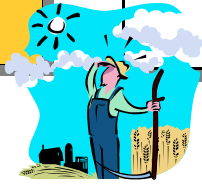
Equipment:

- * Check corn planter, calibrate, note any parts or repairs needed
- * Arrange for custom weed control or check your own application or cultivator equipment for repairs
- * Check nozzles, pumps, etc., recalibrate pesticide application equipment regularly before use
- * Calibrate manure spreaders - maintain records on amount spread per field

Syracuse Regional Market

Produce space available for Thursday Market. An Oneida County produce farmer has purchased a nice spot (9 ft. by 27 Ft.) for the 2007 season at the Regional Market. He can only use it on Saturdays and is interested in sub-renting to someone for Thursday. Anyone interested contact Marty at CCE - 736-3394 Ext. 121.

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Is Your Planter Ready?

The quality of your corn will largely depend on planter performance. An irregular stand can easily cost you 10% of your yield. Planter performance is especially critical in no-till because of high penetration resistance, crop residue at the soil surface, and a rough soil surface.

Inadequate planting will result in uneven seed depth and plant spacing. Hair pinning is common if coulters and row cleaners don't work properly. Now is the time to get your planter maintenance done. Here are some tips to prepare your planter for the new season.



1. **Level Planter:** By placing a level on the toolbar you can easily check if it is horizontally back or forwards, you need to lift or lower the hook-up to the tractor. This is essential to get accurate seed depth placement.
2. **Planter unit alignment:** Look across your planter units from the side. Are they all at the same height? If one unit is either up or down compared to the others, it needs some work. A common problem is that some bolts are loose, you should not be able to easily lift up your unit.
3. **Diameter of seed opener disks:** Check operator manual to determine acceptable disk diameter. Stick two business cards between the openers and move them as close together as possible. The space between them should be 3" or more, depending on your planter type. If opener disks are worn too much you will get a "W" shaped seed slot instead of the desired "V" slot.
4. **Diameter of coulters:** Check the diameter of the coulters, and replace them if needed. You should adjust the depth of worn coulters that are still useable.
5. **Pressure on firming wheels:** Check the pressure on the firming wheels. The downward pressure should be adequate, but not too high (check operator manual)
6. **Depth wheels:** depth wheels should run tight. Change washers from in to outside (or vice versa) of depth wheel if necessary.
7. **Depth of seed placement:** Place the planter on a concrete floor to measure the difference between the bottom of the depth wheels and slot opener and adjust to the desired depth. The front coulters should be set at the appropriate depth (no deeper than the seed slot openers)
8. **Alignment of individual components:** Take a rope and pull it straight from the front coulters to the back press wheels. The firming wheels, slot openers, and counters should all be in line.
9. **Wear on chains and sprockets:** Check the chains that drive meters and their sprockets. If they are worn too much they need to be replaced. Excessive wearing of these parts will cause skips and doubles.

10. **Clean metering units:** Take metering units apart. Remove dirt and clean the hood with soapy water (no kerosene, diesel or oil should ever be used in metering units!) Check for broken fingers in a finder-pickup meter, check the brush that wipes off excess seeds, and see if a groove had formed in the shromium house of the metering unit. If the groove becomes large, and if brushes wear, you have a greater likelihood of doubles. Brushes need to be replaced at least every other year.
11. **Elevator belt in metering unit:** The belt (in finger pick-up meters) should be flexible, not have cracks in it, and should be clean. Clean with soapy water and let it dry before putting it back in. Put the metering unit back together. The rubber belt should be placed back in the right direction, or your meter will malfunction. You can lubricate with graphite (NO OIL or WD-40)
12. **Calibrate meter:** It is highly recommended to take your finger pick-up metering unit to the dealer to have it calibrated. Take a bag of your own seed with you, and give him the correct speed at which you'll be driving.
13. **Vacuum/air units:** If you have a vacuum or air meter, check for leaks and appropriate vacuum or air pressure.
14. **Check your fertilizer unit:** Hold a bucket below the tube of the unit, and do a test run of 175 feet in the field. Weigh the fertilizer in the bucket, multiply by 100, and you have the fertilizer you'll put in pounds per acre (at 30" row spacing). Adjust as needed.

*Sjoerd Duiker, Soil
Management, Crop and Soil
Sciences Penn State*

AGRI*CULTURE Map Listing Deadline – May 14

If your Oneida County farm enterprise helps promote or showcase rural lifestyles, landscapes and/or products, and you market goods and/or services directly to the public, you are invited to be included on the Oneida County AGRI*CULTURE road map.

This includes farm tours & demonstrations, farm stands, you-picks, horseback riding, nature trails, event sites, etc. The map will identify your location and provide information about your business FREE of charge. 100,000 copies will be distributed free to the public.

For additional information about the project, map listing, or your eligibility, call Remi Link, 736-3394, Ext. 111, or Juanita Finn, 831-2484.

Buying/ Selling TMR

Submitted by Ron Kuck, CCE Jefferson

With margins becoming ever tighter in today's dairy economy there is always need for different strategies to keep the milk check coming in and increase profitability. One plan for doing this is buying/selling of total mixed rations.

The buyer benefits from this arrangement in a variety of ways. The cost of machinery, fuel, seed, fertilizer, herbicide and other affiliated crop expenses are reduced or completely eliminated. The supply of a high quality, consistent mix should coincide with an increase in milk production if crop management was a concern. The time saved from field work could be utilized with other income potential sources such as growing/managing cow numbers, embryo and stock sales, etc.

The seller benefits from the arrangement also. The main benefit is that it adds market values to your crops and your farm income. Other benefits include using planting and harvesting equipment over additional acres. This will spread out your machinery, TMR and labor costs. You should also be able to obtain higher nutrient yields per acre, lower field losses and a wider harvest window, especially for haylage.

"Fresh feed" is the main goal of both farms. This may require daily delivery instead of every other day service. This all depends on time of year, daily temperatures and the fermentation variability of the crop (bunk management). The ideal way to do it would be forage coming directly from the storage structure and put into TMR and fed as soon as possible. Once feed is taken from silo, secondary fermentation occurs which could affect feed quality. Stabilizers put into the TMR can slow this down and may help provide "fresh feed" for an additional 24 hours.

Another consideration is the size of the herd buying the TMR. Cow numbers will dictate the number of TMR mixes that can be made and delivered. Both parties need continuous communication with each other. Discuss issues as they arise even if not always convenient.

- Will the ration be the same as the sellers TMR or will they custom mix to the buyers specs?
- Dry cow, heifer and specialty mixes will be difficult to supply.
- Computerized TMR recording systems (EZ Feed for example) for monitoring mixes and billing.
- Transportation-How far and who's trucks?
- Biosecurity concerns?

These arrangements must be a "WIN-WIN" situation for them to work. Partnerships like this have been developing over the past few years as dairy farming continues to change. These type of arrangements between dairies or crop operations can provide opportunities for both to become more efficient. Many variations of this

The Importance of Water in Pasture Systems

Water is one of the most important components of a productive grazing system. Not only is it essential for the livestock, where it is located can influence animal and pasture performance. Research has shown that the closer the water is to the animals in the pasture, the better they utilize the available forage. For beef animals this distance is under 600' and for dairy animals that distance is much less (under about 200'). More watering sites in a paddock will also help increase pasture utilization. Along with forage utilization, manure distribution will also be better when water is readily available and in close proximity. By offering multiple watering sites and/or altering the locations of the sites, you will be able to reduce the effects of animal concentrations on the pasture (bare, denuded areas around watering sites). It is also wise to have watering sites separated from feed/mineral sites and to have both of those areas away from shade.



The bottom line with water is that you want to supply quality water at sufficient quantities (flow & pressure), as well as have it in close proximity to the grazing animals to optimize animal and pasture production.

Have a question or need some assistance?

Give us a call!

Jeff Miller ext 120 Agriculture Team Leader

Heather Sweeney ext 122 Dairy/Livestock Adult-Youth Educator

Cindy Craven ext 124 Ag Administrative Assistant/ Tech Support

Jim Manning ext 129 Farm Business Manager

Mary Wrege ext 131 Farm Business Manager

Marty Broccoli ext 121 Ag. Econ. Dev. Spec. mjb83@cornell.edu

Rita Marie Link ext 111 Ag. Econ. Dev. Assistant rl368@cornell.edu

Please feel free to give us a call and let us know what we can do for you.

Our office hours are Monday—Friday, 8:30 am to 4:30 pm. Our phone number is (315)736-3394 or (315) 337-2531 or check us out on the web at:

www.cce.cornell.edu/oneida

New Agricultural Sales Tax Exemptions

How to Save Money on Farm Purchases

What is the exemption for?

Purchases of property and services to be used or consumed *entirely* or *predominantly* in farm production or commercial horse boarding operations are eligible for exemption from state and local sales and use taxes. For most such purchases, Form ST-125 “*Farmer’s and Commercial Horse Boarding Operator’s Exemption Certificate*” is all you need to benefit from the tax savings. (Tax savings on motor fuel, whether gasoline and diesel, are also available but require a different procedure; more on this below.)

Form ST-125 may be used for a single purchase or, if you check the “blanket certificate” box, may be kept on file by the vendor for all of your eligible purchases. The vendor must have your properly completed form within 90 days of the transaction or the sale will be considered taxable.

How is “farm production” defined?

In general, tax-exempt products and services must be used or consumed *predominantly* in farm production or commercial horse boarding. “Predominantly” means more than 50% measured, for example, by hours of use, by miles traveled or other appropriate measures.

For purposes of this exemption, “farm production” includes:

- Agriculture; including livestock, dairy, poultry
- Floriculture
- Horticulture; includes nursery stock, ornamental shrubs, ornamental trees & flowers
- Viniculture
- Viticulture
- Aquaculture; including fish, fish products, water plants & shellfish
- Silviculture; including the growing & harvesting of trees, bushes & shrubs

Farm production is considered to have cease when the product is ready for sale, so the exemption would not apply to purchases to be used in a retail operation.

Commercial horse boarding operations, defined as enterprises of at least 7 acres and 10 boarding horses that receive \$10,000 or more in gross receipts annually from the boarding of horses, are also eligible for these exemptions. This does not include facilities that are primarily used for horse racing. Form ST-125 requires commercial horse boarding operations to provide their Certificate of Authority number.

What is actually exempt?

Personal Property: Purchases of personal property, whether or not incorporated into a building, are exempt from state and local sales and use taxes when the property is to be used or consumed *predominantly* either in farm production or in a commercial horse boarding operation.

Computers: Computers qualify for tax exemption if used *predominantly* in either farm production or a horse boarding operation. Examples include, but are not limited to, computers operating milking machines, measuring and delivering feed mixtures to bunks, turning irrigation systems on, or used to perform agricultural research, prepare and maintain animal records, etc.

Building Materials: The purchase of building materials is exempt when the materials are used to erect, add to, alter, improve, install, maintain, service or repair a structure, building, or other real property used *predominantly* either in farm production or in a commercial horse boarding operation. The exemption, for example, would apply to cow or horse barns, hay storage barns, fences, buildings for parking, storing or repairing machinery, milk houses, grain storage, cold storage buildings if used for produce still in the “production phase”, silos, greenhouses and any housing provided for employees. A farmer’s personal residence, buildings to house personal motor vehicles, or buildings for product retail are not exempt.

Machinery & Equipment: Machinery or equipment that is permanently installed or used *predominantly* in farm production qualifies for the exemption. Some examples are; barn cleaners, barn ventilation and fans, conveyors, driers, elevators, irrigation pipes and electrical systems.

Services Rendered: Purchases for the maintaining, servicing, or repairing of property or land used *predominantly* in farm production qualify for the sales tax exemption. Also, services of installing, maintaining, servicing or repairing of tangible personal property are exempt, again, provided the property is used predominantly for agriculture production or commercial horse boarding operation.

Motor Vehicles: Motor vehicles (including trailers, all-terrain vehicles, motorcycles, boats and snowmobiles) that are for use primarily for farm production and/or a commercial horse boarding operation may be exempt from sales taxes. These vehicles will qualify for the exemption if they are used more than 50% of the time on property actually farmed or used in a



horse operation, or in direct travel between properties used in farm production. Usage is measured in hours of use or miles traveled, whichever the farmer chooses.

Utilities, Utility Services, and fuel (other than motor fuel): With the exception of motor fuel, purchases of fuel, gas, electricity, or refrigeration that is used either in farm production or commercial horse boarding operations or both, are exempt and form ST-125 may be used.

Motor fuel: Motor fuel (including diesel and gasoline) used entirely or primarily for farm production also qualifies for substantial tax savings including sales tax. However, the procedures and forms to be used are different from those noted above and will be discussed in the next issue of Farm Flash.

Where can I go for more information? You can call the Department of Taxation & Finance at 1-800-225-5829 for more details; you can download form ST-125 at www.tax.state.ny.us/forms/.

Information adapted from NY Farm Bureau Fact Sheets at <http://www.nyfb.org/FactSheets/SalesTax.htm>

FSA Programs Open to Socially Disadvantaged Producers

Brymer Humphreys Executive Director for USDA's Farm Service Agency in New York says FSA is reaching out to women, ethnic and minority farmers in the state in an effort to get more of them involved in its programs.

"FSA programs are available to all producers but we would like to increase participation by traditionally underrepresented groups in all program areas," said Humphreys.

FSA defines a socially disadvantaged (SDA) farmer, rancher, or agriculture producer as one of a group whose members have been subjected to racial, ethnic, or gender prejudice because of his or her identity as a member of the group with out regard to his or her individual qualities. SDA groups are women, African Americans, Americans Indians, Alaskan Natives, Hispanics, Asian Americans and Pacific Islanders.

According to Humphrey's, FSA also reserves a portion of its direct and guaranteed loan funds each year for SDA loans for eligible participants. These loan programs are designed to help farmers purchase and operate family farms.

"With these loan programs, FSA hopes to help reverse the declining number of farmers and ranchers across the United States and especially here in Oneida, Madison and Herkimer Counties," said Humphrey's. "These loans help to encourage and assist them in owning and operating their own farms and ranches, participate in agricultural programs, and become integral parts of the agricultural community."

Applicants must meet the eligibility requirements for a given program before FSA can extend program benefits. For more information on these programs and other programs available through FSA, contact the Farm Service Agency at the county USDA Service Center. USDA is an equal opportunity employer and provider.

Is tax time ever really over?

With the major thrust of the 2006 tax year submission over, it is a good time to take a breath and consider areas of record keeping and accounting to improve future management decisions. Having a complete and accurate set of financial and farm records makes the job of preparing and reporting income tax easier and less burdensome. Generally, we all can improve our record keeping abilities in order to give a financial picture of the farm/home business and to analyze its strong and weak points. Good records are also important for obtaining and using credit, as a basis for partnership operation, estate planning and settlement and for claims adjustment for insurance purposes.

The question is: Where to start? The Internal Revenue Form 1040, Schedule F, "Profit or Loss From Farming", is a good starting point to become familiar with the categories of farm income and expense. Other farmers may be a good resource when it comes to advising on a person and or software that may be valuable for farm accounting. Experience and advice of others can make the process more manageable. However, the burden for keeping track of receipts, sales, inputs and tracking still remains with the owner and operators of the business.

Following is an article that was written in 1995, but offers some timeless questions to consider when evaluating software.

**Ashley C. Lovell CPA and extension economist
Texas A & M University, College Station, Texas
File C6-32 March 1995**

The farm manager choosing accounting software has several selection strategies. The simplest alternative is to buy the accounting software package that the computer salesperson or vendor recommends. Another alternative is to adopt the accounting package that other farm managers in the area are using. A third alternative is to select an accounting system based on expert evaluations printed in various publications. A fourth strategy is to adopt some combination of the first three strategies.

However, to minimize the risk of selecting the wrong package, a comprehensive approach is best. The fifth strategy uses bits and pieces of the above approaches. It differs from the fourth in that it involves hands-on demonstration or testing of the accounting system.

Comparative checklist for accounting software:

Use a checklist to evaluate the three to five accounting packages that the farm will consider seriously. Use these checklists for each package under consideration. By comparing the responses to these questions, you can evaluate the relative merits of each package.

General features checklist:

Compare the general features of this section to the farm manager's needs and available resources (including the ability or inability to handle double-entry accounting). The list of accounting packages to consider may be shortened once these comparisons have been made.

1. Is the package single-entry or double-entry?
2. Does the package handle both cash and accrual accounting?
3. Does the package support full enterprise records and reports?
4. How time consuming and difficult is the initial software setup?
5. How quickly does the system post transactions or find a previous entry?
6. Are annual updates available?
7. What support does the software vendor offer (phone, training, video cassettes)?
8. Is a full-feature demonstration diskette available?
9. Does the software interface with spreadsheet data bases and word processing software?
10. What level of accounting and computer expertise is necessary for entering data and reviewing the accounting printouts?
11. What are the hardware requirements to run the system?
12. What are the data storage requirements (floppy diskette, hard disk, tape)?
13. What is the full cost of the system, including all necessary modules and charges required for updates, telephone support, maintenance, and other such services?

General ledger checklist:

The purpose of the general ledger (GL) is to provide the basic financial statements (profit and loss or income statement, balance sheet, and sources and uses of funds statement) as required. To evaluate the software package's GL capabilities, consider:

- ⇒ What is the maximum number of GL accounts the system can handle?
- ⇒ Are the account numbers and names determined by the user?
- ⇒ Can the chart of accounts be modified as necessary?
- ⇒ To what extent can the financial report formats be changed through the accounts setup?
- ⇒ Is it possible to use nonexistent account numbers when entering GL transactions?
- ⇒ Is it a double-entry system? If so:
 - Does it generate a trial balance to verify the books are in balance?
 - Is it possible to enter and post unbalanced transactions?
 - How simple is it to make correcting entries?
 - Does it generate profit and loss statements and balance sheets using either actual value, market value, or depreciated value bases?
 - Does it integrate with enterprise, accounts payable, accounts receivable, and payroll modules?
 - Does it generate a sources and uses of funds statement?

Enterprising checklist:

Some accounting systems (single-entry as well as double-entry) are able to track the expenses and sales associated with producing a commodity by using enterprise accounting. To evaluate the software package's enterprise accounting capabilities, consider:

- ⇒ Does it record expenses, income, and physical quantities for each enterprise, providing costs and returns reports for units specified by the user?
- ⇒ Does it allow enterprises to remain active even if the books for the fiscal year have been closed?
- ⇒ What is the maximum number of enterprises allowed?
- ⇒ Does it provide for noncash sales between enterprises without affecting GL account balances?
- ⇒ Can it generate consolidated costs and returns summaries for all enterprises and for each farm location?
- ⇒ Can enterprise entries be made through the general ledger, accounts payable, accounts receivable, and payroll modules?
- ⇒ Can budget versus actual reports be generated from budgets previously established for each enterprise?
- ⇒ Can the system automatically allocate overhead to each enterprise using allocation rules specified by the user?

If the manager intends to select software that supports full enterprise accounting, a number of potential packages will likely be eliminated. It is not wise to give further consideration to general ledger software that provides limited capability for enterprise, cost, or departmentalization accounting.

Accounts payable and payroll checklists:

Besides the general ledger and enterprise modules, many farms can benefit from accounts payable, payroll, and depreciation modules. Typically, the public accountant maintains the depreciation schedule. To evaluate the software package's accounts payable capabilities, consider:

- ⇒ Will it run both cash- and accrual-based accounting?
- ⇒ Does it list invoices by date due and indicate the amount of cash necessary to pay invoices?
- ⇒ Does it post invoices to the GL as a batch or one at a time?
- ⇒ Does it print checks and IRS 1099 reports?
- ⇒ Does it provide for entering transactions resulting from daily cash-flow handwritten checks?
- ⇒ Does it provide reports on vendor histories?

To evaluate the software package's payroll capabilities, consider:

- ⇒ Can it calculate payroll using either hourly wages or piece rate—whichever is greater?
- ⇒ Does it automatically calculate all appropriate federal, state, and local payroll taxes?
- ⇒ If it has an accrual, double-entry system, are accrued taxes payable automatically posted to the GL?
- ⇒ Will it handle employee advances and housing deposits?

Forestry Education Letter Series for Landowners Announced

Owners of forests and woodlots often seek ways to learn effective, safe, and profitable management techniques for their property and look for strategies to reduce their tax liability. Others who enjoy, but don't own forest land, are also interested in forest management and ecology.

Now, forest enthusiasts can learn about ecological and sustainable forest management practices through the ForestConnect 2007 Letter Series, delivered to their door or computer. The series will provide unbiased, non-commercial and accurate information about how to manage private forest lands for wildlife habitat, firewood, timber, recreation, and more.

The ForestConnect letter series will include six, eight-page bulletins that provide fact-filled information on how to more fully enjoy the benefits that your forest land can provide. Enrollees in the letter series will receive one bulletin every three weeks during the spring and summer; and can join one of several educational walking tours in early fall.

Each of the bulletins in the letter series will build upon the previous issue, so you will move from the basics of forestry to more advanced knowledge of silviculture and forest stewardship. The letters will be developed by a professional in the field, such as foresters, conservationists, or extension educators.

The 2007 ForestConnect Letter Series is designed for forest owners and forest enthusiasts from throughout New York State. This educational program is based on an award-winning project developed by Cornell Cooperative Extension of Warren County and the Greater Adirondack Resource Conservation and Development Council. Funding is provided through the NYS Department of Environmental Conservation and USDA Forest Service State and Private Forestry.

The 2007 ForestConnect letter series is a joint initiative of Cornell University Cooperative Extension and the New York Forest Owners Association.

Register by calling (800) 836-3566, or on-line at www.ForestConnect.info or www.NYFOA.org. The registration is \$18 for members of the NY Forest Owners Association and \$25 for non-members. Deadline to register is May 10.

The Oneida County Dairy Promotion Committee is a group of volunteers that is dedicated to the promotion of dairy products in Oneida County. The Committee also sponsors the Oneida County Dairy Princess and her court. If you or someone you know would like to join the committee, please call Terri DiNitto at 768-3120. New members are always welcome!



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