Calendar of Events

Mark Your Calendars --- Plan To Participate

- **January 19th**: Central MD Vegetable Meeting
- **January 24th**: Private Applicator Exam, P.G. Co.
- **January 25th**: Private Applicator Exam, A.A. Co.
- **Jan. 30th - Feb 1st**: Tri-State Hort. Meeting, Hershey, PA
- **February 7th**: So. MD Vegetable & Fruit Meeting
- **February 13th**: Apple School - Western MD Fruit Mtg
- **February 16th**: Agronomy Breakfast/Herbicide Wksp
- **February 22-24th**: Mid-Atlantic Direct Marketing Conf.
- **February 28th**: WYE Peach School
- **March 1st**: Fruit Breakfast & Peach Pruning Clinic
- **March 6th**: Nutrient Applicator Voucher Training
- **March 7, 8 & 9th**: Mid-Atlantic No-Till Conference
- **March 13, 20, & 27th**: Intro to Farming Course
- **March 15th**: Sprayer Clinic & Workshop, UMREC
- **March 30th**: Vegetable Breakfast & Sweet Potato Round-Table
- **April 3rd, & 10th**: Farm Management Workshop

Inside This Issue

- Winter Meetings Slated
- New Farmers Market
- Tobacco Seed Distribution Program
- Lonely on the Farm - Telephone Reassurance
- Strawberries Peas & Beans
- APHIS
- Field Ready Equipment
- Fuel into Fertilizer Cost Analysis
- Fighting Phytophora Fruit Rot
- Seed Treatments
- Herbicide Program for Tree Fruit
- Agronomy Update
- Alfalfa Herbicide Options
- Pasture Stocking Rates
- Farm Management Programs 2001
- Southern Maryland Small Farm Cooperative
- Ethnic Produce Update
- Conservation Fund for Local Farmers
- Manure Stockpile Guidelines
- Nutrient Management Update
Winter Meetings Slated

Mark your calendars now and plan to be a part of the winter meetings.

Pesticide Private Applicator Certification

In order to legally purchase and use restricted pesticides on your own crops one must become a Certified Private Pesticide Applicator. However, this does not legally give one the right to buy or apply restricted use pesticides for others. Remember that it’s always best to stay legal and remain liability free. Recertification training is required every three years. If you have allowed your certification to expire or are a new applicant, then you must attend Private Pesticide Applicator Certification Training and pass the exam. The Private Pesticide Applicator Certification Training will be conducted from 7:00 to 9:00 p.m. on January 10, 2001 in Prince George’s County and on January 11, 2001 in Anne Arundel County. The Private Pesticide Applicator Exams are scheduled for 7:00 to 9:00 p.m. on January 24, 2001 in Prince George’s County, and January 25, 2001 in Anne Arundel County.

2001 Mid-Atlantic Fruit & Vegetable Convention

Tri-State Horticultural Meetings

January 30 - February 1, 2001

Be sure to mark your calendar for the 2001 Mid-Atlantic Fruit and Vegetable Convention, January 30 - February 1, 2001, at the Hershey Lodge and Conference Center, Hershey, Pennsylvania. This convention is held in conjunction with the Tri-state Horticultural Meetings. Pre-registration is made through the MD Horticultural Society. For full meeting details call Ms. Cindy Mason at the Western Maryland REC at 301 432-2767.

Southern Maryland Vegetable & Fruit Production Meeting

February 7, 2001

Don’t miss the 2001 Southern Maryland Vegetable and Fruit Production Meeting on February 7, 2001, 7:30 a.m. - 4:30 p.m. at the Davidsonville Rec. Center, Davidsonville, Maryland. Speakers will present a broad range of topics including: “Vegetable Pest Control Updates;” “Savvy Vegetable Price Setting;” “Tips for Avoiding Vegetable Production Blunders;” “40 Years of Plasticulture;” “Developing a Southern Maryland Grape Industry;” “Limes Disease, West Nile Virus & Other Creepy Crawlies;” “Understanding the Spring and Fall Strategies of Row-Covers;” “Maryland’s Organic Program Update;” “Building Southern Maryland’s Small Farm Cooperative;” and “The Maryland Department of Agriculture Pesticide Update.” Private Pesticide Applicator Recertification credit is awarded for attending the meeting. For information and registration, contact your local Extension office or call me at 410 222-6759. There is a $15.00 registration fee. Please register no later than February 2, 2001. For full details and registration information see the enclosed flier.

Apple School

Western Maryland Fruit Meeting

February 13, 2001

If you are an apple grower be sure to attend the Apple School - Western Maryland Fruit Meeting, on February 13, 2001, at the Western Maryland Research and Education Center in Keedysville, Maryland. This meeting will provide Private Pesticide Applicator Recertification Credit, and present the new nutrient management regulations pertaining to tree fruit production. For full meeting details call 301 432-2767 or 410 827-8056.

Anne Arundel & Prince George’s Agronomy Herbicide Workshop & Breakfast

“How Herbicides Work and Why They Sometimes Fail”

February 16, 2001

Plan to attend Anne Arundel & Prince George’s Agronomy Herbicide Workshop & Breakfast on Friday, February 16, 2001, 7:30 a.m.- 11:30 a.m. at the Anne Arundel County office in Glen Burnie, Maryland. This workshop will examine herbicide mode of action for the major herbicide classifications, and focus specifically on the herbicides commonly used on the agronomic crops: corn, soybeans, wheat, alfalfa, tobacco, and pastures. Following this in-depth study of how herbicides work, the group will explore the reasons for common herbicide failures. For information and registration, contact me at 410 222-6759. Please register no later than February 12, 2001. For full details and registration information see the enclosed flier.

Mid-Atlantic Direct Marketing Conference and Trade Show

February 22 - 24, 2001

If you are currently direct marketing your produce or plan to, then don’t miss the opportunity to attend the Mid-Atlantic Direct Marketing Conference and Trade Show, from February 22-24, 2001, at the Cavalier Oceanfront Hotel, Virginia Beach, Virginia. The conference will focus on direct marketing management topics sure to improve your skills including: risk management, merchandising, and business planning. More information may be found on the web at: www.madmc.com or by calling 410 222-6759.

WYE Peach School

February 28, 2001

If you are a peach grower be sure to attend the WYE Peach School, on February 28, 2001, at the WYE Research and Education Center in Queenstown, Maryland. This meeting will provide Private Pesticide Applicator Recertification Credit, and update the new nutrient management regulations pertaining to tree fruit production. For full meeting details call 410 222-6759.
Fruit Breakfast & Peach Pruning Clinic
March 1, 2001
For a double helping of peaches attend the Fruit Breakfast and Peach Pruning Clinic, on March 1, 2001 (the day after the WYE Peach School). The Fruit Breakfast & Peach Pruning Clinic will be held at the Upper Marlboro Research and Education Center from 7:30 a.m. to 11:30 a.m. The Upper Marlboro Peach orchard will be pruned for its first bearing year, comparing the perpendicular-v-system to the traditional open center training method. Joining us will be Dr. Steve Miller USDA-ARS from the Agricultural fruit Research Station, Kearneysville, WV, to help us understand high density orchard plantings. For full details and registration information see the enclosed flyer.

Nutrient Management Applicator Voucher Training
March 6, 2001
The Anne Arundel Soil Conservation District and Maryland Cooperative Extension wishes to extend an invite to all farmers seeking to become Certified Nutrient Applicators under the new MDA Nutrient Management Voucher Program. Arrangements are being made to deliver the Nutrient Management Applicator Voucher Training at a breakfast meeting on March 6, 2001 at the Davidsonville Ruritan, from 7:30 a.m. - noon. Also provided at the meeting will be details about the EQIP, and FSA loan program. Don’t miss this important meeting! For full details and registration information see the enclosed flyer.

Mid-Atlantic No-Till Conference
March 7, 8, & 9, 2001
No-till production has done more for Maryland farmers then any other production technology. No-till has protected our soil resources and watersheds. Farmers in our state are pioneers in this production technique, and have led the way for the entire Country to follow suite. No-till has allowed farmers to plant more land and increase production, saving that most precious and profitable resource - time. The Mid-Atlantic No-Till Conference has been instrumental in the success of no-till in our region. We still have much to learn about no-till production, so why not attend this meeting and revisit an old friend who is still no-tilling. This year’s conference will be conducted in three locations as follows: on March 7, 2001 in Lewisburg, PA; on March 8, 2001 in Carlisle PA; and on March 9, 2001 in Dover Delaware. For full registration details give me a call at 410 222-6759.

Introduction to Farming Short-Course
March 13, 20 & 27, 2001
Whether you grew up on a farm or not, you may need to sign up for this Introduction to Farming Course. This three-day course will open your eyes to the world of farming. A course designed for the young and old alike. It just may make a farmer out of a “city kid” or a hayseed.” Money Back Guarantee! The spring classes will be conducted at the Anne Arundel County Extension Office. For full details and registration information see the enclosed flyer.

Sprayer Clinic & Workshop
March 15, 2001
Put on your spray suite and come down to the Upper Marlboro Research and Education Center on March 15 from 8:00 a.m. to noon to participate in the Sprayer Clinic and Workshop. We will examine in actual spray tests the new T-Jet drift guard nozzles. We will work through calibration and targeting of spray patterns from backpack and tractor driven broadcast sprayers, orchard sprayers and airblast sprayers. We will discuss all aspects of sprayer maintenance that will be sure to save you money, insult, or embarrassment. Also, bring you respirator for a respirator fit check! For full details and registration information see the enclosed flyer.

Anne Arundel & Prince George’s Vegetable Breakfast & Sweet Potato Round-Table
March 30, 2001
The Anne Arundel & Prince George’s Vegetable Producers Breakfast will be held on Friday, March 30, 2001. The purpose of this meeting is to establish a crop production “Think Shop” & “Grower Interactive Discussion” with the goals of pest and production problem anticipation and problem solving. The meeting will be held in the “Round-Table” fashion and a complimentary continental breakfast will be served. The focus will be placed on the on-farm sweetpotato trials. The meeting will be held at the Glen Burnie Extension Facility from 7:30 to 10:30 a.m. A program flier will be made available in a few weeks.

New Farmers Market Needs Farmers
Tony Evans from the Maryland Department of Agriculture wishes to invite farmers to join a New Farmers Market sponsored by the Lyons for Rural Business. The new market will be located on Deale-Churchton Road near the library, and will operate from 4:00 to 7:00 p.m. If you are interested in joining the market contact Tony Evans at 410 841-5770.

Tobacco Seed Distribution Program
It is time to make your tobacco seed requests. The varieties available this year will be MD 609, MD 201, MD 341, MD 40, same as last year. These varieties will be packaged in 1-ounce packets, and made available at seed distribution sites and county Extension offices. In addition, two new varieties will be available, MD 402 and MD 602. These varieties will be packaged in 1/3-ounce packets, the recommended amount for a 100 square yard seedbed. All varieties will be available in the pelletized form by request.
Invasive species despite the best efforts of APHIS and PPQ still threaten our ecosystems, and then the responsibility may fall on you be aware and on the alert for invaders. Currently, quarantine areas exist in Chicago and New York to desperately halt the spread of the Asian Longhorned beetle, which has the potential to decimate our forestry industry. Aphis also publishes many fact sheets pertinent to issues surrounding importation of threats, such as the importation of cattle containing bovine spongiform encephalopathy (BSE), commonly referred to as “Mad Cow Disease.” For more information and to gain access to fact sheet visit the APHIS website: www.aphis.usda.gov

**Field Ready Equipment**

The hay is ready to mow, “Now, Where did I leave that Haybine?” “That’s right its down by the creek, I’d better grab a grease gun.” Some farmers do amazingly well operating like that fellow described above. However, taking the time in the winter to properly service and repair equipment is essential to staying one step ahead. I have always found great pleasure in going over the machinery in the winter, ordering parts, and one piece of equipment at a time going thoroughly over each critical wear part. You will never eliminate every troublesome breakdown, but you sure reduce their frequency and cost. Start this year with field ready equipment, if merely for sanity sake!

**Fuel into Fertilizer: Cost Analysis**

In the last newsletter we alluded to higher fertilizer costs for 2001 based on higher fuel costs. Why? To answer that question we need to understand the role of fossil fuels in the production of fertilizers. There is a distinct relationship between energy and fertilizer, especially for nitrogen production. An estimated 0.8% of the total United States annual energy consumption is presently being used for fertilizer production. The production of anhydrous ammonia, which requires approximately 6300 Kcal/lb of nitrogen, represents nearly two-thirds of the total energy used for all fertilizers. Energy consumption values for phosphorus and potassium fertilizers are estimated at 1250Kcal/lb of phosphate (P₂O₅) and 1000 Kcal/lb of potash (K₂O). It is ironic that 80% of the air we breathe is nitrogen (N₂) gas, which is completely unavailable for plant growth (except for legumes utilizing the nitrogen fixation process). It takes energy; lots of it to generate hydrogen (H) from natural gas or methane (CH₄), capable of combining under intense heat and pressure with N₂ gas to create ammonia (NH₃). The process looks like this:

\[
1 \text{ton NH}_3 = 38,180 \text{ ft}^3 \text{ H}_2 + 9 \text{ gal Fuel Oil} + 54 \text{kwh Electric}
\]

The amount of natural gas required to produce 5 tons of NH₃ would heat the average home in Maryland for the entire winter. This same amount of natural gas, converted into nitrogen fertilizer, results in enough corn production to satisfy the minimum caloric requirements of 275 people for a year. Save more money then ever before - just by following your nutrient management plan.
Fighting Phytophora Fruit Rot
Last summer we endured rain by the buckets, and this fall and winter has been surprisingly dry. Are we in for another wet spring or summer? Are annual rainfall always seems to balance out to 40 inches per year. My point is, if we have a wet summer, we are bound to see Phytophora fruit rot become as troublesome as ever. Fruit rot caused by Phytophora capsici produces a white fungal bloom on the surface of the rotting fruit. This white bloom is composed of the sporangia of the fungus and produces swimming zoospores. All fruit lying in water of susceptible crops are infected by the motile zoospores. Plan to prevent Phytophora capsici fungi from become devastating on your farm by correcting drainage problems in the field and planting on raised beds. Apply Ridomil Gold® at planting for early protection and use fixed copper sprays on the soil between raised plastic beds. During the season spray Bravo® and fixed copper sprays on a 14-day schedule. If the disease has become severe in a field rotate out of the crop for 3-5 years. Susceptible crops include: beans, corn okra, and most cut flowers. Crops that are not susceptible are the solanaceous crops: tomato, eggplant, and pepper, as well as the cucurbits: pumpkin, squash, watermelon, cantaloupe, and cucumber. Crops that are not susceptible include: beans, corn okra, and most cut flowers.

Seed Treatments
After watching stands fail due to seedling decay, damping-off, wireworm and seed corn maggot feeding, and realizing that a $2.00 per acre seed treatment was all that was necessary to avoid the loss, I changed my ways. Maybe its time for you also to purchase the best crop insurance your money can buy - by investing in seed treatment for everything you plant. Dr Galen Dively, University of Maryland, Professor, Entomology, reports the following: A new seed treatment, Gaucho/Prescribe® (active ingredient is imidacloprid), is registered on field and sweet corn for control of seed corn maggot, flea beetles (vector of Steward’s wilt), rootworms, wireworms, and other insects. For seed maggots and wireworms, rates of 1.6 - 3.2 oz/cwt of seed are recommended. For rootworms, higher rates of 4.5-6.0 oz/80,000 units of seed are needed to achieve control equal to granular insecticide control. Commercial seed treaters can only apply this product or pre-treated seed can be purchased. This product is expensive, especially the rootworm rate, and an additional soil insecticide may be needed depending on the soil insect complex present. Not good on white grubs. Effective seed corn maggot control can also be achieved by using new permethrin based seed treatments such as Assault 25® and Kernel Guard Supreme®. Assault® can only be used as a commercial seed treatment.

***Tons of Hay in a Mow – Multiply length X width X height in feet and divide by 450.***

Herbicide Program for Tree Fruit
I have been pretty pleased with the orchard herbicide program that I have used the past couple of years - so I thought I would share. For first year trees, spray Gramoxone Extra® 1.0 qt/A one week prior to planting in a 5 foot wide swath. After planting, be sure that the soil is settled and sealed around the base of the whips (young trees), and then apply Surflan® 4.0 qts/A. In subsequent years apply Gramoxone Extra® 1.0 qt/A + Princep® 4L 1.0 qt/A around mid-March, avoiding direct contact with trunk as much as possible, and maintaining the 5 foot spray swath. I also believe that painting the tree trunks with latex paint in the fall provides an added herbicide barrier. However, I would caution against the use of Roundup® around trees at anytime, the risk of bark absorption is just too high. Use Roundup® to spot treat perennial weeds in the fall. In mid-May an application of Gramoxone Extra® 1.0 qt/A + Surflan® 4.0 qts/A should be applied to provide season long control. I have found that one additional Gramoxone Extra® 1.0 qt/A spray in Mid-July and a little hand hoeing will handle the few stubborn weeds that prevail. If you want the trees to be successful and capable of bearing in that third year, keep that 5-foot swath as weed free as possible. Be sure that the soil pH is below 7.0 when applying Princep®. In high pH soils the triazine herbicides are readily available, and may cause injury. Other late winter or early spring products would include: Karmex® 80DF 1.0 lb/A, Devrinol® 50DF 6.0 lb/A, Solican® DF 3.0 lb/A, Goal® 2X 1 qt/A, Kerb® 50W 2.0 lb/A or Sinbar® 80W 2.0 lb/A, all giving a slightly different spectrum of control.

Agronomy Update
I have copies of the 2000 Maryland Wheat & Barley Variety Performance Trials, Agronomy Mimeo Update 19, and 1999 Maryland Soybean Variety Tests, Agronomy Mimeo available in the office.

Weed Control Update:
In the Maryland Weed Control Reporter, December 2000 issue, Dr Ron Ritter, university of Maryland Associate Professor, Weed Control, summarizes his weed control research and industry news for the year for agronomic crops. Highlights of the report include the following: 2001 Glyphosate Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Manufact.</th>
<th>RR Crop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquire 4L</td>
<td>BASF</td>
<td>Soybean</td>
</tr>
<tr>
<td>Credit 4L</td>
<td>NuFarm</td>
<td>Soybean</td>
</tr>
<tr>
<td>EnGame 1.3L</td>
<td>Entek</td>
<td>Soybean</td>
</tr>
<tr>
<td>Gly-Flo 4L</td>
<td>Microflo</td>
<td>Soybeans</td>
</tr>
<tr>
<td>Glyphomax 4L</td>
<td>Dow AgroSci.</td>
<td>Soybeans</td>
</tr>
<tr>
<td>Glyphos 4L</td>
<td>Cheminova</td>
<td>Soybeans</td>
</tr>
<tr>
<td>Honcho 4L</td>
<td>generic</td>
<td>Soybean</td>
</tr>
<tr>
<td>Rascal 4L</td>
<td>generic</td>
<td>Soybean</td>
</tr>
<tr>
<td>Silhouette 4L</td>
<td>generic</td>
<td>Soybean</td>
</tr>
<tr>
<td>Rattler 4L</td>
<td>generic</td>
<td>Soybean</td>
</tr>
<tr>
<td>Buccaneer 4L</td>
<td>generic</td>
<td>Soybean</td>
</tr>
<tr>
<td>Mirage 4L</td>
<td>generic</td>
<td>Soybean</td>
</tr>
<tr>
<td>Ranger 2.7L</td>
<td>Monsanto</td>
<td>none</td>
</tr>
</tbody>
</table>

***Tons of Hay in a Mow – Multiply length X width X height in feet and divide by 450.***
Also Syngenta is replacing Gramoxone Extra® 2.5L with a new formulation Gramoxone MAX® 3.0L. Griffin will introduce a generic brand of paraquat called Boa® 2.5L comparable to the old Gramoxone® 2.5 L.

The sulfonylurea Finesse® by Dupont has been labeled pre and Postemergence for ryegrass control in wheat. Excellent results applied Preemergence at the Finesse® 0.5 oz/ A rate have been obtained. It is suggested that a STS soybean be planted in a double crop soybean rotation following wheat. Maverick® by Monsanto is another sulfonylurea similar to Finesse® for grass control in wheat. It has been safely applied in the spring, however STS soybeans must follow.

For more information on product changes see Dr. Ritter’s web page at: www.agnr.umd.edu/users/weed/

New formulation for Slugs:
Dr Galen Dively, University of Maryland, Professor, Entomology, also reports the following:

**Deadline**® M-PS is a new formulation that is used at the same rate/acre and contains the same % of metaldehyde as Deadline Bullets® but tests in Ohio show that provides better control of slugs in corn.

**Bt Corn Update**

BTRtra® corn hybrids containing the DeKalb/Monsanto DBT418® event have been discontinued. Also, the StarLinkTM® technology using the Cry9C event has been voluntarily withdrawn from the market by Aventis, as the result of concerns that StarLink® corn might be directed to inappropriate uses such as food. Note that these Bt hybrids were registered only for domestic feed and other non-food industrial markets. Aventis is currently seeking food-use approval in the US and abroad. Thus, no StarLink® corn seed sales will occur until food approval is received from regulatory authorities. Due to possible registration decisions that may occur prior to the 2001 season and annual fluctuations in marketing plans regarding Bt hybrids, growers are urged to consult their seed providers for the most up-to-date information. Be sure to Visit Dr. Dively’s web site at: www.pest.umd.edu/

Also, visit the National Corn Growers Association website http://www.ncga.com for more information about available Bt hybrids and special marketing restrictions.

**Alfalfa Herbicide Options**

I always felt that alfalfa fields should have received dormant herbicide application just before or on Lincoln’s birthday (February 12th) in our area. For control of winter annuals and suppression of dandelion and dock this application timing seemed to work well for Sencor DF® 0.66 lb/A. The Sencor DF® 0.66lb/A application has no rotation restrictions and may also be used on alfalfa-grass mixtures that are one year or older. If your alfalfa field is well established, and you do not anticipate rotating into another crop for two years, an application of Sinbar® 80W 0.75lb/A, Velpar®90W .75 lb/A, or Karmex® 80W 1.5lbs/A also works well on similar weed problems at the Lincoln’s birthday spray period. All of the dormant applications should be made prior to Washington’s birthday (February 22nd) in order to avoid alfalfa injury. If you miss the early application window Pursuit® 70DG 1.25 oz/A may be applied until March 7th on most years before alfalfa exceeds the 3-inch regrowth label restriction. Go get that sprayer ready!

**Pasture Stocking Rates**

How many animals will my pasture support? This is a common question, especially for the first time livestock producer. Unfortunately, it is a complex and often difficult question to be answered.

The first step should be to accurately evaluate the pasture site to determine the anticipated average annual forage yield. A well maintained orchardgrass-ladino clover pasture should yield annually 10 to 15 tons/acre of fresh pasture, being equivalent to 2.5 to 4.0 tons/acre of dry matter (DM). Often producers launch themselves into a livestock venture by buying the livestock first, without first doing some critical pasture site investigation.

The second step is to determine daily feed requirement of the herd or flock. For cattle, sheep, and horses 2-3% of an animals actual body weight is an excellent estimate of daily dry matter (DM) intake of quality forage and grain. Animals that are young and developing, pregnant, or used actively for work or breeding would have the higher feed requirement of 3% of body weight equaling DM forage and grain intake. While animals that are mature and maintaining, generally require 2% of body weight as DM intake. Thus a horse weighing 1100 lbs used occasionally for riding would require: 1100lbs X .02 DM/day = 22 lb DM/day.

In order to keep this horse fit all year, the dry matter feed intake would be 22lbs/day X 365 days = 8030 lbs or 4 tons of DM. If the pasture was also cut for hay during the surplus growth periods and feed losses are minimized, then 1 acre should support an 1100 lb horse annual forage requirements. It is also very important that the ration is balanced, and the components of a balanced ration include: carbohydrates, proteins, fats, minerals, vitamins, and water. Also, it is important to include roughage and bulk to the ration. If high quality legume-grass hay or pasture is utilized then the addition of grains, protein supplements and minerals may only be required to be 25% or less of the ration. For a poor hay or pasture the addition of grains, protein supplements, and minerals may be required to be as much as 50% of the ration.

Another point to remember is that all feeds include a percentage of water, therefore, convert the feed components in a ration into actual dry matter weight. Most field-cured hays in Maryland and grains are 85 to 90% dry matter. The pasture forage percent DM is based on maturity and species, typically ranging from 20 to 50% DM.
in the field. If our 1100 lb horse was on a spring orchard grass and ladino clover pasture consuming 75 lbs/day of forage determined to be 26% DM, then we could calculate that 75lbs/day X .26 = 19.5 lbs DM. The horse would only require 2.5 lb of additional grain and mineral supplements to balance the daily ration. If the spring pasture was considered overly lush it may be advisable to balance the ration by providing only minerals and supplementing the pasture with mature dry grass hay as follows: 15 lbs/day of 85% DM timothy hay = 12.75lb/day DM + 35 lbs/day 26% pasture = 9.1 lbs/day DM + .15 lb/day of minerals for a total of 22lbs/day DM in a balanced ration.

In summary, the pasture requires constant balancing of daily yield potential and animal feed requirements. At times a pasture may be over or under grazed, and both are detrimental to stand longevity and production. If you have questions about livestock utilization of your pasture give me a call, and together we can assess your needs.

**FARM MANAGEMENT PROGRAMS IN SOUTHERN MARYLAND**
Stephan Tubene, Farm Management Specialist, Southern Maryland

**Upcoming Events:**
**Farm Management and Information Technology Workshop**
Plan to attend the first workshop of its kind in Southern Maryland--- Farm Management and Information Technology Workshop. This is a two-day workshop for Anne Arundel, Calvert, and Prince George County’s farmers and agribusiness managers scheduled in Glen Burnie, MD, on April 3 & 10, 2001, 7:00p.m. at the Anne Arundel County Office. Subject areas include Writing a Business Plan, Dealing with Risk Management and Legal Structure. To register for this important workshop, please contact Stephan Tubene at 410-222-6759. Workshop enrollment will be limited to the first 30 registrants.

**Marketing Strategies**
Given a growing interest in grain marketing, Maryland Cooperative Extension would like to establish a Grain Marketing Club in Southern Maryland. If you are interested in joining a Grain Marketing Club and learn more about alternative marketing strategies, please call the Maryland Cooperative Extension office at 410-222-6759; DC Area, please call 301-970-8250, ext.6759

**Southern Maryland Small Farm Cooperative**
The Southern Maryland Small Farm Cooperative is still recruiting members for this coming year. The first election of the Board members was held on October 17, 2000. The SMSFC’ s primary goals are to secure vending spots at the farmers markets, advertise locally raised crop and meat production capabilities, and implement Web based services for Southern Maryland farmers and customers. To achieve these goals, the SMSFC has developed the following objectives:
- Acting as buying and selling representative for agricultural products
- Promoting policies that increase the net income for the producers
- Developing long-term alliances with suppliers to provide savings on supplies to farmers
- Providing an arena for exchanging ideas and networking, and providing a unified voice in state and local agricultural affairs.

For further information, please contact Stephan Tubene at 410-222-6759 and/or Dan Gragan, President of the Board at 202 986-9050.

**Ethnic Produce Update**
Consumer tastes and preferences drive the nation’s food and fiber system. Often the last traditions people change when they move to a new country are their culturally based food habits and customs. An ever-growing Mid-Atlantic ethnic diverse population provides rich and untapped ethnic produce marketing potential. These markets create excellent opportunities for the Baltimore-Washington communities and our regional farmers. Potential ethnic produce includes African, Asian, Hispanic fruits and vegetables, specialty herbs, goat meat, commercial rabbits and live poultry. Recently, an ethnic produce session held at the 2000 Future of Our Food & Farms Summit in Philadelphia area brought together a diverse group of researchers, producers and consumers to discuss ethnic produce market opportunities in the Mid-Atlantic region. If you are interested in ethnic produce production, and marketing, please contact Stephan Tubene and/or Constance Pergerson at 410-222-6759.

**Conservation Fund for Local Farmers**
By John Czajkowski, Engineer, SCD
Maryland has been allocated $1,488,400 through the USDA Environmental Quality Incentive Program (EQIP) to fund conservation projects in fiscal year 2001. In Anne Arundel County, EQIP funds will be used to help local farmers address water quality, erosion control and nutrient management concerns in their watershed. In fiscal year 2000, EQIP Funds helped pay over $125 thousand in conservation projects to Anne Arundel County farmers. The sign-up to participate for fiscal year 2001 EQIP ends on March 31, 2001. Farmers should contact the Anne Arundel Soil Conservation District immediately at 410-222-7822 for additional information.

**Manure Stockpile Guidelines**
MDA provides guidelines for the stockpiling of poultry litter prior to farm field spreading in a document entitled *Stockpiling Guidelines: Temporary Farm Field storage,* and I believe it provides sound advice for the temporary manure stockpiling on any farm. The document is summarized as follows:

1) A manure stockpile site should be pre-determined.
2) The amount of manure stockpiled must approximate the amount prescribed in a Certified Nutrient Management Plan.
3) The stockpile site should not pose any undue environmental risk to water quality.
4) A manure stockpile, which will not be spread within 7 days should be pushed up into a peaked pile at least 8-10 feet high to shed water and crust.
5) The stockpile site should be sufficient in size to accommodate the amount of manure expected to accumulate prior to spreading.
6) The stockpile must be located:
   a. At least 100 feet from any surface water, drainage ditch, swale, or gully;
   b. At least 100 feet from any public road;
   c. At least 200 feet from any residence or neighboring property;
   d. Above the flood plane of the 25-year, 24-hour storm;
   e. Outside natural drainage ways; and
   f. At least 150 feet from wells, or 300 feet from a well when the well is located down gradient from the storage area.
7) When delivering manure to a pile, the trucks must not drive over unloaded manure or recently spread manure.
8) If the manure is stockpiled for 6 months or greater, an additional manure nutrient analysis should be performed prior to spread.
9) All of the manure must be removed from the stockpile site, and the ground scraped thoroughly clean when the spreading operation takes place.
10) Stockpile site must be restored to its original condition, and if necessary reseeded with grass or an agronomic crop to facilitate nutrient uptake.
11) Subsequent stockpiling should take place at a different location on the farm.

The advice makes good common sense to me!

Nutrient Management Update

Animal Unit Equivalents

Number of animals needed to equal 8 animal units
(8 animal units, or $2500.00 annual gross income warrants the need for a Nutrient Management Plan)
1 animal unit equals 1000 lbs of live animal weight

<table>
<thead>
<tr>
<th>Animal</th>
<th>Animal Unit Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horses</td>
<td>8 Broilers/Fryers 2000</td>
</tr>
<tr>
<td>Beef Cattle</td>
<td>8 Ducks 1200</td>
</tr>
<tr>
<td>Dairy Cattle</td>
<td>6 Geese 650</td>
</tr>
<tr>
<td>Sheep</td>
<td>40 Turkeys 425</td>
</tr>
<tr>
<td>Goats</td>
<td>90 Pigs 10-40 lbs 267</td>
</tr>
<tr>
<td>Alpaca</td>
<td>75 Pigs 40-220 lbs 62</td>
</tr>
<tr>
<td>Llama</td>
<td>25 Sows 21</td>
</tr>
<tr>
<td>Emu</td>
<td>60 Ostrich 30</td>
</tr>
</tbody>
</table>

Nutrient Management Plan Cost Share Increase

The Maryland Agricultural Water Quality Cost Share (MACS) Program has increased from the previous rate of 50% to 87.5% for cost-share assistance for Nutrient Management Plan development. The new cost-share rates will cover soil tests and the cost of hiring a private nutrient management consultant. Applications should be submitted to the local Soil Conservation District, and should be approved by MDA prior to the plan's completion.

“The wealth acquired by speculation and plunder, is fugacious in its nature, and fills society with the spirit of gambling. The moderate and sure income of husbandry begets permanent improvement, quiet life and orderly conduct, both public and private.”
-- Thomas Jefferson to George Washington, 1787.

Thanks for Partnering

Thanks for partnering with the Maryland Cooperative Extension, and supporting our programs. I also hope you enjoy this newsletter. If you are no longer interested in receiving this newsletter, please call or write the office for the removal of your name from the mailer.

Farming is Ageless!

Dave Myers
Extension Educator
Agriculture and Natural Resources
Anne Arundel & Prince George’s Counties
Fruits and Vegetables

Prince George’s Cooperative Extension
6707 Groveton Drive
Clinton, MD 20735
301 868-8783

Anne Arundel Cooperative Extension
7320 Ritchie Highway, Suite 210
Glen Burnie, MD 21061
410 222-6759 or 301 970-8250

Note: Registered Trade Mark® Products, Manufacturers, or Companies mentioned within this newsletter are not to be considered as sole endorsements. The information has been provided for educational purposes only.