Production Pointers
Winter 2003

Calendar of Events
Mark Your Calendars --- Plan To Participate
- January 16-19th – Horse World Expo – Timonium
- January 27-28th – Delmarva Ag Conference – Dover
- January 31st – Central MD Veg Meeting – Upperco
- February 4-6th – Mid Atlantic Veg & Fruit Mtg. – Hershey
- February 5th – So. MD Veg & Fruit Meeting – Ruritan
- February 6th – Grape Growers Course – West Friendship
- February 8th – Upper Marlboro Pruning Clinic
- February 17th – Pest Recert. & Voucher – DFRC
- February 19-22nd – MADMAC – Timonium
- February 20 & 27th – NM Certification for Farmers
- February 27th – Greenhouse Growers Meeting - Harford Co.
- February 27th – WMREC Regional fruit Mtg. - Keedysville
- March 5th – Bay Area Fruit School - Wye REC
- March 10, 17, & 24th – Intro to Farming – DFRC

Inside This Issue
- Meetings Meetings Meetings!
- Tobacco Seed Distribution Program
- GAFLPP Job Descriptions Wanted
- Small Farm Institute Corner
- SMRFM Update
- Pasture Weed Management
- Annual Pastures for Heavy Use Areas & Tough Times
- Annual pasture Enterprise Budgets
- Pasture Weed Control
- Nutrient Management Update
- Farmland Preservation Questionnaire

It is the policy of the University of Maryland, Agricultural Experiment Station and the Maryland Cooperative Extension that no person shall be subjected to discrimination on the grounds of race, color, gender religion, national origin, sexual orientation, age, marital or parental status, or disability.
Winter Meetings Slated

Horse World Expo
January 16-19, 2003

The Horse World Expo at the Timonium Fair Grounds is scheduled for January 16-19, 2003. If you have never attended this event, I guarantee that you will be amazed at the crowd and excitement generated. Join the fun, and see why the 5.2 billion dollar Maryland horse industry is a shining star agricultural industry for the state.

You are also invited to visit with Extension faculty at the MCE Horse Expo Exhibit Booth, and plan to attend one or more of the University of Maryland Seminars.

New Opportunities in Delmarva Agriculture Program
January 27 & 28, 2003

Mark your calendars for this exciting new conference New Opportunities in Delmarva Agriculture Program. This two-day meeting is scheduled for January 27 & 28, 2003 at the Modern Maturity Center, on Rt. 8, in Dover, Delaware. I have program copies available. For meeting registration contact Ed Kee, DE, State Vegetable Specialist at 302 856-7303, or Gordon Johnson at DE, Extension Agent at 302 730-4000.

Central Maryland Vegetable Growers Meeting
January 31, 2003

This well sponsored, large grower meeting always offers a great deal of vegetable industry information. The Central Maryland Vegetable Growers Meeting will be held on January 31, 2003, from 8:00 a.m. to 3:30 p.m. at the Friendly Farm Inn, located on Foreston Rd. in Upperco, MD. Pesticide recertification credits are awarded for attending this meeting. For full meeting details, and to register call the Baltimore County Extension Office at 410 666-1024 today.

Mid-Atlantic Fruit & Vegetable Convention
February 4-6, 2003

The three-day Mid-Atlantic Fruit & Vegetable Conference in Hershey, PA, is one of the best fruit and vegetable events in the nation. If you have the opportunity to attend, then be sure to go and enjoy an industry and university sponsored event of the highest caliber. Registration details will be provided upon request. Fees are payable at the conference door. For more details call the Anne Arundel County Extension Office at 410 222-6759.

Southern Maryland Vegetable & Fruit Production Meeting
February 5, 2003

Don’t miss the 2003 Southern Maryland Vegetable and Fruit Production Meeting on February 5, 2003, 7:30 a.m. - 4:30 p.m. at the Davidsonville Rutitan Club, Davidsonville, Maryland. Speakers will present a broad range of topics including: “Vegetable Pest Trouble-Shooting;” “Vineyards for Southern Maryland;” “Producing Leafy Greens;” “Ethnic Vegetable Markets;” “Integrated Vegetable Disease Control Tactics;” “Pumpkin Variety Update;” “2002 Farm Bill Benefits;” “Farm Estate & Financial Planning;” “Farm Record Keeping;” and “The Maryland Department of Agriculture Pesticide Update.” Private Pesticide Applicator Recertification credit is awarded for attending the meeting. Also meeting sponsors will showcase their products and services, and state vegetable organization leaders will be present to recruit and answer your questions. Please attend and make this meeting the best ever! 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 1, 2003. For full details and registration information -- See the enclosed flyer.

Beginner’s Grape Growing Short Course
February 6, 2003

The University of Maryland will be conducting a Beginner’s Grape Growing Short Course on February 6, 2003 from 8:30 a.m. to 4:30 p.m. at the Howard County Fairgrounds, located in West Friendship, Maryland. If you are planning to plant a vineyard, then you had better be a participant in this comprehensive workshop. Over 100 new growers attended this meeting last year, so call early to reserve your spot. For details and registration contact Susan Provost at the Western Maryland Research and education Center at: 301 432-2767, Ext. 315 or by email at: sp178@umail.umd.edu

Upper Marlboro Research Vineyard Pruning Clinic
February 8, 2003

The University of Maryland Vineyard Team and the Maryland Grape Growers Association wishes to invite you to attend the MGGA Upper Marlboro Research Vineyard Pruning Clinic to be held on February 8, 2003 from 10:00 a.m. to noon at the Upper Marlboro Research and Education Center located at 2005 Largo Road, in Upper Marlboro, Maryland. For more details and directions give me a call, or go to the MGGA web site at: www.marylandwine.com
Private Pesticide Applicator & Nutrient Management Voucher Trainings
February 17, 2003

A Private Pesticide Applicator Recertification & Nutrient Management Voucher Training will be held at the Davidsonville Family Recreation Center (DFRC-former Nike missile base) from 5:00 p.m. to 9:00 p.m. on February 17, 2003. The Pesticide Applicator Recertification portion of the program will be from 5:00 to 7:00 p.m. and the Nutrient Management Voucher Training will be from 7:00 to 9:00 p.m. -- See the enclosed flyer.

Mid-Atlantic Direct Marketing Conference and Trade Show
February 19-22, 2003

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 19-22, 2003 at the Holiday Inn Select in Timonium, Maryland. 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 301 405-2436

Nutrient Management Training And Certification for Farmers
February 20 & 27, 2003

The Maryland Department of Agriculture in cooperation with the University of Maryland Cooperative Extension is piloting two Training and Certification Programs for Farmers interested in writing nutrient management plans required by law for their operations. Each session will be geared toward a specific type of operation. A training session will be offered in Montgomery County on February 20, 2003 for traditional crop production operations that use commercial fertilizer as their only nutrient source. Animal or crop operations that use manure or other organic nutrient sources to grow crops may attend the February 27, 2003 training session in Carroll County. Farmers in neighboring counties may also attend these sessions.

The Certification Process
Certification will require a two-day commitment. On day one, participants will learn the fundamentals of nutrient management planning by working through a model plan. Take home study materials will be provided at this time. On the second day participants will meet in small groups at several locations to take a certification exam and develop and complete nutrient management plans for their individual operations. Technical assistance in developing the plans will be provided by Maryland Cooperative Extension specialists.

Farmers who pass the exam and successfully complete their own nutrient management plans will be certified by MDA. Certified farmers are required to attend continuing education classes each year in order to update and revise their plan. These continuing education classes will also be accepted in lieu of voucher training required for farmers who apply their own nutrients.

Registration Information
Due to space limitations, applications will be accepted on a first come, first served basis. The registration deadline is January 31, 2003. The $60 cost covers lunch on days, training and reference materials, and the certification fee. There are no additional fees for retaking the exam or renewing the certificate. Directions and an agenda will be sent with confirmation information to all registrants. Please contact Earle Canter, Maryland Department of Agriculture, at 410-841-5959 or your County Extension Educator for more information.

Greenhouse Growers Conference
February 27, 2003

Don’t miss the opportunity to attend the Greenhouse Growers Conference being held at the Harford County Extension Office on February 27, 2003 from 9:00 a.m. to 3:00 pm. The cost is $25 and includes lunch. Topics include control strategies for thrips, aphids and fungus gnats, marketing greenhouse crops, diagnosing and control of diseases on bedding plants, and fertilization. Register by Feb 25, 2003 by calling Shannon Potter, Harford County Extension Educator at 410-638-3255.

WMREC Regional Fruit Meeting
February 27, 2003

If you are a fruit grower be sure to attend the WMREC Regional Fruit Meeting, on February 27, 2003, 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 details and registration contact Susan Provost at the Western Maryland Research and education Center at: 301 432-2767, Ext. 315 or by email at: sp178@umail.umd.edu

Bay Area Fruit School
March 5, 2003

Attention all fruit growers! The Wye Peach School has transformed this year into the Bay Area Fruit School. Plan to attend the 1st annual Bay Area Fruit School on March 5, 2003, at the WYE Research and Education Center in Queenstown, Maryland. Tentative topics include: making desert fruit wines, fireblight management, peach post harvest care, growing raspberries, spray strategies for a multi-fruit orchard, beekeeping, fruit pharmaceuticals, and a regional fruit industry brainstorming session. This all day meeting will provide Private Pesticide Applicator Recertification Credit. For full meeting details and registration call Debbie Dant, WYE REC at 410 827-8056, Ext. 115.
Introduction to Farming Short-Course
March 10, 17 & 24, 2003

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 Davidsonville Family Recreation Center (DFRC). Make plans to attend. -- See the enclosed flyer.

Agronomy Update Section

I have copies of the 2002 Maryland Wheat & Barley Variety Performance Trials, 2002 Maryland Soybean Variety Tests, and 2002 Maryland Corn Hybrid Performance Tests available in the office. They may also be downloaded and printed from Dr. Robert Kratochvil’s Cropping System Research and Extension Page at: www.nrsl.umd.edu/extension/crops/

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, MD 402, and MD 602 - same as last year. These varieties will be packaged in 1-ounce packets, and made available at seed distribution sites and county Extension offices. All varieties will be available in the pelletized form by request. The form for pelletized seed request will be available at the county Extension offices and the Upper Marlboro Research and Education Center. If you need pelletized seed fill out and fax the form to Alfred Hawkins at 301 627-3273. Any questions or requests regarding this program should be addressed to Alfred Hawkins, Tobacco Seed Production Administrator, call Alfred at 301 627-8440.

Maryland Vegetable Growers Report

On behalf of the Maryland Vegetable Growers Association, I wish to announce that the MVGA Board will hold its annual board meeting in conjunction with the Central Maryland Vegetable Meeting. The Central Maryland Vegetable Meeting will be held on Friday, January 31, 2003 from 8:00 a.m. to 3:30 p.m. at the Friendly Farm Inn, in Upperco, Maryland.

For more information concerning MVGA organizational matters, or to make comment, please contact Guy Moore, MVGA President at 410 442-1427, or Dave Myers, MVGA Secretary/Treasurer at 410 222-6759.

Harvested Fruit or Leaf

<table>
<thead>
<tr>
<th>Vegetable Crop Species/Variety</th>
<th>Average Yield Harvested Portion Pounds/acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hibiscus, Edible, African</td>
<td>Leaves 25,294</td>
</tr>
<tr>
<td>Amaranth, Edible Green Jamaican Calaloo</td>
<td>Leaves 23,493</td>
</tr>
<tr>
<td>Amaranth, Edible Red Jamaican Calaloo</td>
<td>Leaves 18,905</td>
</tr>
<tr>
<td>Sweet Pepper, Green/Red Bell King Arthur</td>
<td>Fruit 19,602</td>
</tr>
<tr>
<td>Sweet Pepper, Red Pimento Pimento Elite</td>
<td>Fruit 13,097</td>
</tr>
<tr>
<td>Hot Pepper, Cayenne Mesilla</td>
<td>Fruit 15,246</td>
</tr>
<tr>
<td>Hot Pepper, Ornamental Numex</td>
<td>Fruit 9,670</td>
</tr>
<tr>
<td>Hot Pepper, African Dutch Bonnet type</td>
<td>Fruit 8,596</td>
</tr>
<tr>
<td>Hot Pepper, Green Habanera</td>
<td>Fruit 2,904</td>
</tr>
<tr>
<td>Hot Pepper, Red Habanera</td>
<td>Fruit 8,131</td>
</tr>
<tr>
<td>Hot Pepper, Orange Habanera</td>
<td>Fruit 6,186</td>
</tr>
<tr>
<td>Solanum Gilo, African Jamaican Bitter Balls</td>
<td>Leaves &amp; Fruit 12,168</td>
</tr>
<tr>
<td>Sweet Potato Red Hayman</td>
<td>Leaves &amp; Petioles 32,670</td>
</tr>
<tr>
<td>Cucumber, Asian Suyo Long</td>
<td>Fruit 80,847</td>
</tr>
<tr>
<td>Tomatillo, Green Toma Verde</td>
<td>Fruit 17,772</td>
</tr>
<tr>
<td>Tomatillo, Purple Purple</td>
<td>Fruit 22,158</td>
</tr>
<tr>
<td>Eggplant, Black Oblong Nadia</td>
<td>Fruit 23,762</td>
</tr>
<tr>
<td>Eggplant, Purple Striped Oblong, Zebra</td>
<td>Fruit 12,574</td>
</tr>
<tr>
<td>Eggplant, Green Striped Round, Kermit</td>
<td>Fruit 17,221</td>
</tr>
<tr>
<td>Eggplant, African Indigenous Variety</td>
<td>Fruit 8,654</td>
</tr>
<tr>
<td>Leek Upton</td>
<td>Leaves &amp; Bulb 6,970</td>
</tr>
<tr>
<td>Spinach, Savoy Type New Zealand</td>
<td>Leaves 21,605</td>
</tr>
<tr>
<td>Spinach, Smooth Leaf Denali</td>
<td>Leaves 10,454</td>
</tr>
<tr>
<td>Cilantro Jantor</td>
<td>Leaves 5,460</td>
</tr>
<tr>
<td>Chervil Brussels</td>
<td>Leaves 1,452</td>
</tr>
<tr>
<td>Sweet Basil Genovese</td>
<td>Leaves 8,567</td>
</tr>
<tr>
<td>Holy Basil, Green Kaprao Thailand</td>
<td>Leaves 3,804</td>
</tr>
<tr>
<td>Basil, Purple Osmin Purple India</td>
<td>Leaves 2,004</td>
</tr>
</tbody>
</table>
GAFLPP Job Descriptions Wanted
The Greater Annapolis Farm Labor Provision Project is ready to service your needs. The GAFLPP Steering committee met on September 16, 2002 to initiate a process to bring the project to a successful spring of 2003 start. The following three agenda items were addressed as being critical to the projects success:

1. The ability to spread the word about GAFLPP to both the farm and worker communities.
2. The development of a worker transportation system to and from the farm communities.
3. The commitment by farm operations to hire and provide descriptive job positions for workers.

Attached at the back of this newsletter is a GAFLPP Hiring Questionnaire for farmers seeking farm workers to fill out. This is the most vital step required for the project to go forward and become successful. Please fill out the form and mail it to the GAFLPP Project Chair, Ms. Lolita Harley as soon as possible. The committee has a goal of offering at least 20 positions to the Latino community of Annapolis by next spring. If 20 jobs are secured then the logistics of utilizing a Bus service becomes a reality for the transportation of the workers to and from the farm communities. We need your commitment today. If you have any questions feel free to call me at 410 222-6759 or Lolita Harley at 301 627-4080.

The Small Farm Institute Corner
By Stephan Tubene

2002 Programs
The Small Farm Institute is a program of Maryland Cooperative Extension, designed to meet the needs of small farm operators including limited resource, minority, life style, and retirement farmers. Started in August 2000, the Small Farm Institute has provided training in production, pest management, horticulture, marketing, and farm management to several Southern Maryland small farm operators as well as the international communities. Several applied research projects were established in collaboration with Maryland Cooperative Extension and Extension Educators to provide scientific guidelines for alternative enterprises in Southern Maryland: ethnic/specialty vegetables research and marketing cooperative establishment. Several grants were secured through various sources to complete these tasks. For more information, please call Stephan Tubene at 410-222-6759 or visit the Small Farm Institute Web page www.agnr.umd.edu/mce/smallfarminstitute

Plans for 2003
The Small Farm Institute will continue to serve more small farmers in Maryland. The Small Farm Institute will expand its existing research, educational and outreach programs. In partnership with MDA, and other private and government agencies, applied research projects (in production, farm management, and marketing) will be conducted on farms and at various University of Maryland Research and Education Centers in order to find effective and sustainable technologies for our farmers. A more collaborative and partnership effort (regionally, nationally, and internationally) will be the focus of the 2003 programs in order to take advantage of regional and national resources for our local clientele.

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, and specialty herbs. For ethnic vegetable and herb production data consult the previous table on page 4.

Southern Maryland Small Farm Cooperative
Under the leadership of Mr. Dan Gragan, the Southern Maryland Small Farm Cooperative (SMSFC) has continued to serve Southern Maryland farmers. SMSFC objectives are to (1) act as buying and selling representative for agricultural products for its members; (2) promote policies that increase the net income for the producers; (3) develop long-term alliances with suppliers to provide savings on supplies to farmers; and (3) provide an arena for exchanging ideas and networking, and providing a unified voice in state and local agricultural affairs. Please call Mr. Dan Gragan, Stephan Tubene, and/or David Myers at 410-222-6759.

Buyers and Sellers’ Responses to Ethnic and Specialty Produce in the Baltimore-Washington Area—Project Funded by Maryland Department of Agriculture: Specialty Crops Grant.

This study is still underway. Preliminary results have been summarized, and are available upon request. For additional information, please call Stephan Tubene at 410-222-6759.

SMRFM Newsletter
January 2003
By Robert Chase

We’re looking forward to a prosperous 2003 for you and the SMRFM Market. Even with the dry summer, the Market finished in the black despite starting January 2002 in the red by $10,000. Prices were up even though quantity was down in some products and up in others. The Markets combined gross sales for the year were $425,000.

Our Hay auctions are doing well even in spite of the dry summer. The number of bales per sale is between 400 - 1000 and sold mostly in 10 to 20 bale lots. The prices range between $3.00 - $5.50 per bale depending on the type and quality. You may call the Cooperative Extension at 410-761-8911 to get the Tip-Line price report on the previous hay auction, and produce prices are provided in the summer season. We have 91 registered hay buyers at this time and can always use more. Hay suppliers are needed desperately to keep the auction going till April. The hay auctions are the 1st and 3rd Saturday of the month. Our commission rate is only 5% on hay and straw. Please call Bob Chase at 410-798-1580 to consign.
In an effort to give farmers an opportunity to market products 12 months a year, we’re happy to announce our first horticultural auction of the year will be on Wednesday April 30th at 2:00 p.m. The horticultural auctions will continue every Wednesday at 2:00 p.m. until sometime in June; when enough produce becomes available to warrant going to our evening produce auction. These horticultural auctions are not limited to shrubbery, flower and vegetable plants, but also any early produce that may be available. So roadside vendors and garden centers, you could be selling strawberries, peas, spring onions and the like with your bedding plants and hanging baskets. Growers please call 1 or 2 weeks ahead of the auction to advise us of what you plan to bring, so when buyers call, we can tell them what’s going to be available.

An announcement about the MADMC conference is included within this newsletter. MADMAC conference will not teach you how to grow a better tomato or pumpkin, but it will teach you how to market that tomato or pumpkin in a better manner. Southern MD has never had a big turn out for this conference but since it is fairly close this year; in Timonium, MD, your opportunity to go will never get closer or easier. Tri-County Council is sponsoring a bus on Friday February 21st. Please call 301-870-2520 to reserve your seat.

In closing we would like to thank the Tri-County Council, MD Dept. of Agriculture and the MD Cooperative Extension for all the help that was given to this Market in the past year. We consider you a true partner in the Market and hopefully we will have a long future together.

Sincerely,

Your Volunteer Board of Directors & Ex-Officio Board Members
President - Robert Chase 410-798-1580
Vice President - Barbara Austin 301-249-9194
Treasurer - Russell Burch 301-932-9495
Secretary – David Myers, MCE 410-222-6759
Member – Jim Duffy, MDA 410-841-5770
Member – Robert Halman, MDA 410-841-5770
Member – Frank King 301-855-7881
Member – Christine Bergmark, TCC 301-274-1922
Member – Francis Roland 301-248-8572
Member – Stephan Tubene, MCE 410-222-6759
Member – Dan Gragan, SMSFC 301-290-1179

SMRFM Hay & Straw Auctions
The Southern Maryland Regional Farmers Market wishes to remind you of the upcoming Hay and Straw Auctions, which are scheduled for the first and third Saturday morning at 10:00 a.m. beginning in November. The auctions will run through March. If you have hay or straw to consign, or are an interested buyer, then please contact Margie Wilkinson at the market office, at 800 533-FARM or call Bob Chase at 410 798-1580. See the table for the latest auction results.

**Sale Date** | **Product Name** | **Low Price** | **High Price** | **Avg Price**
---|---|---|---|---
1/4/03 | Orchard Grass | $4.10 | $4.10 | $4.10
1/4/03 | Timothy | $5.00 | $5.40 | $5.13
1/4/03 | Timothy Mixed | $3.30 | $4.20 | $4.00

### Pasture Weed Management

**Make a Fair Assessment of Forages Verses Weeds in your Pasture**

Why should I worry about weeds in my pasture or hayfield?

- 1-acre of weed free pasture per 1000 lb horse or steer can provide 50% to 75% of the animal’s yearly feed requirements.
- 2-acres of weed free pasture per 1000lb horse or steer can provide more than 90% of the animal’s yearly feed requirements, (some haying required).
- It is difficult to properly balance a feed ration when a pasture becomes excessively weedy. -- Feed value unknown.
- Some weeds are poisonous or noxious.
- The presence weeds dramatically reduce the quality and value of hay.

**Pasture Evaluation Process - You must come to terms with:** (Check the one that applies)

- My pasture is dominated by weeds, or
- My pasture is dominated by desired forages.

In Maryland due to cycles of extreme weather our pastures are in a seemingly endless state of decline; therefore, we should expect to renovate and reseed often. We need to also realize that as soon as a pasture declines, ever so slightly, weeds encroach. Effective weed control is timely weed control, when the desired forages still predominate. The application of herbicides to a pasture or hay field greatly reduces the competitiveness of the weeds, giving the forages a chance to establish, strengthen and dominate. For some pasture systems the pressures of grazing, harsh weather and weed encroachment are overly formidable, and rapid forage stand loss is unavoidable. The best solution may be a continual planting system of annual forage species. Examine the merits of the following annual pasture system:

### Annual Pastures for Heavy Use Areas & Tough Times

**Annual Pasture Systems**

- Allow the opportunity to continually renovate and reseed pastures until pasture problems are solved.
- Utilize annual crops to correct or overcome pasture deficiencies or failures, due to overstocking, compaction, low organic matter, wet areas, fertility imbalances, sandy soils, etc.
- May eventually lead into the successful development of perennial pastures.
- Cost less & return more. (See the enterprise budget examples below for selected annual forages.)
### Annual Pasture Forage Options for Southern Maryland

<table>
<thead>
<tr>
<th>Crop Species</th>
<th>Planting Date</th>
<th>Seeding Rate/A</th>
<th>Seed Cost/A*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austrian Winter Pea</td>
<td>March 1st</td>
<td>75 lbs</td>
<td>$39.00</td>
</tr>
<tr>
<td>Oats</td>
<td>March 1st</td>
<td>120 lbs</td>
<td>$22.56</td>
</tr>
<tr>
<td>Striate Lespedeza (Kobe)</td>
<td>March 5th</td>
<td>35 lbs</td>
<td>$28.00</td>
</tr>
<tr>
<td>Korean Lespedeza</td>
<td>March 10th</td>
<td>30 lbs</td>
<td>$21.60</td>
</tr>
<tr>
<td>Forage Soybeans</td>
<td>May 12th</td>
<td>75 lbs</td>
<td>$45.00</td>
</tr>
<tr>
<td>Sudax – Brown Mid-Rib</td>
<td>May 20th</td>
<td>40 lbs</td>
<td>$24.00</td>
</tr>
<tr>
<td>German Foxtail Millet</td>
<td>May 25th</td>
<td>30 lbs</td>
<td>$15.72</td>
</tr>
<tr>
<td>Japanese Millet</td>
<td>May 25th</td>
<td>30 lbs</td>
<td>$22.05</td>
</tr>
<tr>
<td>Pearl Millet</td>
<td>May 25th</td>
<td>35 lbs</td>
<td>$22.40</td>
</tr>
<tr>
<td>Crimson Clover</td>
<td>September 1st</td>
<td>25 lbs</td>
<td>$34.13</td>
</tr>
<tr>
<td>Annual Ryegrass</td>
<td>September 15th</td>
<td>30 lbs</td>
<td>$26.10</td>
</tr>
<tr>
<td>Triticale</td>
<td>September 25th</td>
<td>120 lbs</td>
<td>$31.20</td>
</tr>
<tr>
<td>Cereal Rye</td>
<td>September 25th</td>
<td>120 lbs</td>
<td>$19.20</td>
</tr>
</tbody>
</table>

* Seed Cost is based upon December 2, 2002 price quotes per 50 lb unit from the Southern States Corporation. Not an endorsement. For educational purposes only.

### Annual Pasture Enterprise Budgets

**Components of an Enterprise Budget**
- Gross Income
- Variable Costs (Inputs)
- Fixed Costs (Overhead)
- Net Income

**Accurate Estimation of Fixed Costs**
- Develop Machine Operation Costs
- Land Costs (Lease)
- Maintenance Costs
- Labor Costs (Employees)

*An Enterprise Budget is Crop or Livestock Specific*

### Annual Pasture Enterprise Budgets

**Cereal Rye**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Income Acre</td>
<td>2.75 tons</td>
<td>$110/ton</td>
<td>$302.50 (110 X 50 lb bales)</td>
</tr>
</tbody>
</table>

**II. Expenses**

A. Variable Costs
- Seed Acre: 30 lb/A $ .52/lb $15.60
- Fertilizer Urea Acre: 100 lb/a $8.25/50lb $16.50
  **Total Variable Costs**: $32.10

B. Fixed Costs
- Land Acre: $35.00
- Machinery & Labor Acre: $45.00
  **Total Fixed Costs**: $80.00

**Net Income**: $169.50

### German Foxtail Millet

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Income Acre</td>
<td>1.8 tons</td>
<td>$120/ton</td>
<td>$216.00 (70 X 50lb bales)</td>
</tr>
</tbody>
</table>

**II. Expenses**

A. Variable Costs
- Seed Acre: 30 lb/A $ .52/lb $15.60
- Fertilizer Urea Acre: 100 lb/a $8.25/50lb $16.50
  **Total Variable Costs**: $32.10

B. Fixed Costs
- Land Acre: $35.00
- Machinery & Labor Acre: $45.00
  **Total Fixed Costs**: $80.00

**Net Income**: $103.90

### Korean Lespedeza

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Income Acre</td>
<td>1.5 tons</td>
<td>$150/ton</td>
<td>$225.00 (60 X 50lb bales)</td>
</tr>
</tbody>
</table>

**II. Expenses**

A. Variable Costs
- Seed Acre: 35 lb/A $ .72/lb $25.20
- Seed Innoculant Acre: 1 pkt/50lb $1.60/A $ 1.60
- Fertilizer 0-0-52 Acre: 200 lb/a $ .08/lb $16.00
  **Total Variable Costs**: $42.80

B. Fixed Costs
- Land Acre: $35.00
- Machinery & Labor Acre: $45.00
  **Total Fixed Costs**: $80.00

**Total Variable and Fixed Costs**: $122.80

**Net Income**: $102.20

### Korean Lespedeza & German Foxtail Millet

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Income Acre</td>
<td>2 tons</td>
<td>$145/ton</td>
<td>$290.00 (80 - 50 bales)</td>
</tr>
</tbody>
</table>

**II. Expenses**

A. Variable Costs
- Seed (millet) Acre: 30 lb/A $ .52/lb $15.60
- Seed (lespedeza) Acre: 35 lb/A $ .72/lb $25.20
- Seed Innoculant Acre: 1 pkt/50lb $1.60/A $ 1.60
- Fertilizer 0-0-52 Acre: 200 lb/a $ .08/lb $16.00
  **Total Variable Costs**: $63.35

B. Fixed Costs
- Land Acre: $35.00
- Machinery & Labor Acre: $60.00
  **Total Fixed Costs**: $95.00

**Total Variable and Fixed Costs**: $158.35

**Net Income**: $131.65
Gain Control of Pasture Weeds With Herbicides

Herbicide Classification & Mode of Action

♦ Cell Membrane Disrupters
  Bipyridiliums
  Paraquat: Gramoxone MAX®, & Boa® New 2002
  Non-Selective & Non-Systemic

Aromatic Amino Acid 5-Enolpyruvyl-Shikimate-3-Phosphate Synthase (EPSP) Inhibitors
No Accepted Classification
  Glyphosate: Roundup Ultra MAX®, Non-Selective & Systemic

Growth Regulators

Phenoxy Acetic Acids
  2,4-D Amine: Multiple Brands® Grass Pasture - POST
    1) 0-14 day grazing and 7-30 day harvest restriction, specific to product brand label.
    2) Next season crop rotation restriction -- grasses 1-month.
    3) Rate: 0.5 – 2.0 quarts/acre.
  2,4-D + Triclopyr: Crossbow® Grass Pasture - POST
    1) 0-14 day grazing and 7-14 day harvest restriction.
    2) Next season crop rotation restriction -- grasses 1-month.
    3) Rate: 0.5 – 2.0 quarts/acre.

Notes: Severe drift concerns. May also cause damage to seedling grasses.

2,4-DB: Butyrac® Alfalfa, & Grass Pasture - POST
  1) 30-60 day grazing harvest restriction, (see label).
  2) Next season rotation restriction -- grasses 1-month.
  3) Rate: 2.0 – 6.0 pints/acre.

Notes: Severe drift concerns. May also cause damage to seedling grasses.

Benzoic Acids
  Dicamba: Banvel ® & Clarity ® Grass Pasture - POST
  1) 30-60 day grazing harvest restriction, (see label).
  2) Next season rotation restriction -- grasses 1-month.
  3) Rate: 0.25-2 quarts/acre.

Pyridines
  Clopyralid: Stinger® Grass Pasture - POST
  1) No grazing or haying restrictions.
  2) 12-18 month forage crop rotation restriction.
  3) Excellent for spot spraying Canada thistle.
  4) Rate: 0.33 – 1.33 pints/acre.

Triclopyr: Remedy® New for 2002? Grass Pasture - POST

Amino-Acid Acetolactate Synthase (ALS) Inhibitors

Sulfonyl-Ureas (SU’s)
  Metsulfuron-Methyl: Alby® Grass Pasture - POST
    1) No grazing or haying restrictions.
    2) 4-34 month forage crop rotation restrictions.
    3) Excellent for spot spraying multi-flora rose.

4) Rate: 0.1–0.3 ounces/acre.

Notes: Be extra careful with sprayer tank residues. Low rates are generally sufficient.

Mobile Photosynthetic Inhibitors

Ureas
  Tebuthiuron: Spike® Non-Selective
  1) 1-year haying restriction in treated areas.
  2) No grazing restrictions for <10 lbs /Acre.

Non-Mobile Photosynthetic Inhibitors

Nitriles
  Bromoxynil: Buctril® Pasture & Alfalfa (seedling)
    - POST
  1) Broadleaf control including: German moss and knawel.
  2) Legumes with > 2 trifoliate leaves are tolerant.
  3) No rotational restrictions.
  4) Grazing and Harvest restrictions:
     30 days after spring application.
     60 days after fall application.

Nutrient Management Update

By Krista Wilson

The Nutrient Management Program is quickly catching up! Our wait lists have drastically decreased so, if any producers need a Nutrient Management Plan, now is the time to call! The Nutrient Management Advisor, Krista Wilson, is in Anne Arundel County on Mondays, Tuesdays, and alternating Wednesdays. In Prince George’s County, Diana Canter is in the office daily. MD Cooperative Extension welcomes calls from producers! Remember, anyone who has 8 or more animal units, or who makes greater than $2,500 Gross Annual Income from their agricultural operation is required to obtain and implement a Nutrient Management Plan under the Water Quality Improvement Act of 1998. For existing clientele needing updates this year, it is requested that you call in as soon as possible to get on our wait list. Most Nutrient Management Plans that were written since 2001 were 1-year Plans. It is your responsibility to keep your NM plan up to date. Soil tests are good for 3 years so, if anyone needs an update, check to make sure your soil sample results are current. If you should have any questions about when your NM Plan expires, call Krista Wilson. The Nutrient Management Advisor can also be emailed with questions at: kristaw@umd.edu

For those interested in learning more about the Nutrient Management process, or for those who wish to become certified to write their own Nutrient Management Plans, a list of all 2003 MD Department of Agriculture (MDA) programs are listed below in this newsletter. MDA handles the registration for these courses and can be reached at 410-841-5959. These courses also count as continuing education credit hours, which keep your Nutrient Applicator Voucher current. All producers who apply lime, fertilizer, or manure themselves on greater than 10 Acres are required to...
obtain a Nutrient Applicator Voucher. See the schedule in this newsletter for the next training date if you need a Voucher. The Nutrient Applicator Voucher Trainings are always free and are usually held in the evening.

University of Maryland and the Maryland Department of Agriculture

Nutrient Management Training Courses/Programs 2003

The following is a list of training workshops for certified consultants. Also listed are the dates for the two-day Pre Exam training and the certification exam dates. Some of the later workshops are still tentative and will be confirmed at a later time. Certified consultants are sent registration forms for all workshops. Registration forms will be available on the MDA website: http://www.mda.state.md.us/nutrient/nutmgmt.html approximately 1 month prior to each workshop. Each one-day workshop counts for 6 hours of continuing education credits. The Pre Exam training cannot be counted toward continuing education credit.

Jan. 10, 17, 24 NuMan Software Drop In Help Sessions
Location: MDA Headquarters
Come anytime between 9 AM and 4 PM.
♦ Jan. 10, Central and Western MD -- Montgomery Co. Extension office, large meeting room
♦ Jan. 17, Southern Maryland -- Calvert Co. Services Plaza, Suite 102 (conf. rm.), Prince Frederick
♦ Jan. 24, Eastern Shore -- Wye REC, conference room
NuMan Drop-In Help Sessions have been scheduled for 3 locations. If the built-in help screens and phone support have not been enough to assist you in becoming "NuMan-competent", bring one of your plans and files and work through the plan with the help of an Extension regional nutrient management specialist.

Jan. 23 Nutrient Management Programs and Policies
Location: MDA Headquarters
This course will update certified consultants on the programs that are available and will be updated on policies that affect the plan writing process and plan submissions, review areas of concern in the plan writing process, review of MDA forms, available programs and incentives for nutrient management. The class will also review and answer questions about nutrient management plans for several types of operations.

Feb. 7 Certification Exam
Location: MDA Headquarters
Anyone wishing to take the certification examination must apply at least 2 weeks prior to the exam date and meet certain educational and experience requirements. Applying 2 months prior to the exam is recommended. Call or write the Nutrient Management Program for an application (phone 410-841-5959). The application form is also available on the MDA website: www.mda.state.md.us. Once the application is approved, study materials will be sent to applicants.

Feb. 19 Advanced Nutrient Management Planning for Nursery and Greenhouse
Location: MDA Headquarters
The course will cover cut flowers, greenhouses, in ground and out of ground production. This workshop will cover new processes that go into writing a plan including plan requirements, the concepts of management units, irrigation management, containment, stormwater management and risk assessment. Available programs and incentives for nutrient management planning and operations.

Feb. 26 Managing Nutrients in Pasture Operations
Location: Patuxent National Wildlife Center
This one-day continuing education workshop is designed to give participants information on how to develop a nutrient management plan for animal operations with pastures. Participants will develop an understanding of the different aspects of pasture management such as stocking rates, forage types, environmental concerns and nutrient recommendations to maintain pasture health. Sample pasture plans for various operations will be covered.

Mar. 19 Intermediate Soil Fertility
Location: MDA Headquarters
This workshop provides participants with a refresher course in the basic concepts of soil fertility and their management as they relate to developing nutrient management plans. Various aspects of the nutrient cycle and how it relates to nitrogen, phosphorus, potassium, pH, lime requirements, and liming material.

March 23 & 28 Writing Nutrient Management Plans
♦ March 23, 2003, Wye Research and Education Center
Seating will be limited to 12 people at each session.
This workshop will familiarize participants with the nutrient management planning process from beginning to end. The workshop is intended for individuals who have not yet begun writing plans or who are new to the plan writing process. Use of the nutrient recommendation software will be integrated into the training throughout the day.

Apr. 2 Phosphorus Site Index Training
Location: MDA Headquarters
This course will introduce participants to the Phosphorus Site Index for Maryland. The course will cover how to calculate the parameters used in determining the P-site index, such as soil erosion using the Revised Universal Soil Loss Equation (RUSLE). The course also provides an opportunity to study different site-index scenarios and discusses the future automation of the Maryland Phosphorus Site Index.
There will also be field training arranged in various locations around the state to use the P-site index on farm fields.

June 17 & 18 Pre Exam Training
Location: MDA Headquarters
This two day training course is organized primarily for individuals planning on taking the Maryland Nutrient Management Certification Examination or the nutrient management component of the Mid-Atlantic Certified Crop
Advisor Exam. The course provides participants with a basic overview of the knowledge areas covered by the certification exam. The Certification Examination is scheduled for August 1st, 2003.

**July 30 Nutrient Management for Grounds Management Personnel**

Location: MDA Headquarters

This training course is aimed at individuals responsible for managing nutrient application on public grounds, parks, apartment complexes, common grounds area and other urban landscapes. Efficient nutrient use, soil testing, record keeping, and regulatory requirements will be discussed.

**Aug. 1 Certification Exam**

Location: MDA Headquarters

Anyone wishing to take the certification examination must apply at least 2 weeks prior to the exam date and meet certain educational and experience requirements. Applying 2 months prior to the exam is recommended. Call or write the Nutrient Management Program for an application (phone 410-841-5959). The application form will be available on the MDA website. Once the application is approved, study materials will be sent to applicants.

Anne Arundel County
Agricultural Development Advisory Committee
Farmland Preservation Initiative Questionnaire

Our County Executive, the honorable Janet Owens, formally appointed the County Agricultural Development Advisory Committee in the Winter of 2002, and tasked the group with the responsibility of promoting and expanding our agricultural industry through a complex chain of relationships at the County, State, Federal and Public levels. The committee members are committed to the preservation of agriculture, and solicit your input by way of your answers to these important County farmland issues brought forth in the attached questionnaire. This information gathered will be presented to the Anne Arundel County Council and Administration to facilitate appropriate land development legislation. Please complete the enclosed questionnaire and return to the Anne Arundel County Extension Office. Farmers and landowners from Prince George’s County or other counties may also complete and return the questionnaire, however, we request that you indicate somewhere on the form the county in which your operation resides. Thank You!

**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.

**Avoid Snow Blindness!**

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

**NACAA Communication Award**
Individual Newsletter
2002 National Winner

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.