

## From the Coordinator

Minority farmers and ranchers have historically faced many obstacles, including purchasing farmland, operating farms, and expanding farm operations. Traditionally, these farmers do not participate in Extension activities due to the fact that most minority farmers and ranchers are part-time farmers, have very limited resources, and have scheduling conflicts.

According to the Census of Agriculture (NASS, 1997 and 2002), the number of farms operated by racial and ethnic minority farmers in Southern and Eastern Shore of Maryland has increased from 235 in 1997 to 469 in 2002 showing an incredible 100 percent increase. This is a significant milestone given the decline in the number of Maryland farms (8%) and farm land (5%) during the same period of time.

The question one has to ask is “who is going to be the next farming generation in Maryland when it is known that the new generation is no longer interested in farming?” Obviously, the aging of our farmers and the lack of their replacement are among problems to be addressed. Definitely, Maryland land preservation has to be encouraged in order to efficiently monitor booming housing development activities.

In fact, the aging of Maryland farmers has been a major concern for the State. The average age of a Maryland principal farm operator is 55.9 years with the highest age among African American farmers (61.1 years), and the lowest (48.7 years) among Asian farmers (Table 1). This trend is consistent with an Analysis of Variance (ANOVA) which indicates that the difference in age among White, Black, and Hispanic farmers is statistically significant, with the highest age bracket of 55-64 for Black and Hispanic farmers.

Definitely, programs such as [Farm Link](#), [Growing Farmers](#), and [Immigrant Farming](#)

[Initiative \(NIFI\)](#) are to be encouraged and supported. In fact, recent U.S. population trends (indicating more diverse and multicultural population) has spurred a new phenomenon known as the new face of the U.S. agriculture dominated by U.S. immigrant farmers. This growing wave of “new” farmers is eager to grow and supply unusual crops sometimes known as ethnic and specialty vegetables. Needless to say, new immigrants are interested in farming, but they do not know how and where to begin. For the first time, a national conference on immigrant farming was organized in Las Cruces, NM on February 2007.



First NIFI Conference in Las Cruces, NM

Using an “open space” presentation style, this conference gave the opportunity to immigrant farmers to express themselves on various topics including accessing USDA grants and programs, disaster responses and 2007 Farm Bill. As far as I am concerned, I went to this meeting not knowing how “open space” technology would work. I was pleased to learn a lot from farmers rather than me speaking in the front of them as we, agricultural professionals, have been trained to do. To learn more about the conference and its outcomes, please visit NIFI Web site - <http://www.immigrantfarming.org>



Stephan Tubene, Coordinator

## Volume 4, Issue 1

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### Special Points of Interest:

Minority Farmers Count:  
[forms.sc.egov.usda.gov/eforms](http://forms.sc.egov.usda.gov/eforms)

Stay Connected:  
<http://www.immigrantfarming.org>

The Small Farm Institute:  
[www.extension.umd.edu/agriculture/smallfarms](http://www.extension.umd.edu/agriculture/smallfarms)

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From the Coordinator (continued)

**Table 1. Maryland Farm Operators' Characteristics by Gender and Race in 2002.**

Characteristics	White	Black	Hispanic	Asian	Native American
<b>Operators (Total)</b>	<b>17,740</b>	<b>296</b>	<b>164</b>	<b>49</b>	<b>71</b>
<b>Operator Gender</b>					
Male	12,497	247	117	37	48
Female	5,243	49	47	12	23
<b>Age Group</b>					
Under 25 years	412	6	3	1	3
25-34 years	1,039	2	5	1	7
35-44 years	3,428	25	36	17	13
45-54 years	4,698	59	38	22	17
55-64 years	4,330	82	47	3	22
65-74 years	2,513	74	18	4	4
75 years and over	1,320	48	17	1	5
<b>Average Age</b>	<b>53.3</b>	<b>61.1</b>	<b>51.4</b>	<b>48.7</b>	<b>51.5</b>

Source: 2002 Census of Agriculture, Maryland Data  
<http://www.nass.usda.gov/census/census02/volume1/md/index1.htm>

**Crossroads Farmers Market**

**Wednesday June 6:** Crossroads Farmers Market opens at 3pm in Takoma Park, MD

**Wednesday June 20:** Crossroads Farmers Market Opening Day Celebration: Leaders of the City of Takoma Park, Montgomery County and the State of Maryland will be invited to join neighborhood residents for an afternoon of festivities to celebrate the opening of the new market.

USDA has approved the Crossroads Farmers Market and Takoma Park Farmers Market to participate in the Food Stamp Program. We should be up and running at the Crossroads by opening day, and I hope to implement the program at the Sunday market in Takoma Park in early May.

Contact:  
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**Risk Management Strategies for Small Farmers, Beginning Farmers and Ranchers Conference**

September 12 – 15, 2007  
 Hilton Milwaukee City Center  
 Milwaukee, Wisconsin

For more information contact:  
 Heather Ryan, Growing Power,  
 414-331-0847,  
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MD & CA Farmers at NIFI Conference in Las Cruces, NM



Brought to you by USDA, RMA, and Growing Power, Inc.

**NACAA Conference in Michigan**

Dear Colleagues in Maryland,

Tomorrow we'll turn the calendar page on April and be staring at May 15, the last day to register for the NACAA Conference. We don't want you to miss this great professional improvement conference. If you haven't been to this conference for a long time I want to encourage you to come. We guarantee you'll say that it was worth your time and investment. From seminars to tours, workshops to general sessions, you are going to find it a great boost for your career and an inspiration to even greater things.



Don't put it off any longer. Why not take a few minutes right now to register. Just click on [www.nacaa.com](http://www.nacaa.com) and get started!

Michigan Agents are looking forward to being your hosts. So come see us at the Grand Hotel in Grand Rapids on the banks of the Grand River for a GRAND time!

See you soon!

Phil Durst  
 2007 NACAA Annual Meeting Chair

## Grant Opportunities

### Value-Added Producer Grants

Value-Added Producer Grants (VAPG) program is administrated by USDA-Rural Development agency. VAPG are used for planning activities, value-added working capital, marketing value-added agricultural products and for farm-based renewable energy. Eligible applicants are independent producers, farmer and rancher cooperatives, agricultural producer groups, and majority-controlled producer-based business ventures. Interested applicants may contact State Rural Development Office to obtain additional information and assistance. A contact person, address, phone number, and e-mail address for each State Office is posted on following website: [www.rurdev.usda.gov/rbs/coops/vadg.htm](http://www.rurdev.usda.gov/rbs/coops/vadg.htm)  
Notice the deadline for VAPG FY07 is May 16, 2007.

### New Programs to Benefit Farmers and Rural Businesses Announced

Contact: Steve McHenry, Executive Director, 410/841-5761 or Jamie Epperson, Business Manager, 410/841-5779

ANNAPOLIS (April 27, 2007). The Maryland Agricultural and Resource-Based Industry Development Corporation ("MARBIDCO") is now offering low-cost financing programs to assist farmers and other rural business owners with entrepreneurial or innovative business activities. Examples of innovative business activities include on-farm and value-added food processing, niche product development and marketing, smaller scale secondary wood products manufacturing, and business-related technology enhancements (especially those related to energy efficiency). The Corporation's mission is to help agricultural and resource-based businesses to innovate, diversify and exploit emerging market opportunities in food and fiber production and in rural tourism and recreation. MARBIDCO's programming is also designed with the aim of helping to increase rural business sustainability and profitability while at the same time contributing to the preservation of Maryland's rural working landscape of productive farms and forests.

The deadlines to apply for MARBIDCO financial and business planning assistance varies by the individual program. MARBIDCO's low-interest loan programs also generally require the participation of commercial lenders.

See below for more information concerning the individual programs:

Maryland Farm and Producer Viability Program is designed to improve the financial viability of producers/processors or assist fledging rural entrepreneurs through specialized business planning assistance. The aim of the program is to help early stage enterprises with operational and market risk assessment and with enhanced business plan development. APPLICATION DEADLINE: May 18, 2007 (for the 2007 pilot program).

Maryland Resource-Based Industry Financing Fund offers low-interest loans to established agricultural, forestry or seafood businesses for the purchase of land and capital equipment for production and processing activities, or environmental enhancement projects. Priority is given to value-added and niche market-oriented projects as well as beginning or transitioning producers and processors. MARBIDCO will provide up to 50% of the financing needed for a project, and a commercial lender and/or a public instrumentality must also have an equal financial commitment in any transaction. MARBIDCO will also take second position on the collateral security. DEADLINE: June 1, 2007 (for loans to be made in the current fiscal year).

Rural Business Energy Efficiency Grants and Loan Interest Rate Buy-Downs helps established firms and producers to purchase equipment or technology related to lowering farm and business-related energy consumption. Grants of up to 10% of a project's cost (maximum of \$5,000), are available for eligible activities. A copy of an energy audit report provided by a qualified third-party consultant is required. DEADLINE: June 1, 2007 (for loans to be made in the current fiscal year).

MARBIDCO is also working in conjunction with the Maryland Agricultural Land Preservation Foundation to institute an Installment Purchase Agreements Program that will enable landowners that sell agricultural property easements to the State (or county governments) to use tax-advantaged financial arrangements structured to benefit both landowners and the public. This program is expected to become available sometime in mid-summer.

Additional information about MARBIDCO's programs can be found on the web at: [www.marbidco.org](http://www.marbidco.org).

## Annual Field Crops Research Twilight, Barbecue & Ice Cream Social

CMREC, Upper Marlboro Farm

August 9, 2007

You are invited to attend a twilight wagon tour of the University of Maryland Upper Marlboro Research Farm, on Thursday, August 9, 2007 from 4:30 p.m. to 8:30 p.m. Maryland Cooperative Extension will host this **Annual Field Crops Research Twilight Barbecue & Ice Cream Social**.

Served after the barbecue, "Old-fashioned" homemade ice cream! It's "old fashioned" ice cream because we will be using a 1929 Fair-Banks Morse antique gas engine to do the cranking.



This event will highlight all field crops, agronomic and horticultural research projects currently conducted at the CMREC Upper Marlboro

Farm, possibly including but not limited to the following:

- Bt Sweet Corn IPM
- Entrust Study on Potatoes
- Vegetable IPM
- Vineyard Projects - Table and Wine Grapes
- Corn Stalk Nitrate Test Study
- P Phyto-Remediation Grain vs. Forage Systems
- Peach & Beach Plum Research
- Ethnic and Specialty Vegetables
- Strip-Till/No-Till Vegetable Production Techniques
- Blueberry Project
- Weed Control

Contact Dave Myers and/or Stephan Tubene at 410-222-6759

### New Nutrient Management Reporting Software Available for Farmers

CONTACT: Sue duPont, 410-841-5889 or Kate Wagner, 410-841-5888

ANNAPOLIS, MD - April 25, 2007 - The Maryland Department of Agriculture (MDA) and University of Maryland College of Agriculture and Natural Resources (AGNR) have announced the release of a new software program that is designed to make annual nutrient management implementation reporting easier for farmers and farm operators. Nutrient Management Reporter for Maryland (NuMan Reporter) is a Windows®-based software program that ties in closely with the reporting requirements of the Maryland Nutrient Management Program.

"Nutrient management plans help farmers protect water quality in the Chesapeake Bay and its tributaries by balancing crop nutrient needs with fertilizer applications," said Agriculture Secretary Roger L. Richardson. "Our goal in developing this software program with the University of Maryland is to make nutrient management reporting as easy and efficient as possible for our state's farmers and nutrient management consultants."

Maryland's nutrient management regulations require farmers to maintain a current plan and file an annual implementation report with MDA by March 1 of each year. These reports describe how farmers implemented their nutrient management plans during the previous cropping season. NuMan Reporter simplifies the reporting process for farmers and works in conjunction with the nutrient management software programs, NuMan MD and NuMan Pro.

NuMan Reporter allows farmers to edit files, confirm recommended nutrient application rates, and input actual field nutrient applications. The program also enables users to develop summary reports that satisfy MDA nutrient management reporting requirements. Importantly, anyone can use NuMan Reporter, even if they do not have NuMan MD or NuMan Pro. Individuals who are familiar with NuMan MD or NuMan Pro should find the software fairly easy to use. Additionally, a "Help" file is built into the program to assist first time users. For those requiring additional assistance, Maryland Cooperative Extension (MCE) will offer NuMan Reporter training workshops at locations throughout the state. NuMan Reporter software may be downloaded free of charge from the AGNR web site at [www.agnr.umd.edu/users/numan/reporter/](http://www.agnr.umd.edu/users/numan/reporter/). To order a free CD of NuMan Reporter or obtain information on training workshops, contact the MCE Nutrient Management Program at 301-405-1318 or the Maryland Nutrient Management Program at 410-841-5959.

## 2006 – 2007 Maryland IPM Program Activities

By *Sandra Sardanelli, MS*; Director, Plant Nematology Facility  
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For the University Of Maryland Integrated Pest Management Program, programs and projects are created and directed by Maryland Cooperative Extension (MCE) and Maryland Agricultural Experiment Station (MAES) faculty and staff. Representing the College of Agriculture and Natural Resources and the College of Chemical and Life Sciences, our extension and research faculty and staff network with the public and private sectors to reinforce and extend the adoption of IPM approaches.

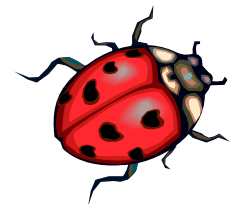


The goal of these partnerships, increased stakeholder awareness, supports the expansion of opportunities for Maryland residents to engage in IPM related activities.

Personnel in all above units contribute to multiple cross-programming efforts which address both ongoing and emerging pest management issues. Drawing from expertise in research based IPM best management practices, pesticide education and assessment venues and regulatory issues this networking of resources provides a consistent and reliable flow of timely pest management information for state residents. These cooperative efforts result in increased stakeholder participation in advisory groups, program committees, policy decisions, research and outreach projects, new pest detection, conference and workshop attendance and use of web based resources.

- Three major program areas provide the activities and deliverables contributing to the Maryland commitment for increased involvement in, and accountability for, IPM implementation: Agricultural IPM, Green Industries IPM and Community/ Structural/Urban IPM. Additionally, the IPM Program benefits greatly from the support and collaborative efforts of a number of Extension resource laboratories, facilities, and allied programs. Maryland IPM activities continue to successfully support a number of advances in research, educational outreach and information delivery strategies.

- These IPM research, education and outreach activities are developed and delivered to a broad range of stakeholders including; producers and their advisors, independent consultants, agribusiness advisors, extension agents and other public sector personnel such as the Maryland Department of Agriculture (MDA) and the Natural Resources Conservation Service (NRCS). Additionally, IPM educational activities include program deliveries for Volunteer, and Consumer Audiences.
- General research based educational activities encompass on-site demonstration programs, beginning and advanced classroom training sessions, short courses and workshops, field level individualized and small group training, newsletters, hotlines, technical publications and access to long-distance education via the WEB.
- The Maryland IPM Homepage, <http://www.mdipm.umd.edu>, which is currently under revision to the new MCE format, can be accessed for quick referral to a variety of Maryland Web-based IPM informational resources and program directories and reports.
- A major focus of IPM planning for the current National IPM Plan of Work cycle (2006-2008) efforts will be to coordinate a Plant Protection Center Initiative which will enable a restructuring and enhancement around core IPM/plant protection functions. Alignment with the Plant Protection Center Initiative will allow the Maryland IPM Program to maintain and enhance its essential program components through expanded public/private partnership. The venture is jointly sponsored by the College of Agriculture & Natural Resources and the College of Chemical & Life Sciences.



### Third UMES Small Farm Conference Draws Beginners, Experimenters By Kat Harting

PRINCESS ANNE, MD – Farmers from the Eastern and Western shores of Maryland and beyond were in attendance to learn new tools for their trade at the third annual Small Farm Conference at the University of Maryland Eastern Shore (UMES) earlier this month.

Farmers attended sessions that included a hands-on sheep and goat production workshop plus presentations on new varieties of specialty vegetables (e.g., “personal-sized” cantaloupes), food safety and bio-security, as well as multiple presentations to assist farmers with their marketing and finding grants.

Maryland Secretary of Agriculture Lewis R. Riley and Delaware Secretary of Agriculture Michael T. Scuse both offered keynote addresses focusing on their efforts and successes in moderating the surge in land development to preserve and promote the interests of agriculture-related industries on the Delmarva Peninsula. The conference was co-sponsored by Maryland Cooperative Extension at UMES and the Cooperative Extension Service at Delaware State University as well as the Maryland Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers Project. The Fourth UMES Small Farm Conference is scheduled for November 3, 2007 at the Richard A. Henson Center, University of Maryland Eastern Shore, Princess Anne, MD.



Dr. Niki Whitley of UMES explains (and demonstrates) how to trim hooves while a producer holds the animal.



Participants at the Sheep and Goat Workshop watch a hoof trimming demonstration.



Delaware Sec’y of Agriculture Michael T. Scuse detailed his agency’s efforts to promote the interests of farmers in the state.



Maryland Sec’y of Agriculture Lewis R. Riley spoke about land use and farm preservation.



Mr. Andy Wetherill from Delaware State University presented findings from his ethnic crop studies.



Conference hosts Drs. Henry Brooks (l) and Stephan Tubene present a door prize to “Organic Greg” Zaczekiewicz (r) from New York.

*Photo captions credit UMES/MCE. For more information: H. O. Hudson at Maryland Cooperative Extension, (410) 651-6206, [hohudson@umes.edu](mailto:hohudson@umes.edu) or the Office of Public Relations (410) 651-2355, [memcneill@umes.edu](mailto:memcneill@umes.edu).*

## Alternative Energy Sources for Greenhouse and Farm Systems

Team Members: H. Douglas, J. Hashley, M.J. Robitaille, E. Lee, E. Rivera, S. Tubene, K. Kim, I. Kirst, A. Wetherill

Alternative Heating Systems for the farm can include a number of energy sources: solar panels, wind energy, geothermal heating or cooling, hydroelectric, etc.

One specific application for heating a greenhouse could be the use of alternative fuels in heat stoves. We discussed corn stoves that are commonly used in the Maryland area. The corn stoves use a low-grade animal feed corn that is inexpensive and readily available. They work with a large hopper attached to a heating stove and are electrically driven by a small agitator— the electricity need to operate the agitator can come from solar panels. Someone asked about the source of corn and it was suggested that a local county extension program could direct people to sources of corn for this purpose. It is relatively inexpensive and is cheaper than electricity for heat. In Massachusetts, some farmers also use wood pellet stoves in a similar fashion for greenhouse heat. These pellets are generally made of sawdust, compressed and palletized and are sold in 40-pound bags at the local Agway stores.

We also discussed water pumping with solar water pumps. It is possible to convert an existing well to a solar pumping system. They are cost effective and are especially useful in areas where it is not possible to install electricity from the grid. Some solar pumps can pump water from depths of 500-600 feet. It is also important to consider using battery storage systems for this type of solar setup to ensure there is adequate power during non-sunny days and in the evenings. USDA Rural Development Agency offers several programs to look into to fund these alternative energy systems –value-added grants or alternative energy incentive programs. There are also tax benefits to be gained through federal and state programs that help payback investment costs over time. One strategy suggested was to invest in an alternative energy system over time and increase the capacity (power) of the system as funding allows.

One participant asked about geothermal energy for heating and /or cooling. It is possible to drill down deep into the earth to tap the constant temperature of the earth. In the Eastern US, it is good for solar energy systems. There are many “backwoods” locations (such as in Maine) that are off the grid and rely solely on alternative energy sources. The cost of alternative energy (solar panels) is coming down. It is also possible to install a shingle or tile system on a roof to generate electricity effectively.

A question was raised about using solar panels and the solar availability in the summer versus the winter months. It is recommended to orient the panels to the south during the summer.

In sizing a solar system, it is important to determine your overall energy demand first in order to calculate the size of the system. Other considerations during installation include: tree cover, buildings, etc. You also need to design a system you need to assume seven sunless days into consideration – there needs to be a storage system to provide back up energy if the system is not operating. Another consideration is not only how much you produce, but also how much you consume. For example, a washing machine and dryer use significant amounts of energy. If you set up an alternative energy system you can still be connected to the power grid as a backup and sell back the energy you produce if you have excess energy. There is a huge benefit using solar water heating systems. It is important to always look for an energy savings label on any new appliances purchased for the home – they really pay back over time and can offer some tax rebates in some cases.

Methane gas is another energy source. One participant helped a farmer write a grant to design a greenhouse heating system with compost. The grower installed a water pump in the middle of the compost heap and there are hoses that circulate the hot water through tubes under the greenhouse soil and it provides warmth for plants to grow. It is necessary to keep adding more compost to keep generating new heat. It can get up to 100-110 degrees in the greenhouse.

Energy will only become more expensive over time. If farmers can save on energy costs, overall farm profitability will increase.

Some New Mexico growers expressed a need for a greenhouse cooling function. Their problem is too much heat in the greenhouse. It is possible to use solar power to power an exhaust fan or to power cool water from a chilled water system that blows cool air through the greenhouse.

For a small greenhouse (9 x 12 feet), one solar panel is sufficient with one deep cycle marine battery to keep it cool with a DC (direct current) exhaust fan.

Solar panels can be found for a few hundred dollars. Some people sell used panels that are affordable. Solar outdoor lights, motion lights, and landscaping lights are also energy saving devices that can be used around the farm. One source for these is Northern Tool and Equipment: [www.northerntool.com](http://www.northerntool.com).

**Source:** Adapted from NIFI Proceedings, First National Immigrant Farming Conference, Las Cruces, NM, 2007.

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The Small Farm Institute

## Mark Your Calendars!

**May 15:**

NACAA Registration  
Deadline

**May 16:**

USDA Value-Added Producer Grant  
Application Deadline

**May 18:**

MARBIDCO grant submission deadline  
Submission deadline

**May 24:**

Strawberry Spring Twilight  
Wye REC, Queenstown, MD

**June 4-6:**

E-Commerce Strategies Meeting  
Nebraska City, NE

**June 6:**

Crossroads Farmers Market opens  
3:00 PM, Takoma Park, MD

**June 16:**

MD Grape Growers Field Day  
CMREC, Upper Marlboro, MD

**June 20:**

Crossroads Farmers Market Opening  
Day Celebration

**June 27-29:**

MACAA Annual Meeting  
Ocean City, MD

**July 15-19:**

NACAA Annual Meeting  
Grand Rapids, MI

**July 29-August 1:**

AAEA Annual Conference  
Portland, OR

**August 9:**

MCE Annual Field Crops Twilight  
CMREC, Upper Marlboro, MD

**September 12-15:**

Risk Management Conference  
Milwaukee, WI

**November 3:**

UMES Fourth Small Conference  
UMES, Princess Anne, MD