

A Joint Publication of the Maryland Grain Producers Association and the Maryland Grain Producers Utilization Board

## PRESIDENT'S MESSAGE... JASON SCOTT, MGPA

Secretary Buddy Hance has approved the Maryland Grain Producers Association to be the certifying agent for the upcoming referendum on the Maryland Grain Checkoff Program. The referendum has passed by a significant margin of support in the 75-85% range but with low participation in the voting. I ask that you take a few minutes and request a ballot from our office or your local Extension office and be a part of your future...... VOTE.

Most of the current issues important to Maryland grain farmers relate to the Chesapeake Bay. Talking to grain farmers across the country, I realize that all eyes are upon us. I was recently asked by Pioneer to give a presentation on the Bay, TMDLs and WIPs to a group of next generation farmers at their lowa headquarters. These young farmers are concerned that they won't be far behind us in dealing with these issues. On the other hand, we are concerned that we are being put at an economic disadvantage because we are dealing with it first and have additional costs to doing business here in this region.

Maryland farmers have truly supported Bay cleanup efforts; in fact, recent data coming out of the NRCS Upper Chester Showcase watershed shows that in that watershed, agriculture has very little more to do. The detailed farm assessments done on every farm in the watershed not only show conservation impacts of federal and state costshared practices, they also show that the farmers have installed a significant number of best management practices at their own expense that are not included in the Bay model. MGPA supports efforts to count farmer installed BMPs and encourages farmers to report this information to their local soil conservation districts. Once done, it will be interesting to see if the same picture surfaces in other watersheds as similar data is gathered across the state.

Tooting our horn again about agriculture accomplishments, I note the recent report released by The Fertilizer Institute, documenting how American farmers are increasing our corn yields while decreasing our fertilizer use. (See details on pages 4-5). It shows again how, with research and sound science farm practices, agriculture will continue to meet the demands placed on the industry to provide for the world's food, feed and energy needs.

### "The Big O" to Speak at Commodity Classic



The best-known agricultural broadcaster in the country, legendary Orion Samuelson will present the keynote address at the 2011 Maryland Commodity Classic on Thursday, July 28. Orion has been heard over WGN in Chicago for over 50 years. Samuelson is heard daily on radio stations nationwide with his syndicated National Farm Report and weekly series Samuelson Sez, providing farmers with agricultural news and information. Orion is also seen weekly on RFDTV as co-host of This Week in AgriBusiness. In 2003, Orion became the first Agribusiness Broadcaster to be inducted into the National Radio Broadcasters Hall of Fame, with the award presented by Hall of Famer Paul Harvey.

years a Growing

## Voting Day set for July 29 for Maryland Grain Checkoff Program

The Maryland Grain Checkoff Program referendum is set for July 29, 2011, from 10:00 a.m. until 2:00 p.m. at county Extension Offices. Under Maryland law, checkoff programs are required to

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conduct a referendum every five years to reaffirm support. If passed by a majority of those voting who are eligible to vote, the 20 year-old Maryland Grain Checkoff Program will continue for an additional five years from October 1, 2011. An assessment of one half of one percent (0.5%) is collected on the net value of each bushel of grain sold. The checkoff is deducted at the first point of sale on all grain, with the exception of soybeans and sorghum, which are under national checkoff programs. To be eligible to vote a person must be financially engaged in the growing of grain as an owner, tenant, or sharecropper. Absentee ballots are available from local Extension offices or by contacting the MGPA office at 53 Slama Road, Edgewater, MD 21037, 410-956-5771, lynnehoot@aol.com, and are due back in the office no later than July 29, 2011. Ballots will also be collected at the Annual Commodity Classic on July 28 at Queen Anne's 4-H Park. For further information, contact the MGPA office.

#### NASCAR ADDED TO MGPA MEMBERSHIP BENEFITS



NEW! NASCAR joins as a partner to offer our members exclusive offers on gadgets, gear, race tickets and more, including discounts with Bank of America, Direct TV, Office Depot, Sprint, UPS, and more.

POWERING NASCAR.

Current benefits also include:

- COMPLIMENTARY TICKET TO MARYLAND COMMODITY CLASSIC
- EXCELLENCE IN AG COLLEGE SCHOLARSHIPS
- DELL PRODUCTS Discount
- ENTERPRISE RENT-A-CAR Discount
- FORD X-PLAN Discount on Ford, Lincoln, Mercury, Mazda and Volvo

Benefit details will be provided after receipt of membership form.

#### **MGPA MEMBERSHIP FEE TRANSFER FORM**

MGPA represents grain farmers in legislative and policy issues, conducts educational activities, and provides farmers pertinent information from the state checkoff board (MGPUB) and affiliated national associations for corn, wheat, barley and international trade.

If you are a grain producer, membership is free! Your checkoff assessment will pay your MGPA dues. Just complete and return this form.

To transfer these funds, please complete this form and return it to MGPUB. If you have requested a refund during the last year, please include a grain sales receipt for at least \$125 (\$50 for one year membership) on which a refund has not been requested. *Questions?* Contact Lynne Hoot at 410-956-5771 or email lynnehoot@aol.com.

MARYLAND GRAIN PRODUCERS ASSOCIATION MEMBER FORM

Complete the following and return to MGPUB, 53 Slama Road, Edgewater, MD 21037. Forms without checks can be faxed to 410-956-0161. Please print or type.

Name	Company 🖵
Farm/Co. Name	Farmer Yes 🖵 No 🖵
Spouse's Name	_ Email address
Home Phone ()	Business Phone ()
Address	
City/State/Zip	
Total Farm Acres In Corn Wheat	t Barley Oats Milo
Referred by MGPA Member	(optional)
Membership: 🖵 3-year membership for \$125 🖵 1-year membership for \$50	□ New □ Renewal (Member #:)
GRAIN PRODUCERS: This is a partial refund form for grain checkoff to pay MGPA membership dues. I hereby certifiy that I am a bona fide grain producer and that I contribute a minimum of \$125 to the checkoff program in a 3-year period (a minimum of \$50 for a 1-year membership) NON-PRODUCERS: Enclosed is a check for the membership fee checked above.	
Signature	_ Date

#### MGPA & MGPUB BOARD

#### MGPA & MGPUB Regional Members

(Regional members serve on both boards)

Kevin Anderson (Region Vacant (1)	1) 410-651-0022
Robert Garrett (2)	410-822-8920
Paul Spies (2)	410-708-5481
Tom Gannon (3)	410-758-2370
Marion Wilson (3)	410-758-1545
Lawrence Meeks (4)	410-848-2867
Vacant (4)	
Chip Bowling (5)	301-259-4397
Bubby Norris (5)	301-769-3870
Steve Ernst (6)	410-842-3926
Walter Gordon (6)	301-371-7605

#### **MGPUB Officers**

President - Marion Wilson Vice President - Paul Spies Treasurer - Chip Councell Secretary - Steve Ernst

#### **MGPUB Non-Voting**

Allen Davis - Ag Commission Charles Morris - Industry (Perdue) Bob Kratochvil - University of Maryland Mark Powell - MD Dept. of Agriculture

#### MGPUB Voting

Chip Bowling - NCGA Director Chip Councell - USGC Director Robert Hutchison - NBIC Director Jason Scott - USW Director

#### **MGPA Officers**

President - Jason Scott Vice President - Tom Gannon Treasurer - Drew Stabler Secretary - Steve Ernst

> MGPA At Large Jeff Middleton Mike Nelson

MGPA Advisory Patrick McMillan - MDA Ronald Mulford - UMD (retired)

#### Administration

Lynne Hoot - Executive Director Jennifer Shannahan - Admin. Assistant Laurie Adelhardt - Public Relations 410-956-5771 (voice) 410-956-0161 (fax) lynnehoot@aol.com (email) PR@marylandgrain.com (email)

#### www.marylandgrain.com

Maryland Grain Producers Association & Maryland Grain Producers Utilization Board 53 Slama Road, Edgewater, MD 21037



## NASCAR Sold on Ethanol Performance

With the idea of "Going Green" a world-wide initiative, NASCAR switched to a blend of ethanol and unleaded fuel that its top three series are using in 2011. Sunoco Green E15 is a 15-percent blend of ethanol which has less emission gases than unleaded fuel is a renewable source that could help NASCAR help cut down the greenhouse gases its cars and trucks release into the atmosphere every weekend.

"Sunoco Green E15 is good for racing, good for the environment and good for America," NASCAR CEO and Chairman Brian France

said. "While fueling the same close, door-to-door racing that thrills our fans, American ethanol creates jobs in the United States, helps foster energy independence and continues the greening of our sport."

Helping to spread the word was American Ethanol's sponsorship of Clint Bowyer, who drives the No. 33 for Richard Childress Racing. "At first, I didn't know what to think," Bowyer said. "Then we met with the folks at NASCAR, American Ethanol and Growth Energy and figured out that not only was it going to cut back on emissions we are putting into the atmosphere, but we are getting an increase in horse-power. I'm all about more horsepower from these ECR (Earnhardt Childress Racing) engines! All of this was implemented without major changes to the engines on these race cars."

"I have had no concerns about fuel mileage at all, especially these few races when the outcomes were determined on fuel mileage," said Bowyer, who continually maintains a top ten ranking. "The horsepower increase has been great with no additional stress put on these engines. That is the main thing. We haven't seen any negatives come out of the entire partnership."



## LEGISLATIVE SESSION CLOSES POSITIVELY FOR AGRICULTURE

As the balloons fell at sine die at the end of the 2011 legislative session, Maryland grain farmers had reason to celebrate. Any rejoicing, however, was for legislation that had failed rather than what had passed, as some significant issues were defeated.

Atrazine was the target of two bills, one in the House sponsored by Delegate Frush to ban atrazine and in the Senate by Senator Karen Montgomery to study a ban on atrazine. Both were defeated in committee. MGPA Board members Drew Stabler, Jamie Jamison and Jason Scott, and Dr. Tim Pastoor, a toxicologist from Syngenta, joined Lynne Hoot to explain the role and importance of atrazine to Maryland grain production and the fact that after reviewing 6,000 studies on atrazine, EPA re-registered the product in 2006.

For the third year, MGPA spoke in favor of having a *pesticide use survey* rather than a reporting system that would add significant burden to grain farmers. In support of the poultry industry, MGPA opposed legislation to ban the use of *Roxarsone*, an animal drug that contains arsenic and is approved by FDA for use in chickens. In each of these cases, MGPA believes strongly that these pesticides and drug products are approved at the federal level and should be dealt with by federal action so Maryland farmers are not put at an economic disadvantage. The Maryland Agricultural Cost-share Program (MACS) was approved at \$6 million and the Cover Crop Program was funded at \$16.2 million from the Bay Restoration fund and the 2010 Bay Trust Fund. No staff was lost in the agency budget, but a statewide budget reduction of 450 employees may impact MDA staff levels.

MGPA supported the *Fertilizer Act of* 2011 that passed, requiring additional regulation on urban lawn care. This legislation was sponsored by the Chesapeake Bay Commission who worked with many interests to develop a bill acceptable to environmentalists and the lawn care industry.

Chip Councell represented MGPA testifying against the Governor's *septic system legislation* that would require certain new subdivisions to use group systems with nitrogen removal. The committee did not vote on the bill and instead the Governor established a *Task Force on Sustainable Growth and Wastewater Disposal* to examine the issue. Delegate Maggie McIntosh will chair the Task Force with representation

from business, agriculture, science, environmental advocacy and state agencies. Pat Langenfelder and Richard Hutchinson are farmers appointed to the Task Force. Agriculture has been asked to suggest ways that restrictions on septic systems and smart growth can be made without hurting agriculture. Maryland Farm Bureau will hold a symposium on August 16th to discuss this in detail.

The legislation to raise the ceiling for the *Agricultural Estate Tax* to \$5 million did not pass but is expected to do better next year. Allen Davis presented testimony. The three-year deferral on estate tax was amended to extend the time beyond three years for properties signed up to sell easements.

MGPA welcomed many new legislators to Annapolis this year. These new faces, as well as many who returned, require you to spend time and energy to provide them an education on what is important to Maryland farmers. Less than 2% of the state's legislators have first-hand experience of agriculture, so it is up to us to keep them informed.

## PRESIDENT'S MESSAGE ..... JASON SCOTT, MGPA

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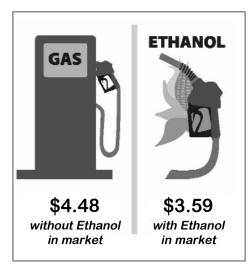
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As most of you know, the American Farm Bureau and Pennsylvania Farm Bureau filed suit against EPA on the Bay TMDL. The lawsuit is not seeking to delay clean-up of the Chesapeake Bay; it regards a specific regulatory scheme that violates the law. It is about federal overreaching into state authorities across seven jurisdictions (Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New York, and the District of Columbia), and it is about the need for valid science and meaningful public participation in federal government action.

According to the Clean Water Act, it is the right and responsibility of the states, not EPA, to determine how to achieve the goal of clean water. Under the Act, states establish their water quality goals and determine how to achieve those goals. In light of the potential impact of EPA's overreaching activities, MGPA encouraged the National Corn Growers Association to support the lawsuit and we provided non-checkoff funds to support their efforts.

MGPA is extremely disappointed that Osage has decided not to start up their barley to ethanol plant in Hopewell, Virginia and has instead chosen to put it up for sale. We applaud Perdue Farms for honoring the contracts made with barley growers in Maryland and Virginia. We wish we were in better economic times as this would be a perfect investment for the states of Virginia and Maryland to encourage the long term production of barley to help both energy security and to prevent nutrients from entering the Bay.

While ethanol appears to be the whipping boy today - we need to share the message that without ethanol, gasoline would be \$0.89 per gallon more expensive based on a recent Center for Agricultural and Rural Development study by economists at Iowa State University and the University of Wisconsin. This saved motorists \$440 million just over Memorial Day weekend.



MGPA is excited that broadcaster Orion "The Big O" Samuelson is our keynote speaker at



the Maryland Commodity Classic. We hope you will join us for the day and spend the morning looking at checkoff funded research at the Wye Research and Education Center before coming over to the Queen Anne's 4-H Park. I look forward to seeing you there - and in the meantime, I am hoping for some serious rain. We certainly need it at our farm in Hurlock.

Jason Scott, President

Maryland Grain Producers Association

# CORN OUTPUT Doubles from 1980-2010 with Fewer Nutrients

The Fertilizer Institute, using nutrient and pesticide use data collected by the U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service, announced that between 1980 and 2010, U.S. farmers nearly doubled corn production using slightly fewer fertilizer nutrients than were used in 1980. Specifically, in 1980, farmers grew 6.64 billion bushels of corn using 3.9 pounds of nutrients (nitrogen, phosphorus and potassium) for each bushel. In 2010 they grew 12.45 billion bushels using 1.6 pounds of nutrients per bushel produced. In total, this represents an 87.5 percent increase in production with 4 percent fewer nutrients during that same time frame. Corn production accounts for half of U.S. fertilizer use and experts estimate that 40 percent to 60 percent of world food production is attributable to fertilizers.

This achievement shown in the USDA data is notable for its environmental, economic and social benefits. Each additional bushel of corn produced through these efficiencies can in turn produce either 6 pounds of beef, 13 pounds of pork, 20 pounds of chicken, or 28 pounds of fish for dinner plates in the United States and around the world.

Increasingly, U.S. farmers' fertilizer use has been under intense scrutiny for its potential impact on water bodies such as the Chesapeake Bay and the Gulf of Mexico. The USDA data demonstrates that farmers are caring for the nation's water resources in large part through voluntary efforts.

"Efficient food production and protection of the environment are not mutually exclusive goals," said TFI President Ford West. "Farmers across the country including in the watersheds that drain to the Chesapeake Bay and the Mississippi River can be proud that their adoption of site specific nutrient management and their use of higher yielding varieties of corn are making a substantial and even massive contributions to the effort to reduce nutrient losses to waters across the nation."



#### Enter Now for National Corn Yield Contest

The National Corn Growers Association (NCGA) National Corn Yield Contest closes on July 25. A new online system (http://membership.ncga.com/CornYield Contest/Default.html) allows growers to easily enter the contest, and register for state and NCGA membership.

The National Corn Yield Contest has provided corn growers the opportunity to compete with and learn from their colleagues as they grow the most corn per acre, helping feed and fuel the world. Winners will receive national recognition and be presented awards at the 2012 Commodity Classic in Nashville, Tennessee.

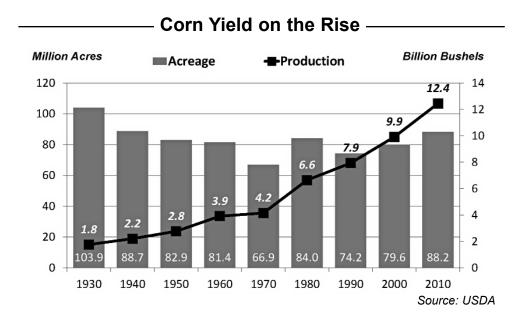
#### Online Research Glossary Defines Terminology

A new Research Glossary provided by the National Corn Growers Association is now available online. The glossary covers the terms most frequently used in agricultural discussions of genetics and provides a simple, accessible resource to better understand and communicate on programs such as the corn genome sequence. Visit http:// ncga.com/research-glossary or request a pocket guide version by contacting corninfo@ncga.com.



#### White House Rural Council

Chaired by Secretary of Agriculture Tom Vilsack, the newly created White House Rural Council is to provide recommendations for investment in rural areas, and will coordinate with rural stakeholders, including agricultural organizations. Discussions will include factors for growth, such as expansion of markets for agriculture, regional food systems and exports; expansion of biofuels production capacity and community based renewable energy products: opportunities for conservation and economic growth on working lands and public lands; job training; access to credit and local investment; health care; education; broadband access, and infrastructure.



#### Grain Farmer Videos Featured on Facebook and YouTube

Consumers will be provided an inside look at grain farming in Maryland as soundbooks on MDA's Maryland's Best website, YouTube and Facebook pages feature these farmers: Chip Councell, Talbot County, Allen Davis, Kent County, Steve Ernst, Washington County, Fred Lechlider and Drew Stabler, Montgomery County, and Russell Stephens, Dorchester County.

#### Market Factors in Closing of Local Business

Much to the dismay of farmers in all agricultural fields, Allen Family Foods will be closing its doors. Poultry is the top economic generator on the Eastern Shore, and a loss of an integrator will be felt by all sectors.

"The bankruptcy of Allen's Foods to Delmarva is very discouraging and is a tremendous loss to our area," states Bob Hutchison, grain farmer from Cordova. "Their claim that ethanol was the cause, however, I would dispute. Ethanol is certainly a factor in the current price of corn, but world shortages of all grains, oil prices and speculation on the commodities market have had a bigger impact."

MGPA has promoted the use of ethanol to provide a market for the ever increasing crop. In 1990, 6.1 billion bushels of the 7.9 billion national corn crop was available for feed and export. Today, 6.1 billion bushels of the 12.4 billion bushel crop is still available. Feed use has been very static over the past twenty years, and this coupled with the fact that one third of the corn used for ethanol is returned to the feed market as Dried Distillers Grains, has retained adequate supply of feed.

"Unfortunately the price of corn rose to its current level in two years instead of rising gradually over twenty years. The impact this sudden increase in price has had on the poultry industry, our number one customer, is of concern to our grain farmers," said Hutchison. Voluntary Conservation Practices Recognized and Awarded USDA Funds

Two projects were selected through USDA's Cooperative Conservation Partnership Initiative - Chesapeake Bay Watershed (CCPI-CBW) to accelerate voluntary conservation efforts in Maryland toward a healthy and restored Chesapeake Bay and its tributaries. NRCS leverages financial and technical assistance with partners' resources to install soil erosion-control practices, manage grazing lands, improve forest lands, establish cover crops, and reduce on-farm energy usage.

"We believe that a thriving and sustainable agricultural sector is critical to restoring the Chesapeake Bay," Dave White, NRCS Chief said. "The unique partnership available through CCPI provides us an opportunity to show that a voluntary, site-specific approach to conservation can work very successfully in this watershed."

Based on assessments of voluntary conservation practices released in March, NRCS found the voluntary, incentives-

based conservation approach is working. Most cropland acres have structural or management practices - or both - in place to control erosion. Nearly half the cropland acres are protected by one or more structural practices, such as buffers or terraces. Reduced tillage is used in some form on 88 percent of the cropland. Adoption of conservation practices has reduced edge-of-field sediment loss by 55 percent, losses of nitrogen with surface runoff by 42 percent, losses of nitrogen in subsurface flows by 31 percent, and losses of phosphorus (sediment attached and soluble) by 41 percent.

Funds awarded to the Maryland Department of Agriculture include \$2 million to plant cover crops on Maryland land within targeted watersheds and \$200,000 to implement vegetative environmental buffers on Delmarva to improve water quality, intercept ammonia and particulate emissions from fans on poultry houses, and reduce associated odors.

### Washington Focus of Ad Campaigns

Looking for the most effective means to communicate the facts and success of today's agriculture industry with the Administration, congress and their staff, agriculturual organizations are taking to the streets to get their message across through creative and appealing advertising.



The Renewable Fuels Association (RFA) is continuing an ad campaign this summer that was rolled out in January, and are looking to run it throughout the first week of August.

The ads, featuring an "ethanol lowers gas prices" message, are featured on buses, at metro stations, and on bus shelters throughout DC. In addition, print ads are running in Capitol Hill publications and on drive time radio. What do you think of when you hear the words "family business'? A corner grocery store? The local dry cleaner? Do you think of...farmers?

The fact is that nine out of every ten corn farms in America are family farms. Dads and moms who want safe, affordable food for their kids and yours so they grow it that way.

Farm families who care about the environment - because their very livelihood - their family business - depends on healthy soils and clean water.

Discover more about America's family corn farmers at CornFarmersCoalition.org. (30 second radio ad: "Family Business")

The industry image ad, *Right Here, Right Now,* is running on the cable, DC-market, political shows when Congress is in town. When one or both chambers of Congress is out of session, RFA advertising switches to advertising on political websites such as www.RealClearPolitics.com.

For the third year in a row, the nation's capital will learn about the U.S. family farmers through the Corn Farmers Coalition ad program at Union Station, an important venue for reaching policymakers inside "The Beltway." By teaming current factual information with faces of today's family farmers, ads showcase the productivity and environmental advances in the industry and how corn farmers have become high-tech and innovative.

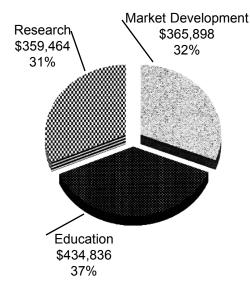


Corn farmers from Maryland, the National Corn Growers Association, and 13 other states are supporting the Corn Farmers Coalition program to introduce a foundation of facts seen as essential to decision. The ads run in Capital Hill publications, frequently used websites, radio, Union Station, the Metro and Reagan National Airport. The ad program will continue until Congress recesses in August.





## YOUR CHECKOFF DOLLARS AT WORK



The Maryland Grain Producers Utilization Board awarded over \$1.1 million in grants for the 2011 funding year, focusing on the specific needs and growing conditions as identified by Maryland grain farmers and described on the following pages.

The Checkoff Program is administered by a Board of Directors made up of regional grain farmer representatives and advisory members from state agribusinesses, Maryland Department of Agriculture and University of Maryland. Twenty years ago, the Maryland Grain Producers Association requested approval from the Secretary of Agriculture to hold a statewide referendum on a grain checkoff program. This foresight by my predecessors lead to the establishment of the Maryland Grain Producers Utilization Board (MGPUB) to administer the new Maryland Grain Checkoff Program that started October 1, 1991.



Since its inception in 1991, the Checkoff program has appropriated \$12.45 million, of which \$10 million has gone in direct grants to

expand the market for grain, improve our knowledge on profitable grain farming, and expand public education and awareness on the importance of agriculture. \$920,000 has been spend on Board program activities, which includes our involvement in national organizations to promote Maryland issues, 2% has been spent to administer the program, and 7% has been returned in refunds.

When the program started, national corn production was 7.5 billion bushels of which 1.4 billion bushels went for food, seed, and industrial uses. The average price paid for a bushel of corn in Maryland was \$2.40. Last year, American corn farmers grew 12.4 billion bushels and the market for food, seed, and industrial use was 6.3 billion bushels. The expanded industrial use, which is primarily lead by ethanol, has been increased due to checkoff programs like ours from across the country. Without such market development and promotion, how would we have sold this additional five billion bushels? All other uses of corn, including animal feed and export, have essentially remained static.

Your checkoff dollars have also funded research to improve farm profitability through enhanced nutrient utilization, better weed control, and new management systems. With all of the environmental pressure faced by Maryland growers, it has been our policy to ensure that production tools are available to enable you to maintain or improve profitability while working towards the ever increasing state environmental goals.

In the last 20 years, 64 grain farmers from six regions across the state have served on the board. Two members from each region serve on both the MGPUB and the MGPA Board of Directors for up to three two-year terms for a maximum of six consecutive years. Issues of Checkoff and policy are kept separate with different officers and separate meetings that are held subsequently for convenience. They serve without compensation and meet at least four times a year, including a three-day meeting in January where we review proposals and determine the best use of checkoff funds. We welcome your participation - potential members are welcome to attend meetings to see how the board functions to determine if you are interested. This is a great group of dedicated growers who deliberate cautiously as they appropriate your funds.

That said, in January our Board took progressive steps to try to overcome the ongoing barrage of negative press about farmers. How did we go from causing obesity because of high fructose corn starch to causing world starvation because of ethanol in less than a decade? MGPUB has set aside \$100,000 to invest in a documentary on Maryland agriculture, and as we develop this program with the help of the Maryland Department of Agriculture, the program may go on to become a 13-week PBS series not unlike "Outdoors Maryland". We welcome other farm organizations to join this effort. We must explain where our food comes from and create awareness for the strong stewardship ethic of modern grain producers. Stay tuned!

This year individuals with a financial interest in grain production in Maryland have the opportunity to vote in the fifth referendum. Let your voice be heard. Vote "YES" on July 29th - remember, those who don't like the checkoff program still have the ability to seek a refund. The rest of us who support the program believe in what Theodore Roosevelt said over a century ago, "Every man owes a part of his time and money to the business or industry he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere."

Marion Wilson, President Maryland Grain Producers Utilization Board

## a Growing Market Development Projects

U.S. farm exports reached an all-time high of \$75 billion during the first half of fiscal year 2011, according to USDA reports, a figure 27 percent higher than the same period last year. This puts exports on track to reach the current USDA export forecast of \$135.5 billion by the end of the year. Strong U.S. farm exports will be a key contributor to building an economy that continues to grow, innovate and out-compete the rest of the world. China is the top U.S. export market, buying \$15.1 billion in farm products, which accounts for nearly 20 percent of all U.S. farm exports. Canada is the second-largest market. When the South Korea, Colombia and Panama trade agreements are fully implemented, those agreements have the potential to add more than \$2.3 billion per year to U.S. exports and support more than 19,000 domestic jobs. Renewable fuel is positioned to be the 21st-century fuel of choice. It is clean, domestic, abundant, reliable and efficient. The ethanol industry produces jobs in rural communities across the continent at a time when more jobs are needed. The solution to the combined economic, environmental and energy challenges that can be credibly put forth will require a significant and growing role for renewable fuel to address sustainable economic growth and energy security.

Working with national organizations, the Maryland Grain Producers Utilization Board (MGPUB) has leveraged significant funding and resources to advance Maryland's needs on the national and international front through market and policy development. The investment in renewable fuel infrastructure and promotion has increased the demand for grain products and the importance of renewable energy.

## **RENEWABLE FUELS**

#### ✓ E85 Marketing and Infrastructure Development

#### Sustainable Energy Strategies, Inc. -\$37,030

With this project, support is provided to the existing 16 stations offering E85, and work is conducted to expand use of E85 throughout the region with more stations and blender pumps. With the assistance of a Department of Energy grant, six new stations will open in 2011.

The Flex Fuel Vehicle (FFV) Awareness Campaign will target FFV owners to be aware that they are driving an FFV. It is estimated 65% to 90% of FFV owners do not know they have a vehicle with the unique feature to use up to 85% ethanol. Since consumers will need to make very deliberate decisions regarding the choice to purchase higher ethanol blends, it is critical that they be educated on their options. Working with the Governor's office, approval will be sought to include FFV Informational materials in state renewal license mailings and inspection station visits. Auto dealerships will include FFV information in the welcome packages that identify FFVs and inform buyers about local ethanol refueling options. With ethanol retailers, FFV decals will be distributed and special promotions will be conducted to reward and motivate FFV owners to choose higher blends of ethanol.

#### ✓ Sweet Sorghum Grain and Biomass for Ethanol Variety Screening Salisbury University - \$9,434

Sweet sorghum contains simple sugars and can directly ferment to produce ethanol without the need to hydrolyze complex carbohydrates. Field trials over the last two summers indicated that sweet sorghum could be successfully grown for biofuel in this region. Sweet sorghum can grow well on marginal, non-irrigated land. Its nutrient input cost is less than half of that required for corn, and it is a short crop cycle plant, reaching maturity in 120-130 days. Data is, however, needed from multi-year trials in order to provide reliable recommendations for the region. Therefore screening of sweet sorghum varieties for biomass, juice volume, sap sugar concentration and grain yield will be continued.

#### ✓ Ethanol Performs

#### Bunny Burkett Racing Team - \$10,500

The Racing Team conducts "Ethanol Performs" promotions with the Dodge Avenger Funny Car driven by Ms. Bunny with fair displays, traveling billboard on trailer, promotional items, personal appearances, website, and print and television media coverage. The racing team competes on the racing circuit garnering significant publicity due to the fact that very few women compete in motor sports on a national level.



## Fill up at these public E85 stations:

Bestgate Shell, 811 Bestgate Road, Annapolis Quik-Mart Citgo Parole, 2042 West Street, Annapolis Fredericktowne Chevron, 1395 West Patrick Street, Frederick Washingtonian W Express, 10003 Fields Road, Gaithersburg Montgomery County Agencies, 16640 Crabbs Branch Way, Gaithersburg W Express, 100 North Frederick Avenue, Gaithersburg Towncenter Chevron, 12301 Middlebrook Road, Germantown Germantown W Express Chevron, 20510 Frederick Road, Germantown Congressional Plaza Sunoco, 1464 Rockville Pike, Rockville Takoma Park Texaco, 6400 New Hampshire Ave, Takoma Park Georgetown Chevron, 2450 Wisconsin Avenue, NW, Washington 22 Florida LP-MAPP, 22 Florida Avenue NW, Washington

## NATIONAL CONNECTIONS

#### ✓ Corn Policy and Promotion

#### National Corn Growers Association -\$172,050

The National Corn Growers Association's action teams and committees work on programs to keep farmers on the cutting edge of technology; provide innovative research to improve and increase market opportunities for the corn industry; reach mainstream audiences with positive messages about corn-based ethanol and corn production; expand new markets, like ethanol and its co-products, as well as corn-based projects; and maintain excellent relationships with key markets: livestock and poultry, processing for human consumption, and foreign export.

## $\checkmark$ Export Market Development and Promotion for Barley, Corn, Sorghum and their Products U.S. Grains Council - \$50.000

The Grains Council has been conducting overseas market development programs since 1960. Demand for U.S. grains and grain byproducts is growing with global population growth and the expansion of the consumer class, leading to a demand for more and better quality food. Included in the Council's initiatives are to measure and recommend transportation infrastructure needs; promote DDGs; expand markets in growth areas of Southeast Asia, India, Mexico and Latin America; and carry the message to our customers promoting the reliable supply, quality and sustainability of U.S. agricultural production.

#### ✓ Developing Export Markets for Maryland's Wheat Producers

#### U.S. Wheat Associates - \$28,300

As the export market development organization funded by America's wheat growers, U.S. Wheat Associates (USW) supplies information and training to wheat buyers and wheat food manufacturers in more than 100 countries through 17 offices overseas. USW objectives are to continue evaluating and reporting on soft red winter wheat (SRW) crop quality and functional characteristics; educate buyers about unique SRW advantages and value, for example, USW is planning an Overseas Varietal Analysis program that gathers input from overseas SRW customers to help SRW breeders develop varieties with functional quality linked to customer needs; and influence trade policy and increase acceptance of technological advancements in wheat breeding.

#### ✓ Wheat Policy

#### National Association of Wheat Growers - \$7,000

Objectives of the National Association of Wheat Growers include to create a unified voice supporting wheat growers that results in positive action, improve Risk Management Programs to support U.S. wheat growers, increase the focus of capturing the benefits of energy policy, and encourage investment and innovation in U.S. wheat. Priority focus for policy issues with congress and the Administration in 2011 will be given to confronting growing environmental regulation, showing the need for strong trade policy, beginning work toward the 2012 Farm Bill, and following financial reform and sustainability talks.

#### ✓ Barley Support and Market Expansion

#### National Barley Growers Association -\$1,518

The National Barley Growers Association's priority issues for 2011 include national farm policy issues and their subsequent effect on barley producers; barley crop insurance priorities; 2011 federal research funding priorities as established by the National Barley Improvement Committee; free trade agreements passage and implementation; conservation programs; and, enhanced transportation systems to be more competitive.

#### ✓ Wheat Promotion

#### Wheat Foods Council - \$16,000

"How Wheat Works" is the unique invention and program by the Wheat Foods Council. It is an excellent online course teaching agriculture and nutrition to those who might never be on a farm. In 2011 the website will be updated with new extensions and better marketing. A teacher's guide will be added to deliver more nutrition messages to students. To halt the childhood obesity crisis, proper nutrition and physical activity are the only solutions and WFC can assist through nutrition education while informing the audience how wheat becomes a food product. An educational tool kit will be revised and offered online, in the teachers section, as part of the virtual tour.

#### ✓ National Agriculture Day Agriculture Council of America - \$500

Every year, producers, agricultural associations, corporations, universities, government agencies and others come together with a single mission: to recognize and celebrate the abundance provided by agriculture. As part of the National Ag Day on March 15, 2011, organizers sent 100 high school students to Washington to carry the message of Ag Day to leaders, key influences, and the media. Ag Day materials and tools include a website, media and classroom resources, public service announcements, an Ag Day Poster, Planning Guide and Fact Cards.

#### Maryland Representatives



Chip Bowling, Charles County NCGA Director



Chip Councell, Talbot County USGC Director



Jason Scott, Wicomico County USW Director



For the past 20 years, the Checkoff has been, and continues to be, the place where innovative projects to educate students and consumers gain their footing. The Maryland Grain Producers Utilization Board (MGPUB) has provided countless educators the vehicle to obtain the right knowledge, creative resources, and the factual information to educate students and consumers about Maryland farming. From ethanol facts to promotion, statewide grain marketing programs to mobile classrooms and leadership contests, farm visits to video productions, MGPUB leads the way in supporting consumer and youth agricultural education.

#### ✓ Maryland Agriculture Documentary Development *NEW*

## Maryland Department of Agriculture - \$100,000

Given the lack of understanding of the general public about modern day farming practices, a documentary will be produced about agriculture targeted to MPT audiences. Modern grain production will be featured within the general Maryland agriculture theme as farmer profiles present the faces and issues behind America's essential agricultural industry. Due to the size and diversity of the state's agriculture industry, expanding the project into a 30minute series covering more facets of Maryland's agricultural industry and the issues it faces will be explored.

#### ✓ Where Does It Come From? **NEW** Maryland Agricultural Education Foundation - \$11,286

A new and original story, "Pizza, Baseball and Money", has been written by Education Director Jeanne Mueller to help the next generation appreciate our farms as the source of the food, clothes, and many other things used daily and frequently taken for granted. The story will be illustrated, published and disseminated to educators through workshops, training sessions and mobile lab visits. Additional exposure will be gained through distribution to Ag in the Classroom programs nationwide. Following the lives of two children, the sister questions where all the products she eats, wears and uses during the day while her brother learns from her research. The book will include facts about Maryland's top commodities, including the many uses of grain. The story and factual information is written to compliment Maryland state standards. Illustration and production will be provided by Laser Letters.

#### ✓ Kids' Country Farm Exhibit **NEW** Port Discovery Children's Museum -\$15,000

Kids' Country Farm will expose children ages 2-10 to the ways in which their lives are connected to the people, plants, animals, and activities found on a farm. For many children, especially those from Baltimore City, Kids' Country Farm will provide their first exposure to nature, rural lifestyles, and agricultural practices that impact their daily lives. Exhibit elements will include a grain elevator and silo, harvest field, horse stable, chicken coop and cow milking areas. Primary exhibit messages include the growth, care and importance of plants; and food and product origins. Exhibits will be minds-on, hands-on, learning activities that support the Maryland state curriculum. Port Discovery has over 250.000 visitors a vear.

#### ✓ The Whole Grains Story of Corn, Wheat and Barley **NEW** Laser Letters, Inc. - \$69,250

An activity booklet, video, website and essay contest designed to teach Maryland fourth and fifth graders about the wonderful world of agriculture and the important and surprising role of grains - corn, wheat and barley - in their lives will be created and distributed. Three main characters (Corn, Wheat and Barley) will be developed to deliver a positive message to children on the impact of grain in their diets and in many of the products they use daily. Next, 30,000 booklets and support materials will be produced and disseminated to education organizations including MAEF, county school systems, county Extension offices, and 4-H instructors. The message will be reinforced through video and the web, culminating in an essay contest.

#### ✓ Soundbooks on Grain Farmers **NEW**

#### Maryland Department of Agriculture - \$5,000

Short videos on grain production will be added to the sequence being filmed by Ed Remsberg as part of the Maryland's Best program. These will appear on the MDA website and be posted to Facebook and You Tube. Five 4-5 minute videos will be produced to address conservation practices, nutrient management, and the value of ethanol.

#### ✓ AGsploration - "The Science of Maryland Agriculture" NEW

#### University of Maryland Extension - \$4,300

The Science of Maryland Agriculture is a program being designed by University of Maryland Extension to bolster middle school students' Science, Technology, Engineering and Mathematic (STEM) abilities while learning the importance of agriculture. The AGsploration team will conduct three 2-day overnight Summer Science Career institutes for 200 middle school aged youth in summer 2011. Through agro-science and technology based curriculum, students will gain a greater understanding of agricultural production, environmental, and nutrition issues in Maryland; Maryland residents' awareness, appreciation and support of agriculture, and their appreciation of science in their everyday lives will increase. The AGsploration Winter Institute will teach how to use curriculum and pilot test with ag agents, then teacher training will be held in spring/summer 2012.

#### ✓ University of Maryland Agronomy Newsletter **NEW**

#### University of Maryland - \$5,000

The Agronomy Newsletter is part of the effort by the University of Maryland Extension (UME) to continue to provide farmers with production information while UME faces issues related to downsizing. The biweekly newsletter features pertinent crop production topics and is distributed statewide via electronic and bulk mail outlets.

Checkofi, Program

#### ✓ Cattleman's Skillathon **NEW** Maryland Cattleman's Association -\$500

The Maryland Livestock Skill-A-Thon is held in conjunction with the annual Maryland Cattle Industry Convention and Trade Show in Hagerstown, Maryland. The statewide youth contest is an innovative, educational event for Maryland 4-H and FFA youth that encompasses all aspects of animal husbandry, management and science. A team is then identified from Maryland to compete in the National Livestock Skill-A-Thon competition held each October.

#### ✓ Winter Barley Breeding Program *NEW* Oregon State University - \$500

Featured at the 20th North American Barley Workers Research Workshop, the Winter Barley Breeding Program will include topics on barley foods and beverages, and provide information useful to a range of participants.

#### ✓ Enhancing Maryland-Grown Wheat Consumption for Health Promotion and Disease Prevention

University of Maryland - \$18,000

Health beneficial activities are critical marketing factors for food ingredients. The goal of this research is to promote the value-added consumption of Marylandgrown soft wheat varieties in all natural functional foods. In this study, the biological properties of different wheat samples and products will be estimated and used for enhancing the consumption of these foods. In addition, more all-natural functional food recipes will be developed and optimized. Sensory acceptability of whole wheat functional foods rich in antioxidants will also be assessed.

#### ✓ Tri-County High School Grains

#### Education Program

#### Frederick County Extension, \$10,000

This project is a continuation of the 2010 Program, which will teach students how whole grains can help prevent chronic disease and control weight. Additionally they will taste whole grain food products and participate in a hands-on laboratory experience on how to prepare foods with whole grain ingredients. The goal is to reach 5300 high school students in 31 schools from Carroll, Frederick and Howard County. Targeted students are enrolled in Family and Consumer Science foods, nutrition classes, and Career and Technology culinary arts classes. ✓ Close Encounters with Agriculture Montgomery County Cooperative Extension Office - \$4,000

Students in 4th grade are offered hands-on learning at the Extension office farm park in areas of production agriculture, nutrition and environment. Teaching packets with additional learning activities are provided for use before and after the farm visit.

#### ✓ Kids Growing with Grains Frederick County Extension Advisory Council - \$4,000

Through hands-on activities, children, teachers, and parents of Maryland 4th graders learn about grain utilization in animal science, the importance of grain products for good nutrition, and grain production. Separate portable programs are being developed to bring the project into the classroom, as well as to use the materials at fairs and other event exhibits.

## LEADERSHIP

#### ✓ Maryland Envirothon

#### Maryland Association of Soil Conservation Districts - \$9,000

The Maryland Envirothon program is a competitive natural resource education program for high school students, carried out through local soil conservation districts. It supplements local school's science curriculum with hands-on field based activity and instruction by natural resource professionals. During competition, students are trained and tested in five natural resource areas; forestry, aquatics, soils, wildlife and a current issue, which for 2011 is Salt and Fresh Water Estuaries. The students train throughout the year for competition with an adult advisor, aided by the various natural resource professionals from each area. Students compete progressively for scholarship money and prizes at the school, county, state and finally the North American level. Begun in 1979, the Envirothon has now spread to 21 of Maryland's 23 counties and Baltimore City.

#### ✓ Maryland's Agricultural Leadership Development Program

#### LEAD Maryland - \$55,000

LEAD Maryland's two-year program is designed to prepare emerging leaders to make a difference in areas of education, research, marketing and promotion, and improving the image and effectiveness of agriculture. Outcomes will be everything from having legislative representatives more responsible to the needs of Maryland farmers, to having stronger leadership serving our current agricultural and community organizations.

#### ✓ Enhancing the Education & Development of Maryland Youth

#### Maryland FFA Foundation - \$10,000

High school students develop vital leadership skills by participating in Maryland FFA programs. This grant provides support for career development events, group functions, and proficiency awards at the state convention. Additionally the grant supports leadership development through the sponsorship of training and workshops.

#### ✓ Farm Stewardship Certification and Assessment Program

#### Maryland Association of Soil Conservation Districts - \$30,000

This project expands the Farm Stewardship Certification and Assessment Program (FSCAP) that is currently operational and certifying farmers that are in compliance with nutrient management regulations and implementing best management practices. To date 16 farmers are certified in Washington, Frederick, Carroll and Baltimore counties. In 2011 the program will expand to the Eastern Shore and Southern Maryland, focusing on priority watersheds.

#### ✓ Support for Maryland Grain Producers Utilization Board

#### Maryland Grain Producers Association - \$140,000

The Maryland Grain Producers Association is the member organization of the grain producers in the state. It informs members through informational newsletters, holds the Annual Commodity Classic to promote grain activities, conducts the College Scholarship program, promotes the expanded utilization of grain, and expands education efforts on grain and agriculture through exhibits, displays, workshops, promotional campaigns, social media and website at www.marylandgrain.com. (\$70,000 allotted to Market Development)

# Research Projects

The Chesapeake Bay is the largest estuary in the United States and is recognized as an important ecosystem and food web. Agriculture production is a valuable element to this region as well. Significant resources have been invested in research to develop practical farm management techniques based on sound science to improve profitability while protecting the environment which makes the production of food, fiber and energy products possible.

While Maryland agriculture is a large sector in the state's economy, it is a smaller portion in the nation's agricultural industry. National companies focus their research on the issues in the nation's bread basket of the midwest. As such, research conducted through the Maryland Grain Producers Utilization Board (MGPUB) is critical to address the unique local issues and growing conditions.

Each and every day, the Maryland Grain Producers Checkoff Program uses its resources to make a positive impact on the future of agriculture in Maryland. Examples of successful research funded include variable rate nitrogen on corn using the GreenSeeker<sup>™</sup> technology for its impact and effectiveness by Dr. Josh McGrath, the Fall nitrate test for winter wheat being developed by Dr. Bob Kratochvil, and the use of vertical tillage equipment such as the Turbo Till to help the farmer by being able to incorporate poultry litter and other manure and still maintain no till characteristics. All of these practices are important by both helping the farmer and the Bay.

## NUTRIENT MANAGEMENT

#### ✓ Using an Adaptive Management Approach for Improving Nitrogen-Use Efficiency in the Chesapeake Bay Region *NEW*

University of Maryland - \$25,000 Researchers and producers have long sought a reliable and efficient method for determining the nitrogen status of corn during the early growing season because weather conditions early can often have a big influence on amounts of nitrogen available for growing an optimal corn crop. Accurate assessments of nitrogen status would allow effective and environmentally sound fertilizer practices. Optical sensors can be used to measure the vigor of a crop and show variability across a field. These sensors can be especially advantageous on manured fields because the sensors can provide feedback on amounts of nitrogen mineralized from the manure. Studies show that the same grain yields or slightly better can be achieved with 21% less nitrogen in corn and 10% less nitrogen in wheat using active optical sensors. However, there is little data at the production scale, especially where manure has been applied, showing the benefit of these sensors. Ten farmers will participate in this project using a Greenseeker optical sensor unit on a minimum of 250 acres of corn to conduct a comparison project to analyze the overall effectiveness of the Greenseeker and the total amount of nitrogen fertilizer reduced when using the Greenseeker as compared to their standard practice.

#### ✓ Corn Hybrids and Nitrogen Rate Response

#### University of Maryland - \$7,500

This project will evaluate available corn hybrids for their nitrogen use efficiency to provide farmers with optimum nitrogen rates for raising crops as environmentally friendly and economical as possible. Corn hybrids representing conventional to Smart Stax genetic technologies will be tested with various fertilizer nitrogen rates under dry land conditions at multiple sites across Maryland.

#### ✓ Nitrogen Sources and Management Systems in Notill and

#### Minimum Till Wheat NEW

Mulford Agronomics - \$4,000

This study will include 3 detailed studies:

*Study 1* will focus on nitrogen sources available to growers. Notill and minimum tillage wheat will follow notill and conventional corn and soybeans. Emphasis will be on comparing 17 treatments of nitrogen sources and blends of nitrogen sources for nitrogen efficiency.

In *Study 2* the previously funded MGPUB notill and minimum till wheat study will be revised to look at areas of management to improve production efficiency and wheat quality. Some of the same treatments that produced excellent yields and quality in 2009 will be compared to new management systems in 2011. Notill and minimum tillage wheat will be grown after notill corn and notill single crop soybeans. Each tillage system will evaluate seven crop management treatments. Low rate fertilizer technology will be compared to standard fertilizer programs. Fertilizer treatments with and without a Fall starter will be included.

*Study 3.* Using six wheat varieties, three production systems will be compared: a) single application of 80 lbs./acre of nitrogen with no further treatments; b) a higher level of nitrogen with a traditional fungicide program; and c) a management program that consistently produced yields and quality above average in the Coker Seed Breeding program.

#### $\checkmark$ Evaluation of Soil Pest Control Services and Nutrient Retention in

#### Notill Corn Production

#### University of Maryland - \$9,905

Data collected on entomopathogenic nematodes (EPN), which can control outbreaks of soil insect pests, will allow the design of an experimental framework to manage soils to promote retention and the long-term persistence of EPN and their biological control services. EPN populations will be surveyed and compared under tilled and notill field conditions. Soil physical and abiotic properties will be measured and nutrient fluxes will be analyzed to form results.

This project investigates nitrogen management practices that, if successful, may allow for reduced amounts of nitrogen for both corn and wheat production. The response of wheat with and without fall nitrogen that follows corn, which received pre-plant or side dress nitrogen that included nitrogen stabilizer products, will be investigated and reported.

#### ✓ Cropping Systems Effects on Soil Phosphorus **NEW**

#### University of Maryland - \$5,000

This long-term study evaluates the effects that two different cropping systems (grain-based and forage-based) have on soil phosphorus concentration. This project was started in the mid-90s with the establishment at three Maryland sites of five soil phosphorus levels that range from medium to excessive in soil concentration. Measurements on the effect that the systems have on soil phosphorus began in 2000, and crop phosphorus uptake and removal measurements have been collected annually since then. In addition, change in soil phosphorus concentration has been collected bi-annually. The large data set created over the past 11 years will be analyzed, summarized and assessed.

#### ✓ Seeding Rates for Cereal Cover Crops

#### University of Maryland - \$7,500

The Maryland Cover Crop Program needs recommendations for standard seeding rates and stand establishment. A field study will evaluate a range of seeding rates for rye, wheat and barley to analyze seedling emergence, biomass production, and nitrogen uptake. Recommendations will then be established for seeding rate and stand establishment.

#### ✓ Wheat Spring Nitrogen: Application Dates

#### University of Maryland Plant Science - \$7,500

This study will investigate the performance of wheat that receives its first spring application of nitrogen across a range of dates during late winter to provide research that can be used by farmers to optimize crop production and by MDA as they assess the need for changes to the Cover Crop Program March 1st statewide date.

#### ✓ Nitrogen and Phosphorous

Fertilization on Long-Term Notillage Corn, Soybean, Wheat Rotation *Virginia Polytech Institute - \$4,000* 

Continuous notillage is a best management practice for soil and nutrient conservation but comes with challenges, such as nutrient stratification since the soil layers are no longer mixed with cultivation. Similarly, poultry litter amended with alum is a best management strategy to mitigate phosphorus (P) issues in runoff, but crop P availability is unknown over long periods of time. This project will continue a long-term study that was initiated in 2003 by planting a corn - wheat - soybean - fallow notill rotation on a Bojac sandy loam on the Eastern Shore of Virginia. From these data. a long-term average of crop nutrient removal can be derived for the Mid-Atlantic region, soil carbon sequestration, and nutrient stratification for poultry litter and fertilizer applications.

#### ✓ Evaluate New Production Practices in Dry Land Corn Production Utilization *Mulford Agronomics* - \$5,000

Corn yields have increased in recent years with improved hybrids. This study will investigate the limits of response of modern corn hybrids to various inputs, and assess agronomic approaches to manage corn production as populations and yields increase.

*Study 1* will look at corn planted notill and reduced tillage at five nitrogen rates.

*Study* 2 will be a continuation of a study to compare dry and liquid nitrogen sources and additives.

Study 3 will evaluate a variety of starter fertilizers at different methods of application. Study 4 will be a continuation of the poultry manure project evaluating four tillage methods after broiler manure application and before corn planting.

#### ✓ Maryland Oyster Restoration Program

#### Chesapeake Bay Program -- \$10,000

This project adds ovster beds to the Chesapeake Bay for study of filtration effects on water quality. The oyster population of Chesapeake Bay has been estimated to be as low as one percent of its historic size, depriving the Bay system a keystone species in the Bay's ecosystem. Oysters filter the Bay's waters and in the process, remove huge quantities of planktonic algae, microscopic plants that are overabundant in the Bay due to excessive nitrogen. In 2010, 240 concrete reef ball reef modules were made, set and placed on sanctuary reef sites in Maryland tidal waters. The goal is to produce and plant ten million seed oysters on sanctuary reef sites in Maryland tidal waters.

✓ Cereal-Legume Cover Crop Mixture to Increase Nutrient Cycling Organisms and Crop Productivity

#### University of Maryland Entomology -\$11,855

Cover crops provide long-term advantages to crop lands such as improving soil health through enhancement of beneficial soil organisms (ie. Soil mites, free-living nematodes, and other decomposers). Unlike plant-parasitic nematodes that feed on plant roots, free-living nematodes are beneficial in that they contribute to nutrient cycling. Soil health providers increase the capacity of soil to perform essential functions such as nutrient cycling which subsequently leads to greater crop productivity. The objectives of this study include:

1) determine species composition of parassitoids and predators and rate of egg parasilkization and predation for the brown marmorated stink bug (BMSB),

2) determine the influence of cover crop on the parasitization and predation of BMSB egg masses,

3) determine the effects of cover crops on soil organism involved in nutrient cycling,

4) determine the contribution of cover crop to crop nitrogen content,

5) determine the effect of cover crop on soil insect pests, and

6) determine the effect of cover crop on corn productivity and grain yield.

#### ✓ Developing a Biologically Based Management Strategy for Slugs in Mid-Atlantic Grain Fields **NEW** *Pennsylvania State University* -\$13,700

The goal of this two-year project is to begin to develop tactics for managing slugs in Mid-Atlantic notill corn, soybean, and small grant acreage. Basic research will be conducted to better understand slug biology, their interactions with various cover crop and natural enemy species, and potential mechanical control options. The goal is to develop a biologically based approach for managing slug populations that develop in high-residue systems.

✓ Management and Control of Slugs in Problem Fields of Notill & Minimum Tillage Corn **NEW** *Mulford Agronomics - - \$5,000* The goal of this project is to evaluate various management methods of slug control during the early growth stages of notill corn so that the young corn plant can emerge from the soil and develop beyond damage from slugs. Testing will be conducted in central Maryland.

## **Call for Proposals**

2012 Funding Requests are due in the MGPUB office by December 1, 2011

MARYLAND GRAIN PRODUCERS UTILIZATION BOARD 53 Slama Road Edgewater, MD 21037 410-956-5771

## **CROP PROTECTION**

✓ Brown Marmorated Stink Bug and Leaf footed Bug in Corn Fields and Impact on Grain Yield and Quality NEW University of Maryland - \$18,000

The brown marmorated stink bug (BMSB) Halyomorphie halys, is a serious pest of several cropping systems. It is known to feed on corn but no investigation has been conducted to quantify the amount of injury it causes. Another true bug species, the leaf footed bug (LFB) Leptoglossus spp. is also known to feed on corn ears but their potential damage has not been quantified. In addition to understanding the damage inflicted by BMSB, it is important to understand its distribution within corn fields. A two-year field study will be conducted in Maryland corn fields to determine both damages inflicted by the BMSB and LFB to corn ears and their spatial distribution in corn fields, and to develop more efficient scouting and treatment programs for both crop systems.

✓ Evaluation of New Bt Stacked and Conventional Hybrids for Protection Against Ear Insects and Stalk Borers *NEW* 

#### University of Maryland - \$5,020

The Maryland corn hybrid performance tests are conducted each year to provide unbiased estimates of yield and other agronomic characters of hybrid seed corn sold in Maryland. The goal of this project is to include additional conventional hybrids and stacked Bt hybrids of different events. Assessment of stalk and ear damage inflicted to these hybrids, along with the stand agronomic measurements, will provide the information for extension outreach activities to inform growers and crop advisors about the insect resistance benefits of different Bt stacked events. Also to be evaluated is the vield performance and relative susceptibility to European corn borer injury of non-Bt hybrids adapted for Maryland growing conditions.

## ✓ Examining Impact of Cover Crops and other Plants on Behavior and Hatching Behavior of Root-knot Nematodes *NEW*

#### University of Maryland - \$7,000

Plnat-parasitic nematodes affect all crops of economic importance and present significant and serious problems for growers, agencies and organizations involved in developing acceptable control measures. The southern root-knot nematodes (SRKN) is especially damaging to corn, causing significant reductions in yields, quality and profits. A major problem with the control of this pest is the lack of effective and economical options for the grower beyond cultural practices such as crop rotation, and an increasingly limited and restricted arsenal of effective nematicides. Study objectives include:

1) determine the hatching response of the southern root-knot nematode to various species of winter cover crops,

- 2) determine the influence of cover crop on the reproduction of root-knot nematode,
- 3) examine the influence of cover crop on the survival of root-knot nematode, and

4) provide corn stakeholders pertinent information on the role of winter cover crops in southern root-knot nematode management.

✓ Effect of Fungicide and Insecticide Applications on Yield, Aphid and Beneficial Organisms in a Wheat Agroecosystem

University of Maryland - \$7,500

It is important to understand the impact of pesticides on beneficial organisms and final crop yields. The objectives of this study are to:

1) determine whether applications of systemic fungicides or a broad spectrum insecticide impact insect pests of wheat and their associated natural enemies,

2) determine if the addition of TiltR, HeadlineR, or WarriorR insecticide provide a yield benefit to wheat, and

3) determine the economical feasibility of using Tilt, Headline, or Warrior based on application cost and final yields.

During the experiment all pest and beneficial organisms will be monitored but greater emphasis will be placed on treatment effect of aphid populations. In addition, plant diseases impacting wheat such as Septeoria leafspot will be graded from each treatment plot if they should occur.

#### ✓ Doe Harvest Incentive Program Maryland Farm Bureau - \$60,000

Now in its third year, the Doe Harvest Incentive Program is expanding the eligible regions by adding Anne Arundel County to the Southern Maryland region of Calvert, Charles, St. Mary's and Prince George's Counties, and Queen Anne's and Kent Counties to the Mid-Shore region of Caroline, Dorchester and Talbot Counties. These areas are experiencing high levels of agricultural damage as a result of overpopulations of whitetail and sika deer. The 2011 program will consist of five 3-week contest cycles in each participating region. A winner is chosen during each 3-week cycle. There is no limit to the amount of entries, provided they were legally harvested doe. Grand prize winners will be awarded to the hunter that has donated the most deer throughout the five contest cycles in each region. Farmers and Hunters Feeding the Hungry program partners in this project.

#### ✓ Disease Risk, Yield Loss and Fungicides in Maryland Field Corn Production

University of Maryland - \$11,250

Independent testing of fungicide effects in field corn can help producers decide if there is a role for these products in their production system. The objectives for this project are to:

1) determine if strobilurin and strobilurin blend fungicide applications in field corn will provide foliar disease control, improve green leaf area, increase yield, reduce stalk rot and lodging in different disease risk cropping systems; and,

2) determine if fungicide applications will affect net photosynthesis, water use efficiency and light use efficiency for different levels of diseased tissue.

The goal is to then combine this information into a rating system that can be used to evaluate risks with benefits that may be obtained from a fungicide application.

# ✓ Wheat and Barley Disease Management: Early Fungicide Application and Scab Toxin Reduction University of Maryland - \$9,800

This project will continue study within field virus nurseries to screen varieties for resistance to wheat spindle streak mosaic virus and soil-borne wheat mosaic virus. The efficacy of fungicides appled at spring greenup for the management of barley powdery mildew and wheat leaf blight will be tested. The U.S. Wheat and Barley Scab Initiative uniform scab fungicide trial will be expanded to include standard fungicide treatments targeted for dieases other than scab to determine if their use affects vomitoxin levels.

## **VARIETY TESTING**

#### ✓ Establishing Small Grains with Vertical Tillage **NEW** University of Maryland - \$5,000

This study will begin in the fall of 2011 and will compare planting wheat and barley via a notill drill with broadcasting seed and using a Turbo Till. Two seeding rates will be incorporated into the study at three locations to obtain environmental and geographical differences representative of the state.

## $\checkmark$ Genetic Improvement and Testing of Small Grains for Maryland

#### University of Maryland - \$26,000

The main goal of the Maryland Small Grains Breeding Program is to develop high yielding, disease resistant, high quality wheat and barley varieties by using superior parental lines and introducing a new germplasm from a variety of sources. The second objective is to conduct local testing of all the commercially available and experimental varieties of winter wheat, and winter barley at several locations across Maryland to provide growers with the most unbiased and current performance comparisons. Segregating populations derived from these crosses will be evaluated in replicated yield trials under Maryland's conditions. A DNA-assisted selection program is being used to develop new scab and rust-tolerant varieties. The barley state test includes new hulless entries. Chesapeake, a variety resulting from this research, has high yield, high test weight, and resistance to powdery mildew, and is widely available to growers.

## ✓ Improvement and Development of Barley for Use in Fuel, Feed and Food

#### Virginia Polytechnic Institute - \$10,000

This research is designed to assess and improve the yield potential of hulled and hulless barley lines for use in fuel, food and feed industries. Desirable traits will be transferred into Thoroughbred to obtain lines having high yield potential, superior disease resistance, and excellent end use quality. This transformation should make barley more competitive with wheat and corn, and will enhance profitability of barley for producers.

#### ✓ Falling Number Research

#### University of Maryland - \$4,000

Currently grown soft red winter wheat cultivars will be screened for susceptibility to pre-harvest sprouting measured by the Falling Number test. Soft red winter wheat varieties in the state performance test will be grown across several locations. Three replications of the falling number test will be done for each variety from each location. Locations that had sprouting with those that did not will be compared, and a late harvest location will be established to promote sprouting.

#### ✓ State Corn Hybrid Test: Inclusion of Benchmark Hybrids *University of Maryland* - \$5,000

The annual State Corn Hybrid Variety Test will include up to six popularly grown corn hybrids not otherwise entered so farmers will be provided with unbiased information to make meaningful comparisons among hybrids before purchasing seed.



Maryland Grain Producers 53 Slama Road Edgewater, MD 21037-1423

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#### www.marylandgrain.com



The Maryland Grain Producers Association, Maryland Soybean Board, Maryland Grain Producers Utilization Board, and Mid-Atlantic Soybean Association invite you to see the latest in checkoff research, education and market development, hear about current issues, and enjoy the company at the famous crab feast and barbecue!

## AGENDA

9:00 - 10:45 am **Wagon Tours** Wye Research & Education Center See Research funded by Maryland Soybean Board and Maryland Grain Checkoff Programs

> 11:00 am **Registration Opens** Queen Anne's 4-H Park *Visit Commercial Exhibits, Checkoff Exhibits & Agency Exhibits*

Noon Lunch Available, 4-H Club

1:00 pm Business Meeting & Program Featuring Keynote Speaker: "THE BIG O" Orion Samuelson

> 4:00 - 5:30 pm Crab Feast and Pork & Chicken BBQ

Non-Profit Organization U.S. Postage PAID Annapolis, MD Permit #189

## Thursday, July 28, 2011

## QUEEN ANNE'S 4-H Park

#### Route 18 between Queenstown & Centreville

**TICKETS:** \$10 prior to 2:30 pm; \$20 after 2:30 pm (no entry after 3:30 pm)

Complimentary tickets are provided to members of the Maryland Grain Producers Association - see page 2 for membership information.

#### FOR MORE INFORMATION:

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