An innovative use of a perennial grass native to the Delmarva Peninsula could help bolster the bottom line for farmers and landowners and will also improve water quality throughout the region. The Nature Conservancy is offering a cash incentive to farmers and landowners willing to establish switchgrass, which can be harvested after three years and used as natural bedding material for chickens in approved houses, or sold to other markets.

The University of Delaware and The University of Maryland and several poultry growers in Delaware and on Maryland’s Eastern Shore participated in preliminary field demonstrations that found that switchgrass is, indeed, a suitable alternative to traditional chicken house bedding.

“Our field demonstrations have helped us learn the importance of proper storage, processing and handling of switchgrass and how to properly recondition this bedding material between flocks,” said Bill Brown, Poultry Extension Agent with University of Delaware Extension. In two separate trials in Amick Farms houses that compared birds grown on switchgrass versus birds grown on traditional bedding, there was no difference in paw condition or bird performance. It’s also cost effective. “Switchgrass can be processed into bedding at 60 to 70 percent of the cost of traditional bedding material while providing a secondary revenue stream,” Brown added.

Because switchgrass can be grown locally and doesn’t have to be transported, it reduces costs to farmers. The crop has a number of other benefits: It can be planted in non-irrigated areas of a field that otherwise have marginal crop yield and can act as an effective wind break, therefore reducing erosion. It is also an ideal crop to grow in buffer areas because it doesn’t require the use of fertilizer, but may provide an income for land that would otherwise not be used.

Switchgrass is also a particularly attractive bedding source because it can improve water quality without taking land out of production. Switchgrass filters water by removing excessive nitrogen and significantly reducing nutrients.

“Most farmers on the lower shore have acreage that would classify as marginal for row crop production,” said Paul Spies, of the Chester River Association. “Many times these...
acres from row crops into switchgrass, farmers can capture increased profits while decreasing the farms’ impact on local waterways.”

The Nature Conservancy is offering an incentive to farmers and landowners of $200 per acre of switchgrass planted and will provide the supply of seed to establish the crop. The incentive is intended to offset the loss of income from another crop and the cost of maintenance for the first three years. After that, farmers will be able to harvest the switchgrass and use it as bedding in approved houses or sell it to other markets. Most Delmarva broiler contracts provide litter, so interested poultry farmers should work with their company.

The Conservancy will work with participating farmers to determine the best place on their land to plant switchgrass that both works with the farming operation and most effectively intercepts nutrients before they enter local ditches and streams. The Conservancy aims to establish a total of 100 acres of switchgrass on the lower shore across about 10 farms in the first year.

These efforts will also result in a network of farmers and local markets interested in exchanging information on growing, harvesting, processing and selling switchgrass. The Conservancy and partners including the University of Delaware Poultry Extension, University of Maryland Extension, Delmarva Poultry Industry, Inc. and the Chester River Association are working with poultry companies and local farmers, to refine techniques for establishing and harvesting the grass, as well as identifying existing and potential markets for the valuable crop.

“We are very encouraged and interested in furthering the use of switchgrass to have the product meet its full potential for both growing chickens with locally supplied bedding and providing water quality benefits,” said Mike Pugh, Grow out Manager with Amick Farms.

If you’re interested in participating or learning more, please contact Mike Dryden, Pocomoke Watershed Project Coordinator at 410-251-5620 or mdryden@tnc.org.

**UPCOMING EVENTS & PROGRAMS**

- May 12, 2014 - Poultry Growers Meeting, Princess Anne, MD
- May 13, 2014 - Poultry Growers Meeting, Centreville, MD
  “Legal Aspects of Commercial Poultry Farming”
- June 20 & 21, 2014 - 65th Delmarva Chicken Festival
As DPI seeks to minimize the impact of the looming Maryland Department of Agriculture Phosphorus Management Tool regulation, in whatever form it may take, we met with officials from the U.S. Department of Agriculture’s Natural Resources Conservation Service in December to explore possible new cost-share programs. We are hoping that an expansion of federal assistance to chicken growers might help growers lessen the financial hit we expect many will have. We discussed:

- **Cost share to assist farms obtain Nutrient Management Plans written concurrently with the P-Site Index and the P-Management Tool**

  NRCS pays for nutrient management plan writing and there is a national cap on what it can pay. Therefore, farmers will have to make their best deal with plan writers to cover their additional workload to provide data from both methods of writing plans.

- **Cost share for Chicken House Cleanouts**

  NRCS considers this expense a cost of doing business. NRCS will not cover these possible higher grower expenses.

- **Windrowing**

  NRCS cannot cost-share for equipment for windrowing or any other practice. Because there is concern within NRCS about air quality deterioration from windrowing, Maryland NRCS will not push for windrowing cost-share because it does not want to exchange an air quality issue for water quality benefits.

- **Gypsum Curtains to Capture Phosphorus on Farms**

  Two research projects will be completed this year. The results will be studied by NRCS and if the results are good, NRCS could develop an interim standard for ditch curtains and then the states could adopt the practice for costshare.

- **Larger Manure Storage Structures**

  Structures are designed for crust-outs and not for whole house cleanouts. Maryland NRCS will need to work with the Maryland Department of Agriculture because its costshare program also funds manure storage buildings and NRCS would like to have similar standards.

- **Forestry Application of Manure**

  DPI held a meeting this month with forestry professionals to discuss the use of raw manure or pellets on private or state-owned forestland to promote tree growth. There appears to be an opportunity to move forward on this, though many public perceptions and financial issues need to be resolved. We will continue work on areas that show potential.
Cut Costs and Energy Use Through Efficiency  
By SARE.org/Learning-Center

Fifteen percent of agricultural production costs are energy related, according to the U.S. Department of Agriculture (USDA) - and as energy prices rise, these costs claim an ever-bigger portion of farm budgets. The quickest, cheapest and cleanest way to lower these costs, as well as cut non-renewable energy consumption, is by improving energy efficiency.

Energy Audits: A Valuable Tool

Energy audits are a vastly underused tool that can help farmers save energy and money. Such an audit typically analyzes equipment and processes such as lighting, ventilation, power units, drives, compressors, insulation and heat exchange, and then provides recommendations for saving energy. The Center for Ecological Technology (CET) in Massachusetts used SARE (Sustainable Agriculture Research & Education) funds to conduct energy audits on 22 farms across the state, helping each grower save from $350-$900 per year in lighting costs along. Fifteen of the audited farms installed energy improvements that had a 1– to 2-year payback.

A number of Maryland state and local agencies launched the Maryland Farm Energy Audit Program to audit 25 poultry, dairy, beef and mixed-crop farms on the state’s Eastern Shore. Working with the Vermont-based energy audit company EnSave, the audits uncovered potential aggregate savings of more than 470,000 kWh of electricity and 46,000 gallons of propane, which could save a total of $115,000 per year for the growers.

The audit’s recommendations for the poultry farms also revealed that energy-saving methods—such as insulation to seal air leaks or radiant tube heaters to provide more efficient heating—can provide potential annual production benefits worth $319,800. These methods decrease costly animal mortality by increasing comfort.

The Maryland Department of Agriculture has financial assistance available to help farmers cover the cost of injecting or incorporating manure and other eligible organic products into cropland. Two million dollars in cost-share money are being offered to help farmers comply with Maryland’s updated nutrient management regulations.

Maryland’s regulations require farmers to inject or incorporate manure into the soil within 48 hours of application to help achieve improved water quality benefits.

Help Available to Farmers Who Use Chicken Manure

February, 2014 Issue of “DPI in Action”
Delmarva Poultry Industry, Inc.

Farmer who incorporate or inject animal manure may apply for cost-share grants from the Maryland Department of Agriculture. Farmers who import manure for use on cropland that they own or rent may participate. While transportation costs are not cost-shared under this program, the Manure Transportation Program is available for eligible farms. Costshare rates for manure incorporation and injection range from $10 to $55 an acre depending upon the type of equipment or services used. Farmers who use manure injection equipment receive the highest reimbursement rates.
All work must be completed by June 2, 2014, and all claims for payment received by June 10, 2014. Other restrictions apply.

Farmers should visit their local soil conservation district office as soon as possible to apply. Applications will be accepted on a first come, first served basis and sign-up is ongoing until all funds are fully committed. For more information, contact the Maryland Department of Agriculture at 410-841-5864.

Winter Thoughts About Vegetative Environmental Buffers
Jim Passwaters, DPI Vegetative Environmental Buffers Coordinator

Wow, has it been cold. I had to climb in my freezer just to keep warm! It’s so cold that lawyers are keeping their hands in their own pockets. Okay that’s enough jokes for now.

Even though we experienced a polar vortex, I have been getting calls regarding vegetative buffers. One grower contacted me regarding moving some trees that were installed around 2004. They needed to be moved for construction of new houses. During our conversation he commented that he wished he had planted more trees. More can always be planted, by the way. His buffer was only on one side of his chicken farm. As the trees have grown, his fuel use has decreased in the house adjacent to the buffer. According to this grower, the fuel savings is considerable.

Many farms have had buffers in the ground for 10 years or more and these growers are beginning to see energy benefits. Originally, buffers were established to help with water and air quality issues. These additional benefits may take a few years to establish themselves, but the payoff is beginning.

Additional benefits can be found by placing shade trees near the cooling pads. By cooling the air prior to entering the pads, less energy is required. Several farms have employed this practice and I recently had a request to assist a Delaware grower with this practice.

Fear of EPA inspections has mellowed a little in past year or so, but benefits to the bottom line can be found by installing Vegetative Environmental Buffers around farms. As a DPI member with an annual dues payment of at least $150, you can have a free consultation to enhance your farm with a buffer that will provide energy benefits, beauty, and water and air quality improvements.

Contact Jim Passwaters at (302) 236-0470 or passwaters@dpichicken.com for more information. Remember…spring (weather) soon will be here!