Hello, Ashtabula and Trumbull Counties!

It’s going to be a busy week in NE Ohio and throughout the state this week. It looks like more corn silage will be chopped, and the first soybeans will probably be harvested soon. I’m excited to be here for my first Trumbull County harvesting season. The smell of silage and drying stalks makes it feel like fall despite the warm temperatures.

David and I will be at the Farm Science Review all this week, so if you are making your way down there, be sure to say ‘hi’ when you see us. The review will have a lot to offer this year and many great education opportunities as well as shiny new tractors. We’ll see you there! - Lee

David Marrison
Extension Educator
Ag & Natural Resources
Ashtabula County

Lee Beers
Extension Educator
Ag & Natural Resources
Trumbull County
Ashtabula and Trumbull County Weed Survey
By David Marrison and Lee Beers, Ashtabula County Extension and Trumbull County Extension

Last week, Lee Beers, Les Ober and I drove a 100-mile loop around each of our counties to determine the weeds which are the most prevalent in our local soybean fields. In fact, OSU Extension Educators from most every county in the state are completing this survey this month.

The populations of these weeds are growing in leaps and bounds as they are becoming more resistant to the herbicides which our farmers and cooperatives are using. As we drove across Ashtabula County, we took observations from 107 soybean fields accounting for an estimated 3,491 acres (roughly 12.5% of our county’s soybean acreage). Trumbull County survey included 110 fields and accounted for over 6,000 acres of soybeans. It was eye-opening to see how quickly Marestail has become our number #1 weed control issue in soybeans. The following tables list the prevalence of weeds found in the fields surveyed.

<table>
<thead>
<tr>
<th>2016 Ashtabula County Soybean Weed Survey</th>
<th>Percentage of Fields With this Weed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marestail</td>
<td>48.6%</td>
</tr>
<tr>
<td>Common Lambsquarter</td>
<td>37.4%</td>
</tr>
<tr>
<td>Redroot Pigweed</td>
<td>29.0%</td>
</tr>
<tr>
<td>Volunteer Corn</td>
<td>27.1%</td>
</tr>
<tr>
<td>Velvetleaf</td>
<td>25.2%</td>
</tr>
<tr>
<td>Common Ragweed</td>
<td>22.4%</td>
</tr>
<tr>
<td>Giant Foxtail</td>
<td>19.6%</td>
</tr>
<tr>
<td>Pokeweed</td>
<td>4.7%</td>
</tr>
<tr>
<td>Giant Ragweed</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2016 Trumbull County Soybean Weed Survey</th>
<th>Percentage of Fields With this Weed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marestail</td>
<td>88%</td>
</tr>
<tr>
<td>Redroot Pigweed</td>
<td>36%</td>
</tr>
<tr>
<td>Common Ragweed</td>
<td>35%</td>
</tr>
<tr>
<td>Volunteer Corn</td>
<td>28%</td>
</tr>
<tr>
<td>Common Lambsquarter</td>
<td>27%</td>
</tr>
<tr>
<td>Giant Foxtail</td>
<td>25%</td>
</tr>
<tr>
<td>Velvetleaf</td>
<td>23%</td>
</tr>
<tr>
<td>Giant Ragweed</td>
<td>5%</td>
</tr>
<tr>
<td>Pokeweed</td>
<td>1%</td>
</tr>
</tbody>
</table>

So what should farmers be doing now to help themselves next year? It is well worth the time for farmers to jump in their farm truck and do a scouting loop of their fields. Scouts should keep records of their scouting to indicate where exactly a problem was identified, how common the problem was, how damaging the problem was and what, if any, control measures were utilized in 2016. It is important to note the hotspots so you can make sure to address the problem and then re-evaluate the results.

The scouting reports can then be used to design a weed management plan for each field. This plan might mean that a chemical application is needed right after the soybeans are harvested this fall. This is especially crucial with Marestail as each plant can produce up to 200,000 seeds. Once you have a good scouting report, you will have plenty of time this winter to analyze your alternatives for control at our winter agronomy schools.

Bus Trip to Farm Science Review
By WI Miller and Sons
We will be taking an Anderson bus to the Farm Science Review in London, Ohio. We will leave W.I. Miller & Sons farm at 4:00 AM Wednesday, September 21st and return by 11:00 PM that evening. The cost of the trip is $50 per person which includes the bus ride, admission to the Farm Science Review, and dinner at Dutch Heritage of Bellville on the way home. Breakfast will be on your own with a stop planned at McDonalds. Call 330-876-6573 to reserve a seat on the bus.
OSU Extension is Looking for a New Extension Educator in Portage County

OSU Extension in Portage County is now taking applications (until October 16, 2016) for an Agricultural & Natural Resources Extension Educator (0.5 FTE, half time). The ANR Educator will provide overall leadership to developing and conducting a proactive applied research and education program in agriculture and natural resources to meet current and future needs in farm management, livestock and crop production, food security, home horticulture/Master Gardeners, commercial horticulture, farm land use issues, innovative agricultural business opportunities, environmental quality and sustainability, renewable energy, and bio-based products. Required job qualifications include: Master’s degree and at least one degree in agriculture, natural resources, or a related field (plant science is preferred). The successful candidate will have strong written and oral communication skills, and experience working with diverse clientele and organizations; demonstrated success in working as part of a team and initiating collaborative partnerships is sought; leadership ability, and strong teaching and subject matter expertise in at least one area of agriculture is necessary. Candidates must be willing to work flexible hours with minimal supervision. To learn more about this position (Job #419222) or to apply, go to: https://www.jobsatosu.com/postings/72794

Diplodia Ear Rot
By Pierce Paul, Felipe Dalla Lana da Silva, Anne Dorrance, OSU Extension Specialists
Source: http://agcrops.osu.edu/newsletter/corn-newsletter/2016-30/diplodia-ear-rot

Over the last two weeks, we have received several samples of corn ears with symptoms typical of Diplodia ear rot. This is one of the most common ear diseases of corn in Ohio. It is caused by two species of fungi, *Stenocarpella maydis* and *Stenocarpella macropora*. The most characteristic symptom and the easiest way to tell Diplodia ear rot apart from other ear diseases such as Gibberella and Fusarium ear rots is the presence of white mycelium of the fungus growing over and between kernels, usually starting from the base of the ear.

Under highly favorable weather conditions, entire ears may become colonized, turn grayish-brown in color and lightweight (mummified), with kernels, cobs, and ear leaves that are rotted and soft. Rotted kernels may germinate prematurely, particularly if the ears remain upright after physiological maturity. Corn is most susceptible to infection at and up to three weeks after silk emergence (R1).

Wet conditions and moderate temperatures during this period favor infection and disease development, and the disease tends to be most severe in no-till or reduce-till fields of corn planted after corn. The greatest impact of this disease is grain yield and quality reduction. Mycotoxins have not been associated with this disease in US, although animals often refuse to consume contaminated grain.

Q&A:

1. **Can disease severity increase on the field? When should we harvest? What moisture should we start?**
   The disease will continue to develop in the field as long as conditions remain favorable. Fields with high incidence of Diplodia ear rot should be harvested as soon as possible and quickly dried to 14% moisture and
cooled to 50°F before storage. Ideally, fields should be scouted to identify areas with Diplodia ear rot hot spots and these areas should be harvested and stored separately from grain harvested from healthier sections of the field. Higher moisture, warm conditions, and pockets of moldy grain in storage will lead to further spread of the disease and even colonization of the grain with other pathogens.

2. **How should the combine be set? Cobs are very soft.**

Rotted kernels and cobs are broken into small pieces during harvest, increasing the amount of fine particles in the grain. These particles affect airflow through the grain, delay drying, and lead to further mold development in storage. Increasing the combine fan speed will help remove fine materials as well as severely infected kernels that are usually lighter than healthy kernels. The specific adjustments needed to remove moldy materials during harvest will vary from one combine to another; see manufacture’s guidelines for details on how to increase your combine fan speed.

3. **Will it get worse in the bin? How dry should it be dried? How long can we store it?**

Clearing the grain to remove fine particles and storing it under cool, dry conditions (50°F and 14% moisture) will slow-down fungal growth and mold development and extend the storage life of the grain at least through the winter. However, you should avoid storing severely affected grain for too long especially since it becomes much more difficult to keep grain cool and dry as outside temperatures increase in the spring and summer.

4. **Do we need to worry about vomitoxin and feeding?**

No, vomitoxin is a mycotoxin produced by *Fusarium graminearum*, the fungus that causes Gibberella ear rot of corn and head scab of wheat. However, some populations of *S. maydis*, the fungus that caused Diplodia ear rot, do produce a different mycotoxin calling diplodiatoxin, but there have been no reports of animal-health problems associated with this toxin in the US. Nevertheless, since animals often refuse to consume moldy grain, you should avoid feeding grain affected by Diplodia ear rot to animals. In addition, moldy grain may be contaminated with other fungi, some of which do produce mycotoxins that are harmful to livestock.

5. **What does next year bring? We know hybrid selection is important. Does the residue need to be buried?**

Yes, since the fungus survives in crop residue on the soil surface, any strategy to remove or bury the residue will reduce the risk of Diplodia ear rot (and other residue-borne diseases) next year. In addition, fields and hybrids with high incidence of Diplodia ear rot this year should be avoided next season. However, whether or not we have a similar problem with this disease next year will depend on the weather.

6. **Would a fungicide have made a difference?**

Very little research has been done to evaluate the efficacy of fungicides against Diplodia ear rot. Although most of the common fungicides kill the fungus in the lab, results in the field have been highly inconsistent. More research is needed to improve application technology and to decide when the fungicide should be applied to effectively control Diplodia ear rot.

Bayer & Monsanto to Merge

Source: [https://www.morningagclips.com/bayer-monsanto-to-merge/](https://www.morningagclips.com/bayer-monsanto-to-merge/)

Bayer and Monsanto announced on September 15, 2016 they signed a definitive merger agreement under which Bayer will acquire Monsanto for $128 per share in an all-cash transaction. Monsanto’s Board of Directors, Bayer’s Board of Management and Bayer’s Supervisory Board have unanimously approved the agreement. Based on Monsanto’s closing share price on May 9, the day before Bayer’s first written proposal to Monsanto, the offer represents a premium of 44 percent to that price.

“We are pleased to announce the combination of our two great organizations. This represents a major step forward for our Crop Science business and reinforces Bayer’s leadership position as a global innovation driven Life Science company with leadership positions in its core segments, delivering substantial value to shareholders, our customers, employees and society at large,” said Werner Baumann, CEO of Bayer AG.
“Today’s announcement is a testament to everything we’ve achieved and the value that we have created for our stakeholders at Monsanto. We believe that this combination with Bayer represents the most compelling value for our shareowners, with the most certainty through the all-cash consideration,” said Hugh Grant, chairman and chief executive officer of Monsanto.

Enhanced Solutions for Growers

This transaction brings together two different, but highly complementary businesses. The combined business will benefit from Monsanto’s leadership in Seeds & Traits and Climate Corporation platform along with Bayer’s broad Crop Protection product line across a comprehensive range of indications and crops in all key geographies. As a result, growers will benefit from a broad set of solutions to meet their current and future needs, including enhanced solutions in seeds and traits, digital agriculture and crop protection.

The combination also brings together both companies’ leading innovation capabilities and R&D technology platforms, with an annual pro-forma R&D budget of approximately 2.5 billion euro. Over the mid to long-term, the combined business will be able to accelerate innovation and provide customers with enhanced solutions and an optimized product suite based on analytical agronomic insight supported by Digital Farming applications. These are expected to result in significant and lasting benefits for farmers: from improved sourcing and increased convenience to higher yield, better environmental protection and sustainability.

“The agriculture industry is at the heart of one of the greatest challenges of our time: how to feed an additional 3 billion people in the world by 2050 in an environmentally sustainable way. It has been both companies’ belief that this challenge requires a new approach that more systematically integrates expertise across Seeds, Traits and Crop Protection including Biologicals with a deep commitment to innovation and sustainable agriculture practices,” said Liam Condon, member of the Board of Management of Bayer AG and head of the Crop Science Division.

“We are entering a new era in agriculture — one with significant challenges that demand new, sustainable solutions and technologies to enable growers to produce more with less. This combination with Bayer will deliver just that — an innovation engine that pairs Bayer’s crop protection portfolio with our world-class seeds and traits and digital agriculture tools to help growers overcome the obstacles of tomorrow. Together Monsanto and Bayer will build on our proud tradition and respective track records of innovation in the agriculture industry, delivering a more comprehensive and broader set of solutions to growers,” said Grant.

Value Creation

Pro forma sales of the combined agricultural business amounted to 23 billion euro in calendar year 2015. The combined company will be well positioned to participate in the agricultural industry with significant long-term growth potential. Beyond the attractive long term value creation potential of the combination, Bayer expects the transaction to provide its shareholders with accretion to core EPS (earnings per share) in the first full year after closing and a double-digit percentage accretion in the third full year. Bayer has confirmed sales and cost synergies assumptions in due diligence and expects annual EBITDA contributions from total synergies of approximately $1.5 billion after year three, plus additional synergies from integrated solutions in future years.

Financing and Closing Conditions

Bayer intends to finance the transaction with a combination of debt and equity. The equity component of approximately $19 billion is expected to be raised through an issuance of mandatory convertible bonds and through a rights issue with subscription rights. Bridge financing for $57 billion is committed by BofA Merrill Lynch, Credit Suisse, Goldman Sachs, HSBC and JP Morgan.

Bayer has a proven track record of disciplined deleveraging after large acquisitions and believes that the strong cash flows of the combined business will contribute to improving its financial profile. Bayer targets an
investment grade credit rating post-closing and is committed to the single “A” credit rating category over the long-term.

The acquisition is subject to customary closing conditions, including Monsanto shareholder approval of the merger agreement and receipt of required regulatory approvals. Closing is expected by the end of 2017. The companies will work diligently with regulators to ensure a successful closing. In addition, Bayer has committed to a $2 billion reverse antitrust break fee, reaffirming its confidence that it will obtain the necessary regulatory approvals.

Headquarters and Employees

The combined agriculture business will have its global Seeds & Traits and North American commercial headquarters in St. Louis, its global Crop Protection and overall Crop Science headquarters in Monheim, Germany, and an important presence in Durham, North Carolina, as well as many other locations throughout the U.S. and around the world. The Digital Farming activities for the combined business will be based in San Francisco, California.

“This combination is a great opportunity for employees, who will be at the forefront of innovation in our sector. This transaction also enhances Bayer’s strong commitment to the U.S., building on our 150-year history with operations across 25 states employing more than 12,000 people in the country. I am convinced that Monsanto will flourish as part of one of the most respected and trusted companies in the world,” said Baumann.

Bayer has extensive experience in successfully integrating acquisitions from a business, geographic and cultural perspective, and remains committed to its strong culture of innovation, sustainability and social responsibility.

Advisors to the Transaction

BofA Merrill Lynch and Credit Suisse are acting as lead financial advisors and structuring banks to Bayer in addition to providing committed financing for the transaction; Rothschild has been retained as an additional financial advisor to Bayer. Bayer’s legal advisors are Sullivan & Cromwell LLP (M&A) and Allen & Overy LLP (Financing).

Morgan Stanley & Co. and Ducera Partners are acting as financial advisors, and Wachtell, Lipton, Rosen & Katz is acting as legal advisor to Monsanto.

Organic Panic: Finding the Right Combination
By Danielle St. Louis
Source: https://www.agronomy.org/science-news/organic-panic-finding-right-combination

Organic vegetables are popular. However, growing them is notoriously high-maintenance for farmers. Researchers are trying to identify the best ways to grow these crops in order to keep the shelves stocked.

Growing organic vegetables is labor intensive, says Craig Cogger. Cogger is a researcher for the Department of Crop and Soil Sciences at Washington State University. “Weed management, amendment choice, and cover crop management are particularly challenging when growing vegetables in an organic system,” he explains.

Farmers have been using a mix-and-match approach to practices for growing their organic veggies. Which combination of practices was best, however, was uncertain.

Cogger and colleagues studied twelve different combinations of practices over the course of ten years to see what worked best.
Their study included three types of cropping systems. One system planted a fall cover crop, another used a relay-planted cover crop, and the third system was a short-term grazed pasture. Two types of amendments were included in the study. Amendments are additions of organic materials to the soil to improve the soil’s condition. One amendment was a compost mixture of dairy manure, straw, sawdust, and yard debris. The other amendment was a mixture of sawdust and manure from a local poultry producer. Finally, two methods of tilling the soil were used in the study. The researchers tilled with a plow and also with a rotary spader.

But let’s not forget the veggies! Cogger and his team used these twelve combinations to grow broccoli, lettuce, winter squash, spinach, snap bean, and winter wheat. Over ten years, the researchers harvested the crops to determine crop yields. They also measured the soil’s physical properties.

After studying the samples and analyzing the data, Cogger and his team found that no one factor consistently increased the amount of vegetables produced. But they did discover the mixed compost improved the soil’s physical properties more than the sawdust and poultry litter. They also found benefits from tilling with the rotary spader. “We could often prepare the field in a single pass, and we occasionally had increased yields,” says Cogger.

Overall, the changes in the soil were short-term. “Most of the differences among systems evolved in the early years of the experiment,” Cogger notes. “The overall results may not be too different from a shorter experiment, but the longer-term study helps our understanding of the evolution of organic systems,” Cogger explains.

The results also showed minimal interactions between management practices. This means farmers can continue to mix-and-match their practices depending on their individual situations. This may include cost considerations as well as soil conditions, Cogger says. “The compost amendment would be expensive for many farmers, and the rotary spader is a relatively large up-front
investment. But if farmers can afford it, the rotary spader can save time, improve soil compaction and seed bed quality, and sometimes improve yields.”

Read more about Cogger’s research in Agronomy Journal. USDA Integrated Organic Program and Western Region Sustainable Agriculture Research and Education funded the research.

Is Full Overtime Pay Headed Your Way?
By: Paul Neiffer
Source: http://blogs.claconnect.com/agribusiness/is-full-overtime-pay-headed-your-way/

California is one of the few states that require time and half overtime pay for farm workers. Under the old law, this pay would apply if the farmer worker completed more than 10 hours in a day or more than 60 hours in a week. Governor Jerry Brown just signed Assembly Bill 1066 that will incrementally change this to comply with overtime rules for other workers. After full implementation, this means that California farm workers will get paid full overtime once they exceed 8 hours in a day or 40 hours in a week.

The measure will start in 2019 (or 2022 for farms with less than 25 employees) and will apply over time if farm workers work more than:
2019 (2022) – 9 1/2 hours per day or 55 hours per week,
2020 (2023) – 9 hours per day or 50 hours per week,
2021 (2024) – 8 1/2 hours per day or 45 hours per week,
2022 (2025) – 8 hours per day or 40 hours per week.

Most states follow the federal rule which only requires time paid for all hours worked (no time and half-pay). However, as pressure builds on wages to, it would not surprise me to see more states follow California and state imposing time and half on farm work.

Love Your Wife and Kids, Not Your Cows!
By John F. Grimes, OSU Extension Beef Coordinator
Source: http://u.osu.edu/beef/2016/09/14/love-your-wife-and-kids-not-your-cows/
(This article first appeared in the Early Fall 2016 issue of the Ohio Cattleman magazine)

The title of this article is a phrase I have used over the years in my Extension programming. Part of the title seems fairly obvious; Of course we love our wives and children! The second part of the title may seem a bit questionable to some of you. Most cattlemen would not raise beef cattle if they didn’t genuinely have the animal’s best interests in mind in terms of daily management that contributes to animal welfare. However, the second part of the title serves as an opening to a seasonal topic that is very appropriate to discuss at this time of the year which is culling beef females from the herd.

Research studies from across the country indicate that the typical culling rate of the nation’s beef cow herd falls between 15 – 20%. Beef cow income usually makes up 10 – 25% of the gross income generated by a cow herd. In many herds, cull cow income will be the difference between an annual profit or loss. We are rapidly approaching the time when cow-calf producers will be weaning their spring-born calves. Weaning is an excellent time to evaluate your cow herd and decide which cows get to remain your “employees” and which ones need to find a new career. Notice that I referred to the cow as an
employee. After all, they work for you. Yes, you have to provide them with the infrastructure to do their job including proper nutrition, health care, facilities, etc. However, if they are not being productive for you, they need to be replaced.

Cows and heifers leave operations for a variety of reasons. Ask a room full of cow-calf producers from anywhere in the country for the key reasons to cull a female from the herd. I would feel confident that the reasons would include any or all of the following factors: 1. Age or bad teeth; 2. Pregnancy status (open or aborted); 3. Temperament; 4. Other reproductive problems; 5. Economics (drought, herd reduction, market conditions); 6. Producing poor calves; 7. Physical unsoundness; 8. Udder problem; and 8. Bad eyes. While all of these factors are valid reasons for culling, I suspect that the first three factors listed who be the top reasons for culling in any given year.

Let’s discuss those first three factors in a bit more detail. There is no “magic” age when a cow should be culled. Most beef cows are at the peak of their productive life from 4 – 8 years of age. Most start to “show their age” as they approach 10 years of age but there are exceptions. A sound management practice would be to examine the teeth of older cows after fall palpation to determine if they have adequate teeth to digest harvested forages during the winter and graze pasture grasses adequately to maintain body condition and support a calf.

The older I become, the less tolerant I am of any temperament issues. I suppose this is a direct result of the fact that I don’t run as fast or heal as quickly as I used to! Animals with poor disposition or aggressive nature are obviously difficult to deal with on an individual basis and can corrupt a larger group of animals. Disposition has become an increasingly important factor as the average age of farmers and cattlemen increases as time moves along. Don’t tolerate the bad actors!

Ultimately, the factor that should ultimately sort a female to the keep or cull pen is pregnancy status. While variable costs such as feed have moderated somewhat lately, it is still fairly expensive to maintain a cow on an annual basis. Producers often fail to consider fixed costs such as machinery, buildings, management, and replacement animal expense. We do not have enough space in this article to debate a sample budget, but it is fair to say the annual carrying costs for a beef female can run from $700 to over $1,000 depending on the situation. An open female is not going to generate any income to help pay the bills.

Carrying an open female over to the next year or the next breeding season only compounds the accumulation of expenses. In nearly every case, the producer would be better off selling the open female and replacing her with a bred female. This is particularly true of yearling females. If you can’t get a properly developed, healthy yearling heifer bred in a 60 -90 day breeding season, sell her as a heavy feeder calf or finish her out to harvest weight. If she is sub-fertile as a yearling, she will likely have fertility problems as a mature female.

I can assure you that the implementation of proper culling practices can be challenging to accomplish. It requires an established breeding and calving season, realistic production goals, and the discipline to carry out your plan. I would be less than honest with you if I said that I have always been completely disciplined with my culling program. It has been my experience that when you start making excuses for a beef female’s poor reproductive performance, it seldom works out well for the owner!

Ohio State Aquaculture Boot Camp Program Recruiting New Fish Farmers

Want to learn how to become a fish farmer? The Ohio Center for Aquaculture Research and Development at The Ohio State University South Centers is offering 30 new and beginning fish farmers an in-depth introduction to aquaculture and aquaponics and the business of fish farming through a yearlong program.

Called Aquaculture Boot Camp-2 or ABC-2, the program’s goal is to increase the number of fish farmers in the region, said Hanping Wang, the director of the ABC program at the OSU South Centers. The OSU South
Northeast Ohio Agriculture Centers are part of the College of Food, Agricultural, and Environmental Sciences. “The goal of the ABC-2 is to enhance the sustainability of new and beginning aquaculture, aquaponic and next-generation farmers in Ohio and the Midwest,” Wang said.

Aquaculture includes the breeding, rearing and harvesting of animals in ponds and indoor tank systems for food, sport, bait and ornamental fish. In Ohio, there are about 200 fish farmers registered statewide, according to a 2010 OSU South Centers survey.

The boot camp will include classroom and individual and group hands-on training, Wang said. Sessions will be held at the South Centers, which are in Piketon, and at other aquaculture facilities. “The training will include new skills and innovations required to sustainably and successfully own and operate an aquaculture or aquaponic farm,” he said.

During the intensive program, participants will take part in 16 days of training, including 12 one-day intensive classroom and hands-on sessions on aquaculture, aquaponics and business, three aquaculture/aquaponics workshops, and a farm tour. Participants will also have the opportunity to work on an operating fish farm. Most of the training will take place on Saturdays, with some Friday sessions.

“Participants will also be paired with trainers and mentors in the field, and have the opportunity to tour several area aquaculture farms,” Wang said. “Participants will also learn how to create a business plan and how to market their new business and products.” The program is free of charge, thanks to a grant from the U.S. Department of Agriculture’s National Institute of Food and Agriculture.

Applications for the program are available at go.osu.edu/abc2 and are due by Nov. 4. Applicants will be notified of selection by Nov. 15, and the first day of the boot camp will be Jan. 14, 2017, at the South Centers. For more information on the program, contact Wang at 740-289-2071 or 800-297-2072, ext. 125, or wang.900@osu.edu. For questions on applying, contact Sarah Strausbaugh at 740-289-2071 or 800-297-2072, ext. 112, or strausbaugh.54@osu.edu

Take the OSU Lake Debris Survey Today! The Ohio State University, City of Cleveland Mayor’s Office of Sustainability, and Thunder::Tech Inc., are working together to conduct a research project on the health of Lake Erie - and we need your help.

The goal is to better understand how and why certain trash items end up in Lake Erie, specifically plastic bottles, shopping bags, and cigar tips. This project will look into why people use disposable items like water bottles and plastic bags, and why more people don’t use reusable drinking bottles or shopping bags.

Your answers to the attached survey will help inform efforts that encourage people to switch from single-use plastics to reusable containers, and properly dispose of plastic debris instead of littering. The survey should not take more than 20 minutes to complete. We further hope the results will help other cities and states in the Great Lakes region clean up their lakes, too.

Survey Link: https://osu.az1.qualtrics.com/jfe/form/SV_56VmwPllyyU0NcliD

Thank you very much for taking the time to answer these survey questions and support the health of Lake Erie. All questions and comments can be directed to Scott Hardy at Hardy.116@osu.edu or Jill Bartolotta at Bartolotta.2@osu.edu.

This survey is for a research project being conducted by Ohio Sea Grant, a statewide program that supports greater knowledge and stewardship of Lake Erie and the Great Lakes through research, education and outreach. It is part of the National Oceanic and Atmospheric Administration (NOAA) Sea Grant College Program, which includes 32 state programs located in every coastal and Great Lakes state and Puerto Rico.
David’s Weekly News Column- Applications for Ashtabula County Master Gardeners
Published on September 21, 2016 in the Jefferson Gazette & September 25, 2016 in the Star Beacon

Hello, Ashtabula County! One of the greatest groups of people that I get the privilege to work with is the Ashtabula County Master Gardeners. This group was begun in January 1998 and has been helping county residents with their gardening questions ever since. Our 30 active members share science-based information with gardeners through workshops, news articles, presentations, community gardens, and one-on-one consultations. In total, the Master Gardeners volunteer over 3,500 hours each year which is estimated to have a value of $75,110 to our community.

Today, I am pleased to announce that we are taking applications from County residents who might be interested in joining this wonderful group. So, if you have a strong interest in gardening and enjoy helping others, you are invited to apply to become an Ohio State University Extension Master Gardener volunteer for Ashtabula County.

To become an OSU Extension Master Garden volunteer, you must attend 11 training sessions held from January to April 2017 and volunteer 50 hours of horticultural service to the community through Extension educational programming after the training. Such service could include teaching adults and youth about gardening, planting and maintaining Extension demonstration gardens, answering gardening questions from the public, judging flower and vegetable projects at local fairs, or assisting community garden participants. As a benefit of becoming a Master Gardener, you will increase your knowledge and understanding of such varied horticultural topics as best cultural practices for growing flowers and vegetables, house plant care, plant disease, lawn care, and insect pest identification and control and much, much more.

Course topics include: history of OSU Extension, plant physiology, soils, composting, fertilizers, herbs, houseplants, plant propagation, plant pathology, diagnostics, entomology, integrated pest management, vegetables, lawns, woody ornamentals, fruits, landscape maintenance, and making effective presentations.

Two informational meetings will be held for those interested in being selected for the 2017 training program. These meetings will be Wednesday, October 12, 2016 from 9:00 to 9:45 a.m. and Tuesday, October 18, 2016 from 6:30 to 7:15 p.m. in the downstairs meeting room of the OSU Extension office at 39 Wall Street in Jefferson. Specifics with regards to the application process, training schedule, course fee, and fingerprinting requirements will be shared at this meeting. It is recommended that applicants attend one of these orientation meetings to have their specific questions answered.

The dates for this year’s training program are: January 25; February 1, 9, 15 & 22; March 1, 8, 15 & 22 and April 5 & 19. This program is taught in conjunction with the Lake County Master Gardener program. Five of the sessions will be taught at the Ashtabula County Extension Office in Jefferson and five will be taught in Lake County. All courses will be taught from 9:00 a.m. – 4:00 p.m. There is a $210 course fee that covers course materials, refreshments, and speaker travel costs. Registration is limited and all applications are due by November 1, 2016. Please call the Ashtabula County Extension Office at 440-576-9008 for more information or for a complete application packet.
To close today’s column, I would like to share a quote from Mary McLeod Bethune who stated, “Faith is the first factor in a life devoted to service. Without it, nothing is possible. With it, nothing is impossible.” Have a good and safe day!

Container Gardening
By: Ashtabula County Master Gardeners

Have you decided to take up gardening on a small scale? Perhaps managing a full plot of dedicated garden is too much, but the desire to grow something calls to you. Consider container gardening. Whether you are hankering to grow your own vegetables, or you want the color and fragrance of some decorative annuals, container gardening may be your answer.

The first consideration you need to make upon entering into container gardening is the selection of the proper pot. Containers are available in all sizes, shapes and colors in local hardware and garden centers. You may also want to explore your own garage, attic, yard sales, etc. Keeping an open mind may allow you to see the possibilities in all types of containers, even the unusual. Old bathtubs, Army boots, cooking pots and much more have been recycled into plant containers. Let your creativity lead you.

Consider whether you are looking for a porous or non-porous container. In dry times a non-porous pot is your friend, since less water will evaporate away from the plant, but in wet times, or for the over-eager waterer, a porous pot, such as a standard clay pot, will allow water to wick out of the soil and help avoid rot. Regardless of the choice you make, a drainage hole, or holes in the bottom of the pot are essential. If you select a pot that does not have a drainage hole, drill one.

Consider the size of pot that you need for your gardening. Keep the size of the pot proportional to the plant/s they hold. Large, heavy pots are usually placed on the ground, smaller pots can be arranged in raised positions, or even hung from hooks, or set on window ledges.

Let’s get gardening: Begin planting by giving your pot or container a good scrubbing. A soapy mixture with 10% bleach solution will clean most containers, and destroy any lingering pathogens. Add a coffee filter, old pantyhose, pebbles or a shard of pottery to partially cover the drainage hole. Next comes a good soilless mix of commercial potting mix. There are lots of choices available to purchase, and nearly any soilless mix will work. Using common garden soil is less desirable since it is heavy, drains poorly and can introduce undesirable pathogens.

Fill the pot to three-quarters full, add your plant/s, and then fill the remaining space with additional mix. Finally, water thoroughly. You will do best if you use rainwater or tap water that has been left to stand for several hours. This way most of the chlorine has evaporated away. Water until the water runs out the drainage hole. Watering early in the day is best. Using a saucer, or drip dish with your container will help with excess water.

Place your container in an area that gets as much sun as needed by the plant. Read the instruction tab on the plant to see what degree of sun is necessary for best growth. Consider the wind, too. Plants can take a lot, but direct sun and a windy location can challenge even the strongest plant.
Plant maintenance: Once your container has been planted, daily watering will be the biggest responsibility. Hot, dry days may demand watering on a twice-daily schedule. You may also consider adding a slow release or water-soluble fertilizer. Read the package directions for specifics on fertilizer use. Lastly, consider deadheading, or removing dead blooms, to prompt reblooming. Pruning and monitoring for pests such as spider mites is also essential.

End-of-season: When frost is approaching (around October 15th in northeast Ohio) you must consider whether your container can survive the harsh winter weather. Terra cotta clay pots and most ceramic pots will not last outdoors. The expansion and contraction caused by our winter weather will crack and chip their surfaces. Lighter plastic and polyurethane pots will probably survive. Consider dumping the pot contents into the compost pile for the future. Next year will be a fresh start and new soilless mix will be needed, as well as new and creative combinations of plants for the dream-filled gardener.

In 2016 the Ashtabula County Master Gardeners will be writing about plants and gardening techniques that you may want to consider. Creating a certified wildlife habitat, African violets and native plants are just a few of the subjects to be addressed. The members of the group encourage you to send topics for our consideration to 39 Wall Street, Jefferson, Ohio 44047.

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