



# NETWORK

*Bringing Knowledge to Life!*

FEBRUARY 2015

VOLUME 30 ISSUE 2

## ATTENTION: ALL 4-H LEADERS AND PARENTS

Monroe County,  
Michigan State University  
and  
Monroe County  
Conservation District

This publication is provided to assist you in receiving the information necessary to enhance the quality of life for you and your family

The Monroe County 4-H Council will host a 4-H TOWN HALL MEETING held on WEDNESDAY, FEBRUARY 25, 2015 at the MB&T Expo Center. The meeting will promptly start at 7:00 pm and wrap-up at 8:00 pm. Following the conclusion, guests in attendance will have an opportunity to browse display booths showcasing the county clubs available for youth participation.

The purpose of this event is to educate leaders, parents, and youth, promote the 4-H Program and opportunities offered, make available calendars of upcoming events, and introduce the two new 4-H Program Coordinators.

**PLEASE NOTE: AT LEAST ONE ADULT FROM EACH CLUB MUST ATTEND THIS MEETING!!!!**

## 4-H SCHOLARSHIPS

The Monroe County 4-H Program will be awarding scholarships again this year to high school seniors, and members and leaders who are currently enrolled in higher education. Applications are available in the Extension 4-H Office and are due on April 15. All applicants for the scholarships will need to complete a form and meet with the evaluators for a formal interview. All interviews for the 4-H scholarships will be conducted on April 16, 7:00pm at the Extension Office. Recipients will be chosen by the committee and award certificates will be presented to the scholarship winners at their High School Honors Programs, or at other appropriate programs. Questions may be directed to Sara Lewis or Darryl Diamond.

**Larry Kreps Memorial Scholarships**  
**Mark Schuon, Jr. Memorial Scholarship**  
**Charles Knabusch Memorial Scholarship**  
**Paul McGuire Memorial Scholarship**  
**4-H Academic Scholarship**  
**Robert Manwell Memorial Scholarship**  
**Marie Siebarth Memorial Scholarship**  
**Larry See Memorial Scholarship**  
**Wayne & Suzanne Lennard Memorial Scholarship**  
**Larry Hammons Memorial Scholarship**



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For more information, visit our website at [www.msue.msu.edu/monroe](http://www.msue.msu.edu/monroe)

Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status.

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## Tracking Forests

By: Bob Potter

Tracking forest statistics is an essential piece of understanding forest trends. Wood and environmental services from forests are critical to the success and welfare of human society.

How much forest is there? Has there been more, or less, than over recent decades? What types of forests exist and how has the mix changed? How diverse are Lake States forests compared to other forests in the United States?

These are just a few of the many questions commonly asked about forest resources. Some answers are easier to come by than others. Definitions, interpretations, and understanding the statistical measures all color the results of an analysis.

For example, exactly what is a forest? What are the parameters for acreage, volume, number of trees, growth rate, tree size, etc.? Which units will be used to describe the quantitative measures? What about the qualitative measures?

Most forest inventory statisticians, or forest biometricians, will have difficulty in providing an answer to a general question without a series of caveats. Even a simple question such as; “How many trees grow in Michigan?” needs clarification. How small of a tree should be counted? One of the billions of brand-new seedlings that have a low chance of surviving to the next growing season? When does a shrub become a tree?

The best source, and sometimes the only source, of statewide forest inventory data is the USDA Forest Service Forest Inventory and Analysis Program. Since the 1930s, the Forest Service has been, more or less, systematically inventorying the forests of the United States. There is a lot of sampling and statistical design, sometimes controversial. Some state governments add money to the pot for additional sample plots in order to obtain more precise information.

Local inventories on a specific forest ownership might have different inventory systems that describe the forest in different ways. A forester preparing a forest management plan for a family forest will likely categorize forests in ways more useful to the specific owners. Private parcels are far too small to use the Forest Service data.

However, statewide and region-wide forest conditions are best described by the Forest Service database. Each year, a short report is prepared for each state. Michigan’s most recent is for 2013, but the 2014 report should soon be available.

The thousands of sample plots were once measured every decade or so. However, since 1999, a fifth of the plots are re-measured annually on a five year cycle. The annualized system provides critical data more often than the older system. The database is available on-line, but forestry and statistical expertise is needed to effectively navigate the tools.

Many questions can be answered by reviewing the annual Forest Service reports, complete with caveats and sampling errors. For example; “Volumes are for 5-inch and larger diameter trees. Number of trees and biomass are for 1-inch and larger diameter trees. Sampling errors and error bars shown in tables and figures represent 68 percent confidence intervals.” From there, various categories of volume estimates are given.

One is the half-million acre increase in forest land from 2008 to 2013, to a total exceeding 20 million acres, about 53 percent of Michigan’s land cover. Volume removals (mostly harvest) are reduced. Natural mortality has increased significantly, mostly due to losses in the ash and beech resources. Growth exceeded removals by over 100 percent each year, as it has for decades.



The most common forest type is maple/beech/birch, mostly what we call our “northern hardwood” type. The most common tree species are sugar maple, red maple, white-cedar, red pine, and red oak. Over 60 percent of the forest is privately-owned, including over two million acres of corporate forest. Individuals own about 45 percent of the forest. The area of large-diameter trees continues to expand.

The descriptive profile varies geographically across the state. Forests of the western Upper Peninsula are quite different from forests in the southern Lower Peninsula. This is, of course, not a surprise. However, the inventory statistics help define just what those differences are.

19	44 b. spruce	30480965.2	20580033.0
20	45 blue spruce	538679056.3	133471.538
21	52 jack pine	468054894.2	119349106.
22	72 red pine	6821827.681	95686192.31
23	76 white pine	538170548.2	0
24	77 Scots pine	1951850187	160983312.3
25	83 Austrian pine	1296980408	711119074.8
26	91 Douglas-fir	152502340.8	275152386.2
27	97 cedar	22887147.43	1470796.788
28	102 hemlock	8021670.875	0
29	111 boxelder	2629716457	0
30	112 black maple	924052972.5	401335349
31	113 striped maple	37299936.75	191612111.1
32	114 red maple	6648118.124	87759.95653
33	115 siber	1161960	

So, how are our forests doing? Pretty well, actually, considering this, that, and the other thing.

## MONROE CONSERVATION DISTRICT SPRING 2015 CONSERVATION PLANTS FUNDRAISER CATALOG

The Fundraiser Catalog is now available on our website - [www.MonroeCD.org](http://www.MonroeCD.org), and for those who preferred a paper copy those have been mailed.

If you are not on our mailing list and would like to receive a paper copy, please e-mail Catherine at [Catherine.Acerboni@mi.nacdnet.net](mailto:Catherine.Acerboni@mi.nacdnet.net) with your name and mailing address, or call the Conservation District office, (734) 241.7755 Ext 5.

This year we are offering two varieties of Tart Cherries and two varieties of Strawberries, this is due to the requests I have been receiving. The varieties we choose primarily have to do with our soils here in the county and the hardiness for first time growers.

I have gotten a few calls regarding the site. Apparently there is a glitch somewhere that our web person has yet to locate. If once on the products page it still reads “Sorry sale over for this year” please refresh the page. This has been working. Sorry for any inconvenience.

Any questions please give us a call or send an email.

**Thank you for your continued support!**

*Fruit Trees*

*Hostas*

*Raspberry Seedlings*



*White Pine Seedlings*

*Rain Barrels*

*Shrubs*

*Many more items*



*Mosquito Barrier*

*Compost Barrels*

*Hybrid Daylilies*

TERRY CLARK-JONES  
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## TEACH PRESCHOOLERS ABOUT MONEY AND MANAGING IT!

PRESCHOOL CHILDREN CAN LEARN A LOT ABOUT MONEY AND BEGIN TO DEVELOP THEIR ATTITUDES TOWARD

Children who are given the appropriate opportunities to make a spending plan and implement it are more likely than others to develop good judgment about money use and learn to accept the consequences of their decisions. Children learn about money through many different sources. At a very young age they watch the adults in their lives use money and buy things. They see through TV and social media thousands of commercials each year. They recognize commercial symbols very quickly! Adults in their lives have a strong influence on what type of attitude they will have about money. Lessons on money that are taught early will set the foundation for sound skills and values around money.

Here are some tips and ideas for parents to use with their preschoolers to begin increasing their money management skills:

- Encourage play that helps preschoolers think about money. This helps children learn about daily consumer choices. For example, play restaurant, supermarket, post office, bank, gas station, or car wash.
- Teach games to identify coins and values. Ask the preschooler to help you count out the money as you purchase items together.
- Talk about work. Preschoolers can be taught that some family members go to work to earn money for family needs such as food, clothes, and the home. Preschoolers can learn that other family members work at home so that the family does not have to buy some goods and services like laundry, cooking and yard work.
- Share information. Talk with your child about how money is earned, paying for expenses and saving money. A good gift for a preschooler to start learning this concept is a three part container with slots that are labeled SAVE, SPEND, and GIVE. There are some great examples on the internet.

The Credit Union National Association in partnership with Cooperative Extension on National level have created a program called Thrive by Five™; Teaching Your Preschooler about Spending and Saving. This is a great resource to visit to gather more ideas teaching preschoolers about money. This program is also a great kindergarten readiness tool.

Michigan State University Extension has released a new toolkit for homeowners who are experiencing or have previously experienced foreclosure. This toolkit will equip these individuals and families with tools to help them recover their financial stability, in the case that a recovery of their home is not possible. The toolkit is available to download free at [MIMoneyHealth.org](http://MIMoneyHealth.org)

URL for more information

[http://www.creditunion.coop/download/pre\\_k\\_9.pdf](http://www.creditunion.coop/download/pre_k_9.pdf)

<http://www.extension.org/pages/9604/thrive-by-five#.VKrssqMo5LM>

[http://www.extension.org/pages/21926/talking-with-young-kids-about-money#.VK1P\\_3uT7XI](http://www.extension.org/pages/21926/talking-with-young-kids-about-money#.VK1P_3uT7XI)

**FREE  
PRESSURE CANNING  
TESTING  
NOW AVAILABLE.**

**FINANCIAL, PARENTING, AND HOUSING**  
**734 240-3179**  
**WINTER 2015**

**Parenting**

**Parenting On Your Own**  
**Nurturing Parenting**  
Every Tuesday  
11:30 am to 12:20 pm  
ALCC  
120 Eastchester  
Monroe, MI 48161  
**Pre-register**  
**Cost: Free**

**Home Education**

**Home Ownership Education**

Thursday, March 12 & 19, 2015  
6:00 to 9:00 pm  
MSU Extension office  
963 S. Raisinville Road  
Monroe, MI 48161

**Pre-register by calling:**  
**734-240-3179**  
**Cost: Free**

**FREE HUD Certified  
Foreclosure Prevention  
Intervention Counseling**

Call for an appointment:  
734-240-3179

**Building Strong Adolescents Parenting Program**

Mondays  
March 9, 16, 23, 30 & April 6, 13 & 20, 2015

6:30 to 8:30 pm  
MSU Extension office  
963 S. Raisinville Road  
Monroe, MI 48161

**Pre-register by March 6th**  
**Cost: \$30 per person or couple for series**

## HEY! THAT'S MINE! – WHEN SIBLINGS FIGHT

SIBLING FIGHTS MAY DRIVE PARENTS CRAZY BUT MIGHT ALSO BE AN OPPORTUNITY TO TEACH KIDS HOW TO NEGOTIATE CONFLICT APPROPRIATELY.

Learning to get along with siblings is one of the first opportunities for children to develop how to socially interact appropriately with others.

It is not unusual for young siblings to have up to six skirmishes an hour. These conflicts can be training ground for dealing with conflicts in the future. With siblings, there is a tendency of having arguments and risk sharing our opinions because we feel safe. What is learned during these childhood clashes can have long term effects.

Siblings that are taught how to fight fair and compromise by parents is crucial. Parents who consider sibling aggression as normal may miss the opportunity to teach how to properly resolve clashes may result children with poor social skills and more conflict as they get older. In comparison, kids whose parents help them work out their disagreements tend to develop good conflict management skills.

One way parents can teach conflict management with children is by encouraging the children to work out their problems themselves while the parents serves as the mediator. Below are steps to do this:

1. Show respect for their feelings by giving them time to explain their side of what happened. “Boy, you two sound angry with each other!”
2. Listen carefully so that you can summarize clearly what each child shared. “I see, so you want to build the tower by yourself.” “And when you saw that, you wanted to build a tower too.”
3. Show respect for the problem. “This is a tough situation. Two kids who both want to play with the same toys at the same time.”
4. Express that you have confidence in their ability to find a mutually agreeable solution. “Know something? I believe that if the two of you work together, you will be able to find a solution that will work for both of you.”
5. Leave. “Let me know what you have come up with.”
6. Provide them with a little time to try to work out a solution.

The majority of the time they will be able to work out the problem on their own. Problem solving skills is one of the best gift parents can give their children yet we often swoop in and solve the problem for them. The majority of the time, when given the opportunity with guidance, they will be able to work out the problem together.

Michigan State University Extension offers a multitude of classes and resources on parenting, conflict resolution and violence prevention. For programs near you go to: <http://msue.anr.msu.edu/events>

## MCHE COUNCIL

January 20, 2015 Meeting Minutes

**Membership Report** – Maggie Lee.  
56 members and 4 Mailbox members

**Flower Card Report** – Barbara Zieski  
Deb’s Flower & Gifts still has some flower cards to sell.

**Christmas Tree at Museum Report** – Mary Stienhouser  
Money and collected items have been donated to the women clients at Paula’s House after Christmas.

**Spring Fling**  
The Spring Fling has been set for May 7, 2015 at the Ida

United Methodist Church, Ida Michigan. We will have a potluck at 6:00 pm

**January lesson** was presented by Alicia Ray  
A class on material you can use for oven mitts or for the microwave oven.

Next meeting date is February 17, 2015 at 10:00 am.

Respectfully,  
Betty Curley

New Members are always welcome! Please call Betty at 734 241-6238.

Darryl Diamond  
4-H Program Educator  
734 240-3188  
[diamon44@anr.msu.edu](mailto:diamon44@anr.msu.edu)

Sara Lewis  
4-H Program Educator  
734 240-3174



## RIDE WITH SLOW SPOKES

Have you heard about the group of 4-Hers who ride their bikes to East Lansing each summer? At 42 years strong, Monroe County 4-H members and chaperones have endured the 100+ mile trek to Michigan State University. The trip is made over three days, with overnight stops in Manchester and Leslie. Some parents ride, others drive vehicles to haul equipment and pick up tired bikers and disabled bicycles.

If you would like to be a part of, or find out more about the trip, please attend the 2014 Slow Spokes Planning Meeting to be held at the 4-H Activity Center on March 11. Scott Wiesler, group coordinator, will begin the meeting at 7:00 p.m. Registration materials, rules and expectations will be addressed at this meeting. Questions will be answered and committees will be formed for the planning process of this year's event. Be thinking if this is something you're interested in as it would be a great leadership opportunity for our youth members. Everyone is welcome to attend. This is a fun activity, which will give you the opportunity to make many new friends. The practice rides, the trip, and Exploration Days all combine for a great experience.



## AG AWARENESS DAY

Planning is in full swing for the 2015 Ag Awareness Day, hosted by Monroe County Farm Bureau, Monroe County MSU Extension, and Monroe County Fair Association. The event will be held Friday, May 1 on the Monroe County Fairgrounds. Second and Third grade classrooms from across the county are invited to attend as it presents a resourceful means to educate youth about agriculture and 4-H.

We are in search of volunteers, both teens and adults who would be willing to teach, work as guides, pack bags, scoop ice cream, or help with the set-up and clean-up. If you would like to be a part of this event, please call the 4-H Office at 734-240-3170.

## MINI EXPO: SAVE THE DATE

The 2015 Monroe County 4-H Mini Expo is set for Saturday, March 14. Please watch your email and Network for more information as it comes available.

## CONGRATULATIONS, CARTER PADDY!!

Carter Paddy has been selected to receive one of the 2015 State 4-H Rabbit and Cavy Scholarships. The selection was based on the outline of outstanding 4-H Rabbit and Cavy project experiences. With this scholarship, Carter has been invited to attend the 2015 Michigan Rabbit and Cavy Show to be recognized and presented the official scholarship award certificate. Congratulations and best wishes on your studies!

## MONROE COUNTY 4-H JOINS SOCIAL MEDIA

A new year brings us new and additional means of communication. Darryl and Sara encourage you follow the Facebook page, Monroe County, Michigan 4-H or follow us on Twitter, @MonroeCounty4H.



## JUDY SEE, GUEST OF HONOR AT RETIREMENT PARTY

Thirty years ago, Judy See, joined the Extension staff serving as the Monroe County 4-H Youth Agent. Judy made a lasting impact on many lives, both young and seasoned. On December 27, Judy was celebrated for her accomplishments and legacy she would leave for her predecessors at a retirement party hosted by 4-H Council. She was joined by 350-400 guests traveling from near and far, including her son, Todd and Family and son, Larry Jr. Many clubs made Christmas ornaments and scrapbook pages as a memento for Judy to reminisce. We look forward to her staying involved and mentoring each of us just as she has for many years. From the 4-H program alumni, community members, current 4-H families, and all those whose lives were touched, THANK YOU and best wishes for a nice retirement.



## COMMUNICATIONS DAY — DON'T MISS IT!!

The popular Communications Day sponsored by REACT will be held at the Extension Office on Saturday, February 14. Registration will begin at 9:00 am. For a flyer, please check your email or call the office at 734-240-3170.

Included this year will, again, be a community service project. Each participant is asked to bring a canned good or non-perishable item which will be donated to a local food bank.

All topics must relate to the environment. Photography, drawing, demonstrations, public speaking and many other categories to increase your skills will be offered.

## LIVESTOCK WORKSHOPS

<b>Poultry Workshop</b>	March 4	7:00 pm	Activity Center
<b>Beef Workshop</b>	March 5	7:00 pm	Activity Center
<b>Rabbit/Cavy/Pocket Pet Workshop</b>	April 1	7:00 pm	Activity Center
<b>Sheep Workshop</b>	April 2	7:00 pm	Activity Center
<b>Fitting &amp; Showing Clinic (Beef)</b>	April 25	6:00 pm	Fairgrounds
<b>Sheep and Swine Tagging</b>	May 2	9am-1pm	Fairgrounds
<b>Swine workshop</b>	May 5	7:00 pm	Activity Center
<b>Broiler Workshop</b>	May 6	7:00 pm	Activity Center
<b>Rabbit and Cavy Show</b>	May 17	9:00 am	Small Animal Barn
<b>Fitting &amp; Showing Clinic (Sheep, Swine, Small Animal)</b>	June 8	6:00 pm	Fairgrounds

## 2015 EXPLORING EXPO

Come learn about 4-H and make 3 craft projects ready for Spring Achievement and Fair to take home. This event is for all Explorers (age 7-8) and any first-year 4-H members (age 9-11). Space is limited to the first 25 youth.

When: Saturday, February 28, 2015      9am-3:30pm  
 Where: 4-H Activity Center  
 Cost: \$10.00  
 RSVP: Please call the Extension Office at 734-240-3170

Thank you to Kerrie Kraftchick for coordinating this event for our youth!

## MICHIGAN STATE UNIVERSITY 4-H SCHOLARSHIP RECIPIENTS ANNOUNCED



Congratulations to Samantha Beaudrie, Senior at Monroe St. Mary Catholic Central and 10-year member of the Monroe County 4-H Program, on being named one of six recipients of the MSU 4-H Scholarship.

Sam has been an outstanding member and asset to the Monroe County 4-H Program. She is a mentor, leader, and role model and is highly respected by her peers and adult leaders. Sam is not afraid to take on leadership tasks and always presents herself in a professional manner. After attending workshops, meetings, and community service activities, Sam found that she truly enjoyed working with others and looked at that as an opportunity to grow and become a confident young lady ready to take on life after high school.

Sam says her involvement in 4-H is what inspired her to attend Michigan State University in the fall. She has participated in Exploration Days on campus for many years, but it was her college visit that confirmed her decision to attend MSU. This fall, Sam will be part of the Lyman Briggs College to further her studies.

Best of luck to you, Sam, in all you aspire to accomplish.

## MONROE COUNTY TEEN AWARDED \$2,000 MSU PRE-COLLEGE SCHOLARSHIP

Courtney Beaudrie, a tenth grader at St. Mary's Catholic Central for 2014-15, has been awarded a \$2,000 Michigan State University Pre-College Achievement Scholarship. Students in 8th to 10th grades for 2014-15 who attended an MSU summer pre-college program last year were eligible to apply for this award last fall. Courtney participated in Exploration Days, one of six pre-college programs offered by MSU Extension 4-H Youth Development.



MSU pre-college programs are great for helping youth explore possible career interests. They are great fun, very educational, and help connect young people with university faculty and other resources. MSU pre-college programs also help youth envision their future so they can wisely choose their high school classes and prepare for college.

Selection for this scholarship is based on academic ability and potential, demonstration of extra-curricular and community service experience, demonstration of leadership and teamwork skills, ability to overcome obstacles, teacher and program director nominations and strength of student essay. The scholarship is applied toward the student's first year at MSU as a degree-seeking student.

The pre-college programs annually offered by MSU Extension 4-H Youth Development are: 4-H Capitol Experience, 4-H Renewable Energy Camp, 4-H Exploration Days, 4-H Great Lakes & Natural Resources Camp, 4-H Animal & Veterinary Science Camp, and the Michigan 4-H Youth Conservation Council. For more information on these 4-H pre-college programs as well as other MSU pre-college programs, please visit Spartan Youth Programs at <http://www.spartanyouth.msu.edu>. You'll find a multitude of programs that can help youth develop valuable skills, make new friends and taste college life.

Congratulations, Courtney!



DR. LINA RODRIGUEZ  
SALAMANCA  
Commercial Vegetable  
Crop Educator  
517 927-2561

## UPCOMING EVENTS

**February 23**, Field crops webinars: “Malting Barley (& Hops) Production. By Ashley McFarland & Dr. Rob Serrine, MSUE”

Visit the website <http://events.anr.msu.edu/event.cfm?folder=fieldcropswebinars2015> to register and access connection information

**March 3**, Vegetable Production workshop, 9:00-4:00 pm at CMCOG 611 West Bell St Camden MI 49232. For more information see this online brochure, call 517-264-5300 or email [rodri408@anr.msu.edu](mailto:rodri408@anr.msu.edu)

## DISEASE OR DISORDER: HOW DO I TELL THE DIFFERENCE? PART 1

LEARN HOW TO IDENTIFY DISORDERS TO EASE YOUR SCOUTING IN THE GREENHOUSE AND FIELD. A PRERECORDED WEBINAR ON VEGETABLE DIAGNOSTICS IS NOW AVAILABLE AT THE ONLINE IPM ACADEMY.

*by Lina Rodriguez Salamanca, Michigan State University Extension*

Scouting your vegetables in the greenhouse and field will help you identify potential issues early on. In most cases, the earlier you detect an issue, the more effective the management tactics can be. But what are the differences between a disease and a disorder? Among the webinars Michigan State University Extension is offering at the [Online Integrated Pest Management \(IPM\) Academy](#), the webinar titled “**What is wrong with my vegetable plants?**” discusses the differences between vegetable diseases and disorders.

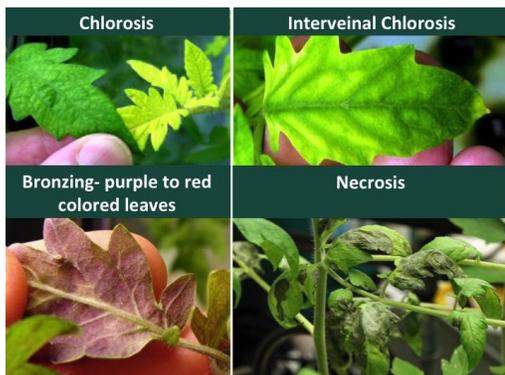
Since vegetable transplant production will start soon, let’s focus on how to pinpoint disorders in the greenhouse. The nutrients plants require are available as soluble salts. Nitrate, ammonium, potassium, calcium, magnesium, chloride and sulfate contribute to the soluble salts in greenhouse growing media. The substrate can be charged with nutrients but sometimes it is not. Guidelines for soluble salt content can be found in the MSU Extension article “**Diagnosing plant problems – don’t forget about pH and soluble salt content**” and the MSU Extension bulletin E1736, “**Greenhouse growth media: Testing and nutrition guidelines.**” Electrical conductivity (EC) is a measure of the soluble salts and indicates salt accumulation in the growing media.

On the other hand, the pH of the media influences the availability and uptake of nutrients. Vegetable transplants grown in media with inadequate pH (lower or higher than optimum) can develop nutrient deficiencies or toxicities. Monitor growth media and irrigation water pH frequently. Closely monitor nutrient and soluble salt content weekly, or twice a week if possible, by randomly selecting plug trays throughout the facility. This proactive approach is very important in maintaining your greenhouse fertility plan when needed while preventing nutrient deficiency and toxicity. Consider investing in a portable instrument that allows you to measure pH, EC and meters for nitrate-N and K petiole sap testing and nutrient solutions.

The most common disorders in vegetable transplants are nutritional disorders related with pH, soluble salts and irrigation. The symptoms associated with nutrient imbalances include chlorosis, necrosis, change in color of the foliage and stunting.

Chlorosis is a yellowing due to breakdown of plant’s chlorophyll, or because its production is disrupted. Necrosis or cellular death results in tissue turning dry and brown to black. Necrosis usually occurs first along the leaf margins, but can expand over time.

Anthocyanin and other pigment concentration changes and as a result, leaf bronzing can occur. Stunting is a noticeable delay in growth. When nutrient deficiencies occur, one or a combination of symptoms arise, for example stunting can be associated with off-color (dark green or yellow).



*Symptoms of nutritional deficiency in tomatoes. Top symptoms are nitrogen deficiency, bottom symptoms are phosphorous deficiency. Photo credit: Robert Kosinski, Clemson University*

Preventative management tactics are the best approaches to managing disorders. Plan ahead your fertility management strategy and design adequate watering schedules to keep the nutrients in the media available to the plants while decreasing the potential for nutritional deficiencies or toxicities. Once transplanted in the field, avoid overwatering vegetable seedlings. The article “**Don’t overwater your vegetable seedlings**” will walk you through some considerations.

If symptoms arise in the greenhouse or the field, it is important to be able to recognize diseases on vegetable transplants in the greenhouse. On occasion, some symptoms observed may be the result of a pathogen. Disease symptoms also include chlorosis, necrosis and stunting.

If you have additional questions, find an MSU Extension expert or collect and send samples to MSU Diagnostic Services. Remember, correct diagnosis is the first step to effective disease management.

Do not miss the chance to learn more about IPM basics, scouting guides and more at the Online IPMAcademy.

Accommodations for persons with disabilities may be requested by contacting Erin Lizotte with MSU Extension at [taylor548@msu.edu](mailto:taylor548@msu.edu) to make arrangements. Requests will be fulfilled when possible.

## MSUE NEWS YOU MAY HAVE MISSED

- **MSU Extension publications** that help minimize yield loss from diseases and other pests| Try [shop.msu.edu](http://shop.msu.edu) to order your 2015 MSU Extension bulletins in print or PDF format. It’s easy, fast and convenient.
- **The three R’s of good weed control**  
Getting good weed control with herbicides can be a frustrating experience. Reducing that frustration is possible by using the 3-R principle – the right product, the right rate and the right time.
- **Disease or disorder: How do I tell the difference? Part 2**  
Recognizing diseases on vegetable transplants in the greenhouse can improve your scouting. A prerecorded webinar on vegetable diagnostics is available at the Online IPM Academy.



**FEBRUARY / MARCH**

**4-H**

**February**

2/4/15	New Horizons Extension Learning Center	6:00 pm
2/5/15	Dundee District Ida High School - Room 118	7:00 pm
2/9/15	Fair Advisory Board w/ Fair Board Monroe County Fair Office	7:30 pm
2/11/15	Horse & Pony Extension Learning Center	7:00 pm
2/14/15	Communications Day Extension Learning Center	10:00 am
2/16/15	<b>PRESIDENT'S DAY OFFICE CLOSED</b>	9:00 am - 5:00 pm
2/16/15	Youth Leadership Extension Learning Center	6:00 pm
2/16/15	4-H Council Extension Learning Center	7:00 pm
2/18/15	Junior Livestock Association Extension Learning Center	7:00 pm
2/18/15	Teen Ambassadors Extension Learning Center	7:00 pm
2/21/15	Horse & Pony Lock-In Monroe YMCA	6:00 pm
2/24/15	CSI Extension Learning Center	7:00 pm
2/25/15	4-H Town Hall Meeting Fairgrounds Expo Center	7:00 pm
2/28/15	Exploring Expo 4-H Activity Center	9:00 am

**March**

3/2/15	4-H Council Extension Learning Center	7:00 pm
3/3/15	Steer Hoof Trimming Monroe County Fairgrounds	TBD
3/5/15	Beef Quality Assurance 4-H Activity Center	7:00 pm
3/5/15	Dundee District Ida High School	7:00 pm
3/6-8/15	Dog Board Camp 4-H Activity Center	
3/9/15	Horse & Pony Extension Learning Center	7:00 pm
3/10/15	Custer District Extension Learning Center	7:00 pm
3/11/15	Slow Spokes Meeting 4-H Activity Center	7:00 pm
3/14/15	Mini Expo Extension Learning Center	9:00 am
3/15/15	Horse & Pony Tack Sale MBT Expo Center	10:00 am

**4-H**

**March**

3/17/15	Airport District Bob Evans	7:00 pm
3/18/15	Junior Livestock Association Extension Learning Center	7:00 pm
3/19/15	Fair Advisory Board Extension Learning Center	7:00 pm
3/21/15	4-H Garage Sale 4-H Activity Center	9:00 am
3/23/15	Small Animal Association Extension Learning Center	7:00 pm
3/24/15	CSI 4-H Activity Center	7:00 pm
3/25/15	Teen Ambassadors Extension Learning Center	7:00 pm
3/27-28/15	Bedford Spring Achievement 4-H Activity Center	TBD

**AGRICULTURE**

**February**

2/18/15	MSU Field Crop IPM Meeting Cabela's - Dundee
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**March**

3/3/15	Pesticide Review 4-H Activity Center	9:00 am
3/3/15	Farm Safety Class 4-H Activity Center	1:00 pm
3/4/15	MDA Pesticide Testing 4-H Activity Center	11:00 am
3/31/15	Sprayer Calibration Workshop 4-H Activity Center	8:00 am

**FAMILY & CONSUMER SCIENCE**

**February**

2/3/15	Nurturing Parenting Class Arthur Lesow Community Center	11:30 am
2/3/15	RELAX: Alternatives to Anger Extension Learning Center	6:30 pm
2/10/15	Nurturing Parenting Class Arthur Lesow Community Center	11:30 am
2/17/15	Nurturing Parenting Class Arthur Lesow Community Center	11:30 am
2/24/15	Nurturing Parenting Class Arthur Lesow Community Center	11:30 am

## STAFF AND MSUE RESOURCES

The Monroe County MSU Extension office is open to the public on Monday thru Friday from 9:00 am to Noon, and 1:00pm to 5:pm. The office staff may be accessed via the main phone line at 734-240-3170.

TERRY CLARK-JONES Extension Educator <i>clarkjon@anr.msu.edu</i>	240-3170	LINA M. RODRIGUEZ SALAMANCA M.S. Vegetable Educator <i>rodri408@anr.msu.edu</i>	517-927-2561
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DIANE MICHAUD Secretary <i>diane_michaud@monroemi.org</i> <i>msue.monroe@county.msu.edu</i>	240-3182		

Though Extension has recently reorganized our structure, Extension professionals are still located in communities across the state and are still working to address Michigan's most pressing needs through four broad-themed areas; greening Michigan, agriculture and agribusiness, children and youth, health and nutrition. If you would like to learn more about these program areas, you can read about them in a document called "Carrying Out the Land-Grant Mission" that can be found at [www.msue.msu.edu](http://www.msue.msu.edu). To locate MSU Extension Staff across the state by name or area of expertise go to: <http://people.msue.msu.edu>

### FAMILY & CONSUMER SCIENCE

### HORTICULTURE

#### March

<b>3/3/15</b> Nurturing Parenting Class Arthur Lesow Community Center	11:30 am
<b>3/10/15</b> Nurturing Parenting Class Arthur Lesow Community Center	11:30 am
<b>3/12/15</b> Home Ownership Education Extension Learning Center	6:00 pm
<b>3/17/15</b> Nurturing Parenting Class Arthur Lesow Community Center	11:30 am
<b>3/19/15</b> Home Ownership Education Extension Learning Center	6:00 pm
<b>3/24/15</b> Nurturing Parenting Class Arthur Lesow Community Center	11:30 am

#### February

<b>2/21/15</b> MCMGA Extension Learning Center	10:00 am
<b>March</b>	
<b>3/21/15</b> MCMGA Extension Learning Center	10:00 am