

# GARDEN BUZZZZ



### Volume 25 Issue 12 Central Alabama Master Gardener Association

December 2016

### Message from: Rhona Watson CAMGA President



December is not my favorite gardening month. I don't like the cold, and losing the light so early. But there are still things to do.

This year due to the drought it is necessary to water, newly planted trees, shrubs and perennials. Woody plants, especially evergreens are susceptible to drying out over the winter, broad leaf evergreens (camellias and hollies) even more so.

It is important to water thoroughly every 7 to 10 days, allowing the feeder roots that are in the top 12-18 inches of soil to soak at a slow enough rate to allow penetration. Drip Irrigation is excellent for this task.

So what to do, after Christmas preparations are done? December is the perfect time to plan for the upcoming gardening season. I love to look through books, and magazines for new ideas, and plants that I have to have. I also make up my plan for planting seeds. Usually I order seeds on line, but this year I have lots of seeds I bought on my trip to England last May, and a few I have saved from last year.

December is also a great time to plan what the master gardener program can offer you next year. We have started making plans for our farmbot which will arrive in February. The plans for the fence and beds are underway, and we will be asking for volunteers when we are ready to start construction.

We are fortunate that most of our committee chairs have agreed to continue, the terrific job they have been doing. Special thanks to Peggy Gelpi, who has agreed to head the fund raising committee, and Robin Snyder, who has agreed to take over Hospitality. Check your directory for the names of the committee chairs and what you can volunteer for.

If you want to receive next years directory, the deadline for dues is December 31. When you pay local dues you will be in the CAMGA directory, receive our newsletter, and be eligible for the stars awards for hours under 1000. CAMGA pays for and awards the stars. AMGA awards the badges for over 1000 hours, and state dues must be paid to receive them. Your state dues goes to fund the conference, the state newsletter, and grants to local associations.



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# Message from: Rhona Watson

CAMGA President — (Continued)

Thank you to Candy Jones, and Jane Mobley for their informative presentation on Taxonomy. And a special thanks to Lee Borden for the work he has done in getting us interesting programs this year.

My favorite thing about master gardeners is learning new things, making new friends, and trying new stuff in my garden.

My picture this month is a camellia sasanqua, *snow on the mountain*. The flowers are supposed to be white, and they are except for one deep pink one.

The sasanqua blooms in late fall, and has smaller flowers than the japonica. It takes sun to light shade, and keeps a small airy shape.

Hope to see you all at the Christmas lunch on December 20<sup>th</sup> at Mulder Church.

Have a Happy Healthy Holiday Season! Rhona



Camellia Sasanqua Snow on the Mountain

Rhona and Sandy Adkins recently attended a Bonsi Presentation at Smith Gilbert Gardens. See picture below of Sandy with one of the impressive bonsai's at Smith Gilbert Gardens.



### **Message from Mallory**

**Mallory Kelley** 

**Regional Extension Agent — Home Grounds, Gardens, Home Pests** 

### Emerald Ash Borer is now in Alabama and the Dangers of Moving Firewood

There are many invasive species of different kinds around us in Alabama whether we are talking about insects, animals, or plants. I had a family relative from the east coast who came to town recently who had never been this far south. They were talking about the beautiful countryside and this beautiful, lush "ivy look-alike" growing everywhere, all over the trees and covering the hillsides and they wanted to know what it was. It took me a second, but I soon realized they were talking about our beloved Kudzu!



Kudzu is probably the first plant that pops in your mind when I say invasive. Can you believe this plant was introduced to the South in the 1930-50's as a good plant for helping reduce soil erosion? The legal definition of an invasive is, "a species that is non-native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health."

Invasive pests pose a major threat to Alabama's natural ecosystems. "Whether they are plants, animals or insects the damage they cause can have significant impacts to the native flora and fauna. The challenges associated with invading insects are the lack of natural predators to control their populations. Additionally, their hosts or trees impacted have few natural defenses due to the pest not being a natural component of the ecosystem. This combination can result in large pest populations causing significant mortality of host species" said Beau Brodbeck, Forester and Regional Extension Agent, Alabama Extension.

All this talk leads me to invasive insects that we all need to be aware of as we move into the winter. Emerald ash borer (EAB) has been all around us for years, but none located in the state of Alabama until just a few months ago in NE Alabama. The EAB is an exotic invasive from Asia that was discovered in Michigan in 2001 and has been recorded in 24 states and 2 Canadian provinces. According to Herms and McCullough, "Because ash is one of the most common tree genera in North America, the pest's prolific nature and fatal impact on trees make it the most economically and ecologically costly forest insect to invade North America."

Below is a link where you can view where the EAB has been identified: <u>http://www.emeraldashborer.info/documents/MultiState\_EABpos.pdf</u>

The EAB adult females deposit their eggs on the bark of ash trees, usually high in the canopy of trees in the thin branches. When the larvae hatch, they bore into the tree and feed on the inner bark. The feeding disrupts the nutrition system of the tree and as more larvae infest the tree, this causes a slow death, usually 2-4 years from the time of infection. At the time you realize you have this insect in your forest, it will be too late. The bark will begin to fall off of the tree and you will see tunneling all under the bark. Unlike the Granulate Ambrosia Beetle that feeds on a wide range of tree hosts, EAB feeds only on ash trees. The three North American species most vulnerable are the white, green and black.



# **Message from Mallory**

**Mallory Kelley** 

**Regional Extension Agent — Home Grounds, Gardens, Home Pests** 

Although EAB can fly, its flying radius is fairly minimal, but where our awareness of these insects comes into play is when we could be the ones transporting them. The public can be a valuable asset in slowing the spread of EAB and preventing the pest from entering non-infested states. This time of year people are heading to the mountains to see the fall foliage and may pack firewood to take or purchase firewood upon arrival.

Check the map and know where the EAB has been found. If you are in an area that is noted as having EAB, do not buy firewood or take firewood from that area to another. If you do buy firewood, use it only in the county where you bought it. Ash firewood that has dried naturally can still harbor larvae. The Granulate Ambrosia beetle can live in a wide variety of tree hosts all across Alabama so its best not to move firewood from one property to another, but especially not across state lines as you could be transporting these insects or others.

According to Herms and McCullough, "Researchers have estimated that if EAB continues expanding at its current rate, it is likely to have an economic impact of \$12.5 billion by the year 2020." Researchers and regulators can do their part, but we also need you, the citizens.

For more information, go to http://www.emeraldashborer.info.

**Source for information:** Herms, D.A. and McCullough, D.G. (2014) Emerald ash borer invasion of North America: History, biology, ecology, impacts and management. *Annu. Rev. Entomol.* 59: 13-30. Doi: 10.1146/annurev-ento-011613-162051.

Beau Brodbeck, Regional Extension Agent, Forestry and Natural Resources, Alabama Extension.

Garden Buzzzz December 2016

# CAMGA Minutes November 2016 Rosemary Mobley — Co-Secretary

The November, 2016, Central Alabama Master Gardeners' Association (CAMGA) meeting was held November 16, 2016, at the Elmore County Extension Auditorium, located in Wetumpka, Alabama. Rhona Watson called the meeting to order at 10:00 a.m. Lee Borden introduced the speakers, Jane Mobley and Candy Jones, CAMGA members. The session covered the topics of classification and taxonomy.

#### **PROGRAM**:

Jane Mobley began the presentation by explaining that in the field of science, taxonomy is a process of defining biological groups on the basis of shared characteristics. Classification is a way of arranging like groups. Classification and taxonomy are both tools for organizing and categorizing large amounts of information. Living organisms are categorized into groups for easier understanding.

The need for standardization in naming organisms is the rationale for a binomial naming system. It helps to prevent confusion. In this system, each species of animal or plant receives a two-part name. The first part identifies the genus to which it belongs, and the second part is the species. For example, Homo sapiens refer to human beings. The word Homo refers to genus and the word sapiens refers to species. Latin is the usual language of binomial nomenclature.

\*\*

Candy and Jane discussed the importance of observation skills in noting characteristics of plants, and practice with plant terminology (simple leaves, compound leaves, serrated leaf edges, smooth leaf edges) as prerequisites for working successfully with keys. Keys are constructs of information in which you use either the process of elimination or an interview to

identify a plant. Candy distributed copies of the Alabama Cooperative Extension System (ACES) publication, "A Key to Common Native Trees of Alabama," ANR-0509.

The examples used by both speakers were dichotomous keys. The process is to answer a series of specific identification questions by choosing one of two possible answers. The answer chosen leads to the next two-answer-choice question, which then continues in a sequential order that further narrows down the organism's characteristics, and leads to its final naming.

Some web sites referenced were identifythatplant.org namethatplant.net, gobotany.newenglandwild.org, arborday.org, and mountainnature.com. Additional resources cited were *"Botany in a Day"* by Thomas J. Elpel and *"Native Trees of the Southeast"* by L. Katherine Kirkman, Claud L. Brown, and Donald Joseph Leopold.

**BUSINESS:** After the break, the business meeting convened at 11:20 a.m. Rhona Watson opened with some announcements:

Special appreciation is extended to all of the committee chairmen who agreed to serve next year.
Contact Rhona if you are interested in chairing the Hospitality, Publicity, or Projects Committees.
Contact John Barnes, Projects Committee chairman, to volunteer with that committee, as time nears for the Permaculture Seminar in February, 2017.

The ACES 2017 Calendar will be for sale after the meeting. The calendar is a great idea for a Christmas present. The cost is \$5.00.

Volunteer hours should be entered on the ACES Service Report website before the end of the year.







# November 2016 Minutes Continued Rosemary Mobley — Co-Secretary



PROGRAMS: Rhona stated that the December 20<sup>th</sup> meeting and Christmas Party will be held at Mulder Memorial Methodist Church. Remember to contact Anida Wishnietsky if you plan to attend. Rhona thanked Lee for his service in arranging for excellent programs for two years. Sandy Rosamond will serve as Vice President and Programs Committee Chair starting in January 2017. The program for the January meeting will focus on volunteer opportunities.

TREASURER'S REPORT: Becky Ashurst gave the Treasurer's Report for October, 2016. The balance as of September 30, 2016 was \$12,585.92. Income for October totaled \$576. Expenditures for October totaled \$420.26: This resulted in a balance as of October31, 2016 of \$12,741.66. The Treasurer's Report was approved by acclamation. Becky reminded CAMGA members that local dues are \$12 and the combination of state and local dues equals \$20. The payment deadline for dues is December 31, 2016.

MINUTES: The October 2016 Minutes published in the November 2016 CAMGA newsletter was approved by acclamation.

#### **COMMITTEE REPORTS**

PROJECTS COMMITTEE: John Barnes reported for the Projects Committee. Additional fliers are available to advertise the upcoming CAMGA-sponsored seminar on permaculture, at the Wetumpka Civic Center, on February 15, 2017. Registration information is available online at CAMGA.net.



Plans are underway for the placement of the Farm-Bot equipment on the grounds of Elmore County Extension offices. John Barnes, Rhona Watson, Mary McCroan, Linda Griebel, and Johan Beumer are working with county 4-H and other extension agents in the selection and preparation of the sight.



LUNCH AND LEARN: Charlotte Hall reported that there were 30 attendees at the November Lunch and Learn (L&L). The December 13<sup>th</sup> session is titled "Christmas with Maria" and will be presented by Maria Pacheco-West. Maria will return in January to conduct the L&L: "Monthly Gardening at a Glance." The L&L sessions scheduled for 2017 may be found at CAMGA.net.

ALABAMA MASTER GARDENER ADVISORY COUNCIL: Gale Wheeler-Leonard and Rosemary Mobley attended the quarterly meeting on November 1, 2016, in Clanton, Alabama. Rosemary reported the following statewide information:

- Harvest for Health will require approximately 456 mentors over the next 5 years.
- In 2016, there were 9000 calls on the Master Gardener Helpline.
- Members were encouraged to nominate individuals for statewide awards. Presidents of local organizations are the point of contact for nomination submittals. Many of the awards have a January 31<sup>st</sup> deadline. Information and new forms for awards are available at: alabamamg.org.
- The next Alabama Master Gardener Conference will be held in Huntsville on May 1-3, 2017, and registration information is available at: alabamamg.org.
- The next advisory council meeting is scheduled on February 7, 2017.



## November 2016 Minutes Continued Rosemary Mobley — Co-Secretary

OTHER BUSINESS:

Linda Griebel announced that cuttings from the Confederate rose and angel trumpet in the Learning Gardens will be available after the CAMGA meeting.

There being no further business, the meeting adjourned at 11:50 a.m. Forty-seven attendees were at the meeting.

Respectfully submitted, Rosemary Mobley, Co-Secretary

### **Time To Pay Dues!**

It is now time for you to pay CAMGA dues. The dues are \$20.00 for state and local or \$12.00 for local only.

They can be sent to me: Becky Ashurst, 775 Morgan Trace, Wetumpka, AL 36093. **Please make checks payable to** <u>**CAMGA.**</u>

Thank you, Becky Ashurst



## Lunch and Learn Program For November 2016 By: Charlotte Hall



### CAMGA November Lunch and Learn "Hydroponic Gardening Using Stackers"

Well, the weather still continues to be a monster for all of us gardeners and the heat, along with lack of water, is a great problem. Ken Barber of Barber Berry Farms has found a way to be a successful gardener in this area with a degree of control for these problems. Ken, who is married to our own Anida Wishnietsky, grows fruits and vegetables with a method of hydroponic gardening using stackers.



Hydroponics is a method of growing plants without soil, using mineral nutrient solutions in a water solvent. Many of us have probably observed a hydroponics system when visiting Epcot at Disney World – which is one of Ken's favorite spots at the amusement complex. Ken incorporates open system vertical stackers which allows for the water to be applied at the top of the stacked containers and drip down through the other plants in the containers below them. Ken's description of his gardening method is "like tinker toys that can be re-arranged easily for growing plants."

Mr. Ken Barber presented the November 2016 Lunch & Learn Program on Hydroponic Gardening

In his stacker system, he has vertical gardening with each stacker accommodating up to five (5) plants per stacks. He uses a growing medium of vermiculite and perlite and a water soluble fertilizer of 6-12-28 and 15.5-0-0. He applies the "open system" of fertilized water which requires one quart of water per stack. Water is applied 3 or 4 times per day. Unlike a closed system which circulates water back through the planters, Ken uses the open system. In the open system, water is applied at the top, runs through the stacked planters and goes out the bottom. By applying the water that runs through the plants with the water-soluble fertilize, a specific pH of 6.0 can be maintained for the plants, and we all know that vegetables love a pH of 6.0.

Because of the extreme heat in this area, Ken has a corrugated fiberglass roof over his stackers. This roof reflects 85% of the sun. With this diffused light, there is less plant shadowing. It also helps in the pollination process because pollen starts to cake around 92 degrees which impacts pollination. The third advantage of the corrugated roof is there is no rain hitting the plants. In the South, there is a potential of downpours, even though that has not been such a huge problem this summer. The roof eliminates the effects of downpours which minimizes the spread of powdery mildew. Overhead spraying is used only when necessary.



## Lunch and Learn Program (Continued) November 2016 By: Charlotte Hall

For an irrigation system, tanks, pumps and timers are required. People who are interested in the hydroponic stacker system can purchase all the needed equipment from hydrostacker.com.

Over a period of trial and elimination, Ken has determined which plants work the best for him in this area, and he now grows a variety of fruits and vegetables such as strawberries, tomatoes, squash, cucumbers, peppers and green beans. Plants with light roots tend to do better with stacking hydroponics. Plants must not have a heavy root system because the water does not flow through the heavy roots of the plants below the surface. Yellow squash and zucchini are examples of plants with light roots. Ever bearing strawberries are also good plants for this system. With his covered hydroponic stacked system, Ken helps eliminate one of the growing problems for strawberries and tomatoes in this area which is no cooling down time caused by the heat.

Ken and Anida start their plants from seed in February and plant in mid March to early April. In June, each planter is replaced with African blue basil which is used to attract honey bees. The vermiculite and perlite growing medium is replaced each year to avoid fungus that may be left over from the plants.

In one short hour, Ken demonstrated a successful alternative way of growing fruits and vegetables for this area. And he also provided an entertaining presentation while teaching us about vertical stacking. Attending Lunch and Learn presentations can amazingly expose one to new topics and ideas that can be extremely helpful in gardening experiences.

Next month, there will be a program change from the 2016 Lunch and Learn schedule. Due to Phil Easter's health, Maria Pacheco-West from Lanark has graciously agreed to step in and make a presentation on Christmas and natural materials. Please join us on December 13<sup>th</sup> for a festive demonstration with Maria.



# Governor's Mansion Report For November 2016 By: Amanda Borden



All of us in Central Alabama would have loved some rain, but our unseasonably warm, sunny weather made for pleasant gardening conditions at the Governor's Mansion during the month of November.

Tours of the Mansion begin in early December, and the volunteers wanted to have the gardens looking as good as possible for public viewing.

They weeded and trimmed around the pool and all along the driveway, and they cut back the cast iron plant next to the bungalow.

Have a great start to your holiday season!





Amanda Borden basked in the summer-like conditions as she worked by the pool

Beautiful view of side yard, with gardeners in the foreground: (L-R) Melanie Barry, Sandy Rosamond, Allyson Ludington, Jane McCarthy, Kathy Quinn





Attending the Projects Committee meeting November 14<sup>th</sup> were Linda Griebel, Jane Mobley, Rhona Watson, Sharon Potts, Candy Jones, Janet Lewis, John Butler, Johan Beumer and John Barnes.

Members bringing food to the monthly meeting were Iva Haynie, Freda Frye, Sally L'Abbe, Penny Arceneaux, Marjorie Hannah and Johan Beumer.

The speaker for Lunch and Learn this month was Ken Barber, speaking on Hydroponics. There were 30 attendees, 21 of them Master Gardeners. Assisting were Sandi Adkison, Charlotte Hall, Debbie Kelso, Carla McCune and Bill Quailes.

CAMGA volunteers at the Governor's Mansion this month were Melanie Barry, Amanda Borden, Jane McCarthy and Sandy Rosamond.

Maria says CAMGA members volunteering this month at Lanark were Carla McCune, Norman Turnipseed, Leslie Bingham, Peggy Gelpi, Jimmy May, and Interns: Paul Richardson, Cheri Cook, Lanell Tatum all came out to help me. We will be doing special projects on Tuesday mornings which some of this year's interns are already signed up for. Please consider joining us. I still have the regular work day on Wednesday mornings and if you need an afternoon or another day, (we are closed weekends) please call me at 334-657-9414. I would love to welcome you back to Lanark, or introduce you to Lanark. Your help is necessary and a vital part of the beautiful gardens here at the Alabama Wildlife Center. Thanks to you all for your help.

# LEARNING GARDEN By: Mary McCroan

Our volunteers in the Learning Garden for November included Linda Griebel, Amanda Borden, Sherri, Schaefer, Candy Jones, Red Norman, Terri Chambliss and Mary McCroan.

Our focus this month has been removing annuals and cutting back the perennial plants that are going dormant. Mostly it's a matter of going out in the garden and noticing that something looks brown and unsightly and deciding to wack it.

There is a certain satisfaction in removing the old brown plants to make room for something new, or maybe just to allow an area of the garden to rest. Not every part of the garden has to be growing something all of the time. Letting the garden rest and letting the gardener rest is a twofer! Most of the vegetation that has died back is destined for the compost pile. Speaking of compost, we are trying something different this year. Rather than throwing all the old vegetation on the compost pile, we are piling it between rows of winter veggies and covering it with weed cloth. The hope is that it will compost in place and be ready for spring planting. One more experiment--that is why it is a learning garden!

The garlic also got planted this month and soon (after a good freeze) we will harvest the horseradish.

We continue to plant some brassicas. The rhubarb is not growing fast, but it is growing. We'll see if it handles our winters well enough to mature to eating size.

Happy gardening to all!







The CAMGA holiday party will again be at Mulder Memorial United Methodist Church on our regular meeting day and time -- December 20th at 10:00 a.m. It will not be catered this year so attendance is free as long as you bring a covered dish to share.

CAMGA will provide ham, turkey and paper/plasticware, while attendees provide side dishes/appetizers/ desserts.

If you have not already done so, please email Anida Wishnietsky at: anidawi@aol.com and let her know that you plan to attend. **Please provide your name, the name of any guest you plan to bring, and what food item you plan to bring,** so we can buy enough ham and turkey.

Please let Anida know what you plan to bring, so we won't have too much of any one item. If you don't know or care what food to bring, contact Anida and she will let you know what we are short of.

Mulder Memorial United Methodist Church is located at 3454 Firetower Road, Wetumpka, about 9 miles away from the Extension Office. Just follow Hwy 14 East out of Wetumpka, turn right onto Firetower Road (also County Road 59), and the large white church is on the top of a hill on the right.

You'll want to park in the first parking lot, nearest the Sunshine Play-ground side of the church. You are getting close when you see the water tower. Speed limit on Firetower is 45 mph and it is patrolled frequently, so please be safe.



### Alabama Bee Workshop December 12—13, 2016

### Registration

#### Registration is required but FREE For more information or to register, email either Charles Ray at raychah@auburn.edu or Bashira Chowdhury at bashira@uw.edu.



AUBURN UNIVERSITY



#### December 12<sup>th</sup> to 13<sup>th</sup> Auburn University

Join up the week of Monday, December 12<sup>th</sup> for the inaugural Alabama Bee Workshop on the campus of Auburn University. Meet fellow native bee enthusiasts and professionals, and attend presentations and site visits in one of three tracks based on your interest.



#### www.aces.edu

The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) is an equal opportunity educator and employer.



### Alabama Bee Workshop

BBI

### Alabama Bee Workshop

Over the past year, the Bee Biodiversity Initiative has been criss-crossing Alabama learning more about our state's native pollinators, and many of you have joined us by collecting pollinator data right in your own backyard. Together, our efforts have yielded important insights that we can now use to protect Alabama's pollinators. This December, we invite you to join us for a two day workshop at Auburn. We want to brainstorm what actions we can take in your communities to help pollinators. Please join us!







#### **Brief Schedule of Events**

December 12th: How can we help pollinators in our neighborhoods? Morning: Discuss urban pollination, smart bee gardens, issues like pesticides and invasive plants, and of course, the data we have collected together Lunch: Honey tasting with Local Alabama Beekeepers along with lunch provided by AU Afternoon: Brainstorm about urban farms, legislation, and permaculture solutions Dinner: A specialty crop dining event brought to you by AU chefs

December 13th: How can we work together to protect more pollinators? Morning: A hackathon to build mobile tools for pollinators including discussions on community outreach, schoolyard gardens, and museum connections Lunch: Workshop concludes

#### **Master Gardeners Association** LUNCH & LEARN 2017 2<sup>ND</sup> TUESDAY OF EVERY MONTH 12:00-1:00 P.M. FREE PROGRAMS **Elmore County Extension Office** 340 Queen Ann Road, Wetumpka 36092 10 January Monthly Gardening at a Glance Maria Pacheco-West Advanced Master Gardener Pruning Pointers 14 February Dr. Chip East, Horticulturist, ACES 14 March Gardening without Injury Bill Jackson, PT Solutions 11 April **Backyard Tomatoes** Mallory Kelley, Horticulturist, ACES 9 May **Propagating Plants** Rhona Watson Advanced Master Gardener 13 June **Hydrangeas** Rhonda Flowers, Aldridge Gardens 11 July Name that Tree- Tree Identification Patrick Cook, Autauga Forestry Commission 8 August Preserving your Garden's Bounty Janet Johnson, Food Preservationist, ACES 12 September Fall Gardening and Harvest Lee and Amanda Borden, Advanced Master Gardeners 10 October Sweet & Sour Facts of Citrus Dr. Arlie Powell, Petals From the Past **Holiday Plants & Forcing Bulbs** 14 November Karen Webber, Master Gardener 12 December Orchids Judy May, Master Gardener



#### Garden Buzzzz December 2016



DESIGNING ECOLOGICAL LANDSCAPES Wednesday, February 15, 2017 9:30 am to 4:00 pm Wetumpka Civic Center, 410 S Main St., Wetumpka, AL 36092 \$25 per person **REGISTRATION IS FROM** 

#### 9:00-9:30

YOU MUST PRE-REGISTER IN ORDER TO ATTEND. NO MONEY WILL BE TAKEN AT THE DOOR. Registration must be sent by check or money order made out to CAMGA to the address below. Use the attached registration form at the bottom and mail with your check or money order by January 31, 2017. You will receive email confirmation of your registration!

Door prizes will be given! We would love to see you there





- Do you want to learn how to get the most out of your gardens with the least amount of work?
- Are you tired of tilling and weeding?
- Do you want bountiful harvests without the use of tons of chemicals?
- Are you concerned about how your practices affect our pollinators and water supply?
- Are you looking for a sustainable landscape and gardens?

Then join us on February 15, 2017 to listen to a nationally recognized expert in permaculture as he teaches us how to address those concerns and stay to learn what plants in our area are perfect to meet these concerns...

### DESIGNING ECOLOGICAL LANDSCAPES

A seminar brought to you by the Central Alabama Master Gardener Association under the auspices of the Alabama Cooperative Extension Service



### Do you want to learn how to get the most out of vour gardens with the least amount of work?

Wednesday, February 15, 2017 9:30 am to 4:00 pm Wetumpka Civic Center 410 S Main St., Wetumpka, AL 36092 \$25 per person

#### DESIGNING ECOLOGICAL LANDSCAPES

#### Introducina:

Toby Hemenway, author of the acclaimed Gaia's Garden and The Permaculture City, has been an adjunct professor at Portland State University, Scholar-in-Residence

at Pacific University, and has taught over sixty 72-hour permaculture design courses. He has presented lectures and workshops at major sustainability conferences such as Bioneers, SolFest, and EcoFarm, and at Duke University, Tufts University, University of Minnesota, University of Delaware and many other educational venues. His writing has appeared in magazines such as Natural Home, Whole Earth Review, and American Gardener. He has contributed book chapters for WorldWatch Institute and to several publications on ecological design. He comes to us from Sebastopol, California.

Toby's topics for this seminar are: 1. Permaculture Basics: Ecological Landscapes for Town and Country 2. Food Forests: Edible Landscapes That Benefit Both Wildlife and People 3. Designing Polycultures and Guilds: Creating Our Own Plant Communities for Food, Habitat, Medicine, and More. 3. Designing Polycultures and Guilds: Creating Our Own Plant Communities for Food, Habitat, Medicine, and More.

#### DESIGNING ECOLOGICAL LANDSCAPES

YOU MUST PRE-REGISTER BY JANUARY 31, 2017 IN ORDER TO ATTEND. NO MONEY WILL BE TAKEN AT THE DOOR

REGISTRATION FORM (DUE TO LUNCH SELECTIONS, PLEASE SUBMIT SEPARATE FORM FOR EACH PERSON.)

Address			
Email addres	s	 	
Phone			

Preferred Lunch (check only one) beef sandwich turkey sandwich vegetarian sandwich

Make checks (\$25 per person check or money order) out to CAMGA and send to

#### CAMGA

c/o Janet Lewis, Registrar 403 Covered Bridge Rd Wetumpka, AL 36093



DESIGNING ECOLOGICAL

LANDSCAPES

Also featured, Jason Powell, owner of Petals From the Past in Jemison, AL, and expert in local landscape plants, will share his advice on choosing plants from our area, suitable to putting Toby's knowledge to work in our landscapes.

DOOR PRIZES will include selections from Petals From the Past!

#### CENTRAL ALABAMA MASTER GARDENER ASSOCIATION







Noon