November 29th, members and guests gathered together to share a delicious potluck Holiday Dinner at the Greene County Library. Project Partners and supporters of our program were invited to attend.

During the dinner, Special Recognition for Members with 100+ Hours and Perfect Attendance was given and Local Award winners and/State Award Nominations were presented.

(L-R) Pauletta Tobey, Patti Roberts, Tacie Huffman, Martha Chiles, Libby Christie, Carolyn Palmer, & Holly Fletcher

Patti & 2016 Perfect Attendance Members

288.0, Spring Plant Sale -208.0;
Committee Hours-ATC-323.0.

Agent of the Year
Dave Freeze
(Continued, Brenda Barr, Pg. 4)

Friend of MG-Individual
Dusty Kennemore

Master Gardener of the Year
Donna Jones

Rookie of the Year
Libby Christie

Volunteer Recognition for 100 + Hours included Service: Pauletta Tobey -172.5; Holly Fletcher - 136.75; Patti Roberts -107.75; and Brenda Barr-103.25;

Education: Ann Bowers -103.5; and Patti Roberts -103.5. Event Project Hours noted were GEV -
President's Notes

Master Gardeners, Linda Glickert, Holly Fletcher, Nancy Rogers, Libby Christie, Paulette Tobey, Tacie Huffman, and I recently attended a program presented by the NE AR. Master Naturalists on Native Trees in the Urban Landscape at Lake Frierson State Park; Sat. Dec. 10th.

Donna and David Jones were there too, but wearing a different hat as Master Naturalists. It’s amazing that we have resources so close and freely available to us, and some of us have never been there before.

It’s interesting too, how our group is much like the Master Naturalists. We all enjoy being good stewards of the earth and truly care about our planet.

Maybe combining resources as volunteers and working together on some of the same projects should be considered as a way to accomplish more for our part of the state. Something to think about in the coming new year!

Happy Holidays!

Connie

Treasurer's Report

FNB Beginning Balance
11/01/16–11/31/16 966.42

Credits
Change from Tree Sale & Craft Fair 100.00
Craft Show Sales 464.30

Ending Balance 1530.92

Deposits not shown on statement
D. Kennemore Donation 239.00
D. Freeze: Gourds/Crafts 60.00
ATC: Book Door Prize Reimb. 35.00
MG Calendar Mbr. Re 3.00
C. Whitman: Twig Crosses/Crafts 10.00

Outstanding Checks 337.99
12/1 Whitman Reimb. (Stamps & Holiday Dinner) 20.29
12/2 Palmer Reimb. (Photo Processing & Dinner Ham) 105.83
12/10 Whitman Reimb. (Book for Library) 34.95

Respectfully submitted 12/12/16
Kenneth E. Fletcher, Treasurer

Events Calendar

Jan. 10: BBL. GC Library Legacy Room 12-1, Neva Shewmaker, Craighead MG, will share her experience and photos of the 2016 Summer International MG Tour: Gardens of Cornwall & Wales

Jan. 15: Deadline for State Awards Nominations & Donations

Jan. 21-Feb. 18: MG Training: Craighead County Extension Office. 8:30-4:30

Jan. 24: MG Meeting. GC Library Legacy Room, 6pm. 15.00 Dues are due.

Feb. 1: MG State Meeting Registration Begins

Feb. 24-26th-AR Flower & Garden Show, LR Statehouse Convention Center

In 2017, please remember all reimbursement requests must be on an Expense Reimbursement Request Form with receipts attached for Master Gardener items ONLY.

Per Janet Carson we can no longer accept reimbursement requests if they are not done correctly. If you have any questions, contact Treasurer Holly Fletcher.
Monarchs’ winter roost in peril  Avocado boom eats into Butterfly Habitat

VICTORIA BURNETT, The New York Times

Originally published November 20, 2016

APUTZIO DE JUAREZ, Mexico -- The green volcanic hills that tower above Aputzio de Juarez have begun to fill with swarms of monarch butterflies, which return each year for the winter stretch of their celebrated -- and imperiled -- migration.

But downhill from the monarchs' mountain roost, in the oak and pine forests that border this small farming town, there lurks a new threat to their winter habitat: a lust to grow the lucrative avocados that are being consumed at record rates in the U.S.

Spurred by soaring demand for the creamy fruit, farmers in the western state of Michoacán are clearing land to make room for avocado orchards, cutting oak and pine trees that form a vital buffer around the mountain forests where the monarchs nest.

"It's scandalous what people are doing now to grow avocado," said Arturo Espinosa Maceda, who has for years grown avocados, peaches and strelizia flowers at a farm some 12 miles north of Aputzio. "But it's mega-business."

Aputzio sits on the western edge of the Monarch Butterfly Biosphere Reserve, a 135,000-acre protected area where the butterflies rest on oyamel, or native fir, trees. The butterflies' numbers have dwindled sharply in recent years as milkweed declined in the U.S. and deforestation affected their Mexican habitat. Each year environmentalists hold their breath to see how many butterflies will arrive in Mexico.

Omar Vidal, director general of the World Wildlife Fund in Mexico, said that conserving the winter sanctuary was "fundamental to the survival of the migration."

Deforestation "has to be reduced to zero," he said.

But the avocado boom could complicate that goal.

Americans ate a record 7 pounds of avocado per capita in 2015, twice as much as in 2008, according to the Department of Agriculture. Nearly 80 percent of those avocados came from Michoacán, the only Mexican state authorized to export the fruit to the U.S. by the department, which bans avocados from other Mexican regions over fear of pests. Michoacán doubled its avocado exports over the past seven years to 770,000 tons -- worth roughly $1.5 billion.

The bonanza has been brutal for Michoacán’s oak and pine forests, which grow at 5,000 to 7,000 feet -- the same altitude as avocados. Between 1974 and 2011, about 110,000 acres of forest across Michoacán’s central highlands were turned into avocado orchards, according to a study by the National Autonomous University of Mexico.

And deforestation is accelerating, experts said. Jaime Navia, president of GIRA, a nonprofit organization based in Michoacán that promotes sustainable rural development, estimated that 65,000 acres -- most of it forest -- had been converted to avocado growing since that study.

"The damage is irreversible," he said.

Officials have blamed producers looking for a pretext to turn land over to avocado orchards for a spike in the number of forest fires in Michoacán this year. But forestry experts and farmers said Mexico's environmental watchdog, the Federal Attorney for Environmental Protection, often turned a blind eye to abuses. Officials are fearful of powerful interests, they said, especially given that organized crime has links to the industry, or bribes make the officials pliant.

"The authorities need to control this," said Armando Lopez Orduna, general director of the Mexican Avocado Producers and Packer-Exporters Association. To offset deforestation, the association has planted half a million trees since 2009 and hopes to plant another half-million by 2018, he said.

Around Aputzio de Juarez, a town of 1,100 people surrounded by fields of guava and corn, scars on the hillsides and patches of young avocado trees signal the crop’s advance. Some have farmed avocado for decades. But now, growers from other areas are buying land.

David Romero Hernandez, a stocky farmer who was trimming grass in his new avocado orchard on the edge of Aputzio one morning in October, said the land had been covered with oak and pine. But the owner felled the trees a year ago and sold it to him.

Romero, 51, pointed to a shorn hill above his plot. That, too, was also covered in forest until a few months ago, he said. Then a farmer from another village bought it.

(Continued, Page 5)
Thank you Patti Roberts and Cora Flanery for being Santa’s little Helpers at the Holiday Dinner!

Everyone received a Christmas card and goodie bag filled with candies, a Volunteer Survival Kit, and Purple Pride Tulip Bulbs! Happy Holidays!

Greene Garden News

Project Updates

**Rainbow Garden:** Joy Gatlin Chair: Not much to report on the Rainbow Garden. Richard Yeazel will be my co-chair for this next year. Eric will continue to keep the plants trimmed and the other tiers weeded like he has done all the time. We will plant the yellow lantana next spring. It grows the very best and is beautiful all summer.

**GC Museum:** Wanda Howerton & Sally Mugford Chairs: Nothing new to report.

**Historical Courthouse**

**Herb Garden:** Donna Jones & Holly Fletcher Chairs: No report.

**South Sign:** Brenda Barr & Paulette Tobey Chairs: No report.

**GC Fairgrounds:** Connie Whitman & Joy Gatlin Chairs: Adding beds to the south end of the Commercial Building. Planted Ribbon Grass donated by Wanda Howerton and will transplant gaura from the entryway beds when warmer.

**Centennial Park:** Bonnie Hamilton & Marilyn White Chairs: Nothing new to report.

**Main Street Caboose:** Tacie Huffman & Jean Crossno: No report.

**East Sign:** Paulette Tobey & Dr. James Laird Chairs: We have $151.00 in the account which is enough to redesign the bed. Upon discussion with Dr. Laird and several of the master gardeners, we plan on re-designing and making tiers. There is 5 feet depth and 16 feet length. We should be able to get 3 beds. This will allow for more plants. Right now the bed is full and every time we try to plant an annual we cut into a bulb. We should be able to use the existing plants and then be able to add annuals for color. We will leave the hollies.

**GE VI:** Connie Whitman, Lead & Executive Board Co-Chairs: More planning in January.

**GC Courthouse:** Patti Roberts & Nancy Rogers Chairs: The 2 benches have been set in front of the GCCH and right next to each of the project beds. A nice addition. The plants look pretty good considering the time of year.

**GC Museum:** Wanda Howerton & Sally Mugford Chairs: No report.

**Plant Sale 2017:** Joy Gatlin, Marilyn White & Cora Flanery Chairs: Date: Sat. May 6th.

**Airport:** Kathy Graber & Tabitha McFadden Chairs: No report.

**GC Library:** Ann Bowers & Brenda Barr Chairs: No report.

**Brown Bag Lunch:** Linda Glickert, Chair: No December Program

**Trellis Garden:** Dr. Laird & Paulette Tobey Chairs: Visited with Chuck Palmer and discussed the continuous of the garden and the amount of donation. I am to get with him after the first of the year.

FNB purchased the property that the garden is on and there has been no discussion about what is to be done with it as of date. Chuck promised to keep me informed and we agreed that until further notice we should continue as we have been.

Committee Comments

**Sunshine:** Joy Gatlin, Lead, & Cora Flanery: We will continue to send birthday cards and other cards to our members and other friends of Master Gardeners. We have many friends who are so helpful to our group and our projects. We are always happy to send cards of appreciation and thanks to them.

**Scrapbook:** Carolyn Palmer, Lead: Need articles and pictures.

**Plant Markers:** Martha Chiles, Lead: Need Plant Lists.

**Membership:** Connie Whitman, Lead. “Let’s work to recruit new MG members.”

**Publicity:** Paulette Tobey, Lead: “Working on membership.”

**Hours Management:** Patti Roberts, Lead: All hours due by Dec. 31st.
Avocados ripen on trees in Zitacuaro, where growers are seeking certification to export their crops to the United States.

(Continued Avocado, Page 3)

"It's the ambition of avocado," he said.

That ambition could soon increase. Zitacuaro, the municipality surrounding Aputzio, is seeking certification to export avocados to the United States - a fact that is on the lips of every farmer.

Certification is awarded municipality by municipality, and not all of Michoacán can export avocados. As it stands, some of Aputzio's avocados are sold to buyers from Uruapan -- a town 100 miles west that is the heart of the industry -- who pass them off as having been grown there.

Deforestation in Aputzio is a recent problem and far less extensive than in other areas of Michoacán, experts said. But "it is becoming a significant problem," given the area's proximity to the monarchs' habitat, said Edgar Gonzalez Godoy, director in Mexico of the New York-based Rainforest Alliance.

Efforts to fight deforestation in the reserve focus on about 34,000 acres around where the butterflies roost. Programs run by the World Wildlife Fund and other organizations have helped cut logging from hundreds of acres each year to just 28 so far this year, said the fund's Vidal.

But the trees in the reserve's outer ring play an important role, said Manuel Sarmiento, a biologist and member of the Alliance for the Conservation of Forests, Land and Water, a group of local farmers, environmental activists and residents.

For example, the trees cool the air from Michoacán's warm western plains as it rises toward the oyamel forests in the center. If the temperature at the heart of the reserve, about 7 miles from Aputzio, were to rise, the oyamel could suffer, and thus the butterflies would suffer, too, he said.

Gonzalez worries that the lure of avocado will only grow if Mexico succeeds in opening new markets. He noted that deforestation is increasing in Jalisco state, another area that hopes it will soon be able to export its crop to the U.S.

"Just imagine what would happen if the Chinese started eating avocado," he said.

In town, residents said avocado had put money into empty pockets. Workers make about $7.50 per day to tend the orchards, and twice that during harvests. A resident can sell 1 acre to an avocado farmer for about $4,300 -- more than that seller would typically make in a year.

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"People have more to spend, and that lifts us all," said Fernando Bernal, a butcher, as he hacked slabs of pork from a loin.

But like others in Aputzio, Bernal worries about water. Aputzio's supply comes from springs fed by the hills east of town. Pine and oak help water filter through the earth and into the spring; avocado, on the other hand, has shallow roots and consumes a lot of that water.

If people keep cutting down the forest, "we'll run out," Bernal said.

And Aputzio isn't the only community with much at stake. The hills that stretch northeast collect water for the huge Cutzamala water system that supplies the thirsty Mexican capital, Mexico City, 100 miles away.

Even Romero, happily tending his avocado bushes on land once filled with mighty trees, is saddened by the loss of forest. He said his village, Zicata de Morelos, depends on water that comes from the hills near Aputzio.

"So we're all affected," Romero said. "But people don't think about the future."

Article provided by Martha Chiles

Winter solstice 2016 in the Northern Hemisphere will be at 4:44 AM, central time, Wednesday, December 21st.

The winter solstice occurs at the moment when the North Pole is tilted furthest away from the sun, giving us the shortest day of the year.

Looking forward to spring? Spring 2017 in Northern Hemisphere will start on Monday, March 20.
(L-R) Bob Branch, benefactor & former MG; Judge Rusty McMillon; Connie Whitman, President; Donna Knight, Cement Pond; Paul Thul, GCCH Groundskeeper; Patti Roberts, Project Coordinator; GC Extension CEA Agent Dave Freeze, & Nancy Rogers Co-chair, gathered for the dedication of hardscapes in GCCH beds in memory of Bob’s sister, Frances Branch Walls.

(L-R ) Marilyn White, Cora Flanery, Ken Fletcher, Nov. 29th

(L-) Marilyn White, Ken Fletcher, Jean Crossno & Holly Fletcher, November 29th Holiday Dinner

Greene Garden News
Greene County Master Gardeners Newsletter

Greene Garden News Contributors
Joy Gatlin
Ken Fletcher
Paulette Tobey
Martha Chiles

Greene Garden News Editor
Connie Whitman

Submit articles by the 15th of each month to:
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