Call Kim Keller or the Extension Office at 641-472-4166 for more information!

Course begins March 20th
Weekly webinars and locally-coordinated activities
Held on Thursday evenings from 6:00 ~ 9:00 pm

Stewarding Your Landscape
Week #1: Edible Landscape Design
Week #2: Soil & Water Resources

Growing Food
Week #3: Vegetable Cultural Practices
Week #4: Vegetable Crops and Cultivars
Week #5: Cultivated Fruit Crops
Week #6: Trees & Wild Crops
Week #7: Food Storage & Preservation

Raising Livestock
Week #8: Grazing & Ruminants
Week #9: Manure & Compost
Week #10: Wildlife Management
Week #11: Beekeeping
Week #12: Backyard Poultry
Monarch butterflies decline; migration may disappear
Mark Stevenson, Associated Press 1:14 p.m. EST January 29, 2014

Number of butterflies in Mexico at lowest level since 1993

The butterflies now cover only 1.65 acres in the Mexican forest, down from a high of 44.5 acres

Decline may threaten the butterfly's migration, which is an inherited trait

MEXICO CITY (AP) — The number of Monarch butterflies wintering in Mexico plunged this year to its lowest level since studies began in 1993, leading experts to announce Wednesday that the insects’ annual migration from the United States and Canada is in danger of disappearing.

A report released by the World Wildlife Fund, Mexico’s Environment Department and the Natural Protected Areas Commission blames the displacement of the milkweed the species feeds on by genetically modified crops and urban sprawl in the United States, as well as the dramatic reduction of the butterflies’ habitat in Mexico due to illegal logging of the trees they depend on for shelter.

After steep and steady declines in the previous three years, the black-and-orange butterflies now cover only 1.65 acres (0.67 hectares) in the pine and fir forests west of Mexico City, compared to 2.93 acres (1.19 hectares) last year. They covered more than 44.5 acres (18 hectares) at their recorded peak in 1995.

Because the butterflies clump together by the thousands in trees, they are counted by the area they cover.

The announcement followed on the heels of the 20th anniversary of the North American Free Trade Agreement, which saw the United States, Mexico and Canada signing environmental accords to protect migratory species such as the Monarch. At the time, the butterfly was adopted as the symbol of trilateral cooperation.

“Twenty years after the signing of NAFTA, the Monarch migration, the symbol of the three countries’ cooperation, is at serious risk of disappearing,” said Omar Vidal, Omar Vidal, the World Wildlife Fund director in Mexico.

Lincoln Brower, a leading entomologist at Sweet Briar College in Virginia, wrote that “the migration is definitely proving to be an endangered biological phenomenon.”

“The main culprit is now GMO herbicide-resistant corn and soybean crops and herbicides in the USA,” which “leads to the wholesale killing of the monarch’s principal food plant, common milkweed,” Brower wrote in an email.

Monarch butterflies gather on a tree by the thousands at the El Rosario Butterfly Sanctuary near Angangueo in 2005. (Photo: Kirsten Luce, AP)

While Mexico has made headway in reducing logging in the officially protected winter reserve, that alone cannot save the migration, wrote Karen Oberhauser, a professor at the University of Minnesota. She noted that studies indicate that the U.S. Midwest is the main source of the butterflies coming to Mexico. “A large part of their reproductive habitat in that region has been lost due to changes in agricultural practices, mainly the explosive growth in the use of herbicide-tolerant crops.”

While some gardeners and activists in the United States have started a movement to plant small patches of milkweed, the effort is in its infancy. Extreme weather — extreme cold snaps, unusually heavy rains or droughts in all three countries — have also apparently played a role in the decline.

It's unclear what would happen to the Monarchs if they no longer migrated. The butterflies can apparently survive year-round in warmer climates, but populations in the northern United States and Canada would have to face bitter winters. There is also another small migration route that takes the butterflies to California, but that has also registered declines.

The migration is an inherited trait. No butterfly lives to make the full round-trip, and it is unclear how they remember the route back to the same patch of forest each year, a journey of thousands of miles to a forest reserve that covers 193,000 acres (56,259-hectares) in central Mexico.

Inhabitants of the reserve had already noted a historic change, as early as the Nov. 1-2 Day of the Dead holiday, when the butterflies usually arrive. "They were part of the landscape of the Day of the Dead, when you could see them flitting around the graveyards," said Gloria Tavera, the director of the reserve. "This year was the first time in memory that they weren't there."

Losing the butterflies would be a blow for people such as Adolfo Rivera, 55, a farmer from the town of Los Saucos who works as a guide for tourists in the Piedra Herrada wintering ground. He said the butterflies had come later and in smaller numbers this year, a fact he attributed to a rainy winter. "This is a source of pride for us, and income," Rivera said.

Butterfly guide Emilio Velazquez Moreno, 39, and other farmers in the village of Macheros, located inside the reserve, have been planting small plots of milkweed in a bid to provide food for the Monarchs if they decide to stay in Mexico year-round, which he said some do.

Sitting beside a mountainside patch of firs where the butterflies were clumping on the branches, Velazquez Moreno, a second-generation guide who has been visiting the butterflies since he was a boy, said "we have to protect this. This comes first, this is our heritage."

A Monarch butterfly perches on a tree at the Sierra Chincua Sanctuary in the mountains of Mexico's Michoacan state in 2011. (Photo: Marco Ugarte, AP)
The Diet That Is All Fluff

Many crazy diets appear in the headlines. Some recent offerings include the feeding tube diet and the tape-worm diet. The latest diet to make headlines is the cotton ball diet, and the science behind it resembles the structure of cotton—unsupportive fluff.

The diet involves consuming five cotton balls dipped in orange juice, lemonade, or a smoothie. The claim is that you will feel full without gaining weight. Some dieters consume these before their meal to limit calorie intake, while others rely exclusively on the cotton balls as their “food” intake.

Medical experts agree that nothing good can come of this diet, and in fact it is very dangerous for the following reasons:

- Cotton balls may not be cotton—most are bleached polyester fibers that contain lots of chemicals
- Eating synthetic cotton balls is similar to eating cloth, or even buttons or coins
- Risks include choking, malnutrition, or even worse, a blockage in the intestinal tract, which can be life-threatening

A healthier and safer approach to feel full is to make sure you get plenty of fiber in your diet. Follow these tips to get the recommended 25 to 38 grams of fiber each day:

- Eat fruits, vegetables, whole grains, and legumes (beans and peas), which are all good sources of fiber
- Look at the Nutrition Facts Panel for a product’s fiber content—20 percent or more is considered high
- Include fiber-rich foods with meals and snacks

The adjacent smoothie recipe is a good source of fiber and includes 5 grams per serving!

Raspberry-Spinach Smoothie

Ingredients
- 2/3 cup frozen raspberries
- 1 cup frozen mango
- 1/2 cup frozen chopped spinach
- 6 ounces vanilla yogurt
- 1 cup milk

Directions
1. In a blender combine all ingredients and mix until smooth.
2. Serve immediately and enjoy.

Optional
Add 2 tablespoons ground flax or chia seeds for about 3 to 5 grams of added fiber.

Nutrient information per serving
- 190 calories, 0 g fat, 0 mg cholesterol, 80 mg sodium, 37 g carbohydrates, 5 g fiber, 30 g sugar, 14 g protein


Serves: 2 (Serving size: 1½ cups each)
Lauren Christian Pork Chop Open
Planned for June 25

AMES, Iowa --

The calendar may show mid-February, but plans for the 2014 Lauren Christian Pork Chop Open are heating up. John Mabry, animal science professor at Iowa State University, leads the planning and said this year’s tournament is scheduled similarly to last year.

“We’re staying with late June for both the golf tournament and the Iowa Swine Day program,” Mabry said. “This allows people to attend both events without needing to make two trips to Ames.”

The 18-hole best ball tournament is set for Wednesday, June 25 at Veenker Memorial Golf Course in Ames. Iowa State’s Iowa Swine Day is the following day at the Scheman Building at the Iowa State Center.

Cost for the tournament remains the same at $85 per person ($340 per four-person team), which includes lunch, beverages and snacks. The registration deadline is Wednesday, June 11 or when the field of 32 teams is filled. The registration form is available on the Iowa Pork Industry Center website at http://www.ipic.iastate.edu.

On-site registration will begin at 9 a.m. with a shotgun start at 10 a.m. Awards and a reception honoring the 2014 recipients of the Lauren Christian undergraduate and graduate scholarships will follow the tournament at the course.

This annual event benefits the Lauren L. Christian Endowment, which provides financial support for outstanding undergraduate and graduate students, and continued swine and pork educational opportunities through Iowa State. Christian was an internationally recognized expert in swine genetics and the first director of IPIC. An Iowa State faculty member for 33 years, he also was a consultant for private and corporate firms associated with swine production.
Yard and Garden: Plants Affected by Frigid Temperatures

AMES, Iowa -- Winter can be tough on Iowa’s trees and shrubs. Low temperatures, rapid temperature changes, winter desiccation and the weight of ice and snow can damage vulnerable trees and shrubs. Horticulturists with Iowa State University Extension and Outreach answer questions about the effect this winter’s frigid temperatures will have on landscape plants. To have additional questions answered, contact Hortline at 515-294-3108 or hortline@iastate.edu.

This winter temperatures have dropped to -20 degrees Fahrenheit. What effects will the cold temperatures have on my fruit trees?

The cold temperatures may have damaged peach and sweet cherry trees. Peach trees are not reliably cold hardy in much of Iowa. Temperatures below -18 F will destroy the flower buds on peach trees. Temperatures of -25 F or below may damage or destroy the peach trees themselves. The flower buds on sweet cherries are slightly more cold-hardy than those on peaches. The flower buds on some sweet cherry cultivars can survive temperatures of -20 F. Iowa gardeners should expect poor crops on peaches and sweet cherries this summer. It also is possible that the trees themselves may have been damaged. Damage may vary from dieback of twigs and branches to complete death. On a brighter note, the cold winter temperatures should not have damaged apples, pears and sour (tart) cherries.

What effects will this winter’s cold temperatures have on my trees and shrubs?

Trees and shrubs that are native to Iowa (or similar regions of the world) are well adapted to our climate and should have suffered little or no damage. However, marginally hardy plants, such as Japanese maple (Acer palmatum), flowering dogwood (Cornus florida) and Japanese flowering cherry (Prunus serrulata) may have sustained damage. (The maximum cold hardiness of most Japanese maple, flowering dogwood and Japanese flowering cherry cultivars is -20 F.) Damage may vary from the dieback of twigs and branches to complete death of the tree.

This winter’s cold temperatures also may have destroyed the flower buds on flowering quince (Chaenomeles spp.) and some forsythia cultivars. Temperatures of -20 F or below likely destroyed the flower buds on flowering quince and ‘Lynwood Gold’ and ‘Spring Glory’ (two popular forsythia cultivars). As a result, these shrubs likely will produce few, if any, flowers in spring. Fortunately, the cold temperatures should not have any long term effects on the shrubs. The leaf buds on flowering quince and forsythia are harder than their flower buds. The shrubs should leaf out normally in spring.

This winter’s cold temperatures should have little impact on the flowering of forsythia cultivars ‘Meadowlark’ and ‘Northern Sun.’ The flower buds of ‘Meadowlark and ‘Northern Sun’ can tolerate temperatures to -30 F.

Deer have eaten all the foliage on the bottom portions of several arborvitae. Will the bare areas green back up in spring?

This winter’s prolonged period of snow cover has deprived deer of food on the ground. As a result, deer have been feeding on trees and shrubs in woodlands, windbreaks and home landscapes. Among evergreens, arborvitae and yews are most susceptible to browsing by deer in winter.

The extent of damage to the lower portions of the arborvitae will be determined by the presence or absence of buds (growing points). If buds are present, the lower branches will produce new growth in spring. The new growth should be apparent by early summer. The lower portions of the arborvitae will remain bare and likely never develop new growth if no buds are present.

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AMES, Iowa -- When parents worry about gray hair and wrinkles or complain about getting older, should they also wonder whether their children are listening? During February, family life specialists discuss children’s attitudes about aging in the Science of Parenting blog from Iowa State University Extension and Outreach.

“This month we’ll talk about whether parents’ attitudes toward aging affect their children’s attitudes,” said family life specialist Donna Donald. “Research shows that family influences are among several factors that can impact how children view aging and older people. We’ll also look at the impact from TV, movies, books and jokes, and everyday language and experiences.”

Family life specialist Lori Hayungs added, “Join us as we blog about how to help children view the aging process in a healthy and realistic way.”

Learn more from tips on the blog throughout the month and in a four-minute podcast. Through the Science of Parenting, www.scienceofparenting.org, ISU Extension and Outreach specialists share and discuss research-based information and resources to help parents rear their children. Parents can join in the conversation and share thoughts and experiences, as well as how they handle parenting responsibilities.

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Winter is the best time to appreciate houseplants. As the snow is falling outside, gardeners live indoors nurturing their houseplants. New gardeners, however, often find houseplants overwhelming. Since there are thousands of different types of houseplants to choose from—how do you choose which ones work best for you? Follow the same process used for selecting outdoor plants.

**Site selection**

The key to plant success is placement in an appropriate site. Outside, hostas perform best in some shade and daylilies prefer mostly sun. Houseplants are the same. The key difference is that the indoor “site” often refers to a particular window or exposure. Plants like ferns, begonias and African violets prefer indirect light, while cacti and succulents (alo, jade, Old-man cactus, etc.) prefer direct light. Indirect light can be found in north-facing and some east-facing windows, whereas south-facing and west-facing windows have more direct light.

Other site characteristics to consider are temperature and humidity. Is the site cold during the winter or hot because it is near a heating register? How humid is the area during the winter or summer? Most houseplants are native to the tropics, so they prefer to be away from drafty windows or doors. In fact, many houseplants can be easily damaged by temperatures below 45-50 F. Most houseplants also prefer moderate to high levels of humidity. Since Iowa homes are not typically humid in the winter, some special houseplants benefit from placement on humidity trays (pebble trays) or near a humidifier.

**Maintenance**

Another important consideration when selecting a houseplant is knowing how much maintenance it will take to keep the plant thriving. For example, in my home the cacti and succulents are performing the best. This is because they are placed in a southern window with plenty of direct light daily. These plants also work best in my home, because I tend to forget to water them regularly. Knowing that I have a tendency to underwater my plants, I have selected plants that will tolerate—even thrive with these site and maintenance conditions.

**Making the Match**

What plants match your home and maintenance conditions—you might ask? This is where you get to do a little research. There are several wonderful books available that will tell you which houseplants like which conditions. Gardening books are filled with beautiful, colorful pictures. So even if you don’t know (or couldn’t begin to pronounce) the scientific name, you can find a few plants that you like that meet the conditions of your home.

<table>
<thead>
<tr>
<th>Name</th>
<th>Light</th>
<th>Moisture</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aloe</td>
<td>Direct</td>
<td>dry</td>
<td>Do not over water</td>
</tr>
<tr>
<td>Snake Plant</td>
<td>Direct to</td>
<td>dry</td>
<td>Tolerant of many conditions</td>
</tr>
<tr>
<td>Airplane Plant</td>
<td>Indirect</td>
<td>moderate</td>
<td>Will produce off-shoots when established</td>
</tr>
<tr>
<td>African Violet</td>
<td>Indirect</td>
<td>moderate</td>
<td>Will flower when given enough light</td>
</tr>
<tr>
<td>Jade</td>
<td>Direct</td>
<td>dry</td>
<td>Do not over water</td>
</tr>
<tr>
<td>Ferns (many species)</td>
<td>Indirect</td>
<td>moist</td>
<td>Place on pebble tray in winter to raise humidity</td>
</tr>
<tr>
<td>Begonias</td>
<td>Indirect</td>
<td>moist</td>
<td>Many different foliage types</td>
</tr>
<tr>
<td>Croton</td>
<td>Direct</td>
<td>moderate</td>
<td>Brightly colored leaves</td>
</tr>
<tr>
<td>Moth Orchid</td>
<td>Indirect</td>
<td>moist</td>
<td>Place on pebble tray in winter to raise humidity</td>
</tr>
<tr>
<td>Ponytail Palm</td>
<td>Direct</td>
<td>dry</td>
<td>Bulbous base stores water</td>
</tr>
<tr>
<td>Rubber Tree</td>
<td>Indirect</td>
<td>moderate</td>
<td>Can become a small indoor tree</td>
</tr>
<tr>
<td>Weeping Fig</td>
<td>Direct or</td>
<td>moderate</td>
<td>Can become a small indoor tree</td>
</tr>
<tr>
<td>Philodendron</td>
<td>Indirect</td>
<td>moderate</td>
<td>Durable ivy or vining type plant</td>
</tr>
<tr>
<td>Peace Lily</td>
<td>Indirect</td>
<td>moderate</td>
<td>Will flower when given enough light</td>
</tr>
<tr>
<td>Schefflera</td>
<td>Indirect</td>
<td>moderate</td>
<td>Both dwarf and large types available</td>
</tr>
<tr>
<td>Corn Plant</td>
<td>Indirect</td>
<td>moderate to dry</td>
<td>Can become a small indoor tree</td>
</tr>
<tr>
<td>Cactus (many species)</td>
<td>Direct</td>
<td>dry</td>
<td>Many have beautiful and colorful flowers</td>
</tr>
<tr>
<td>Dumb cane</td>
<td>Indirect</td>
<td>moderate</td>
<td>Potentially poisonous plant—keep away from children and pets</td>
</tr>
</tbody>
</table>

Direct light usually means at least some bright light—often from a west or south-facing window. Plants that prefer indirect light will be more successful in a north or east window. For moisture, plants that like it dry will need to dry out considerably before watering again. For plants that like it moist, letting the top of the soil dry out too much could result in wilting or death. Always check the top of the soil to determine when a plant needs water.
Jefferson County Business Class
‘Cash is King!’
Tuesday
March 11th
11:30—1:30
$5.00/Lunch
(Register for food count)
Call the Extension Office @ 641-472-4166 to register or for any questions!