

**Howard County Master Gardeners  
2019 - 2020  
CATALOG OF PRESENTATIONS**



**To Schedule Presentations**

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**Special Requests:**

Our speakers can accommodate requested variations on our presentations.

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## **BAYWISE & STORM WATER MANAGEMENT**

### **Baywise Landscaping – simple choices for the home gardener**

Landscaping for cleaner Chesapeake Bay is about making simple everyday choices that support a cleaner and safer environment. This talk discusses how homeowners can create a desirable and sustainable landscape while reducing the pollutants flowing into the Chesapeake Bay. Topics include fertilizing wisely, reducing the use of pesticides, conserving water, control soil erosion and rainwater runoff and composting.

Length of presentation: 1 hour  
 Method of presenting: Power Point

Presenters: Member of  
 Baywise Committee

### **State of the Bay – Baywise Gardening**

This presentation focuses on the changing status of the Chesapeake Bay over the years and the major challenges/issues facing the Bay at this time. Emphasis is given to sustainable practices that individuals can take in their gardens and yards to help address the problems facing the Bay. Learn best practices for your yard and gardens.

Length of presentation: 1 hour  
 Method of presenting: Power Point

Presenter: Paul Beares

### **Growing and Maintaining a Fescue lawn**

The lawn supported in the presentation will be a Bay-Wise lawn. Covered topics include soil preparation and testing, choosing correct seed, fertilizers (when, how much, and WIN numbers), watering, mowing, thatch, weed and disease control. A beautiful lawn will be yours without adding to pollution of the Chesapeake Bay.

Length of presentation: 1 hour  
 Method of presenting: Power Point

Presenter: Ann Vieth

## **Rain Barrels: Why and How**

Gallons of a valuable commodity run off our roofs and enter storm drains. As part of a “green” lifestyle, learn why and how to harvest rainwater for garden use. This presentation looks at today’s rain barrel, illustrates how to assemble one, and gives advice on using a rain barrel system in the garden, including where to buy them, precautions, and covenant regulations.

Length of presentation: 1 hour

Presenter: Caroline Feil

Method of presenting: Power Point

## **Rain Garden: Creating and Maintaining**

What is a Rain Garden? It is a special spot in your yard that collects runoff and is enhanced with native plants. Why should you have one? Come to this presentation and find out why and how along with plant suggestions.

Length of presentation: 1 hour

Presenter: Caroline Feil

Method of presenting: Power Point

## **Landscaping with Rain Barrels and Rain Gardens**

Rain barrels and rain gardens are great ways to use the rainwater that falls on your garden. Come and learn how simply you can implement these gardening ideas and enhance your landscape.

Length of presentation: 1 hour

Presenter: Caroline Feil

Method of presenting: Power Point

## **Living Architecture: Green Roofs and Green Walls**

This presentation will highlight the environmental and personal benefits of a green roof. It will include an explanation of the structure, design, plant selection, and maintenance required. Green roofs are generally found on large buildings, but Howard County has a residential green roof, featured in the presentation. Discover how green walls can liven up a small spot.

Length of presentation: 1 hour

Presenter: Barbara Schmeckpeper

Method of presenting: Power Point

## **Trees, Wonderful Trees**

This program covers the many roles of trees in our lives and in our environment, the multiple aspects of choosing the correct tree for your location/needs, and the basics of planting and caring for your tree.

Type of presentation: Power Point and Discussion  
Length of presenting: 1 hour

Presenters: Phyllis Yigdall  
Linda Decker and  
Barbara Schmeckpeper

## **COMPOSTING**

### **Composting Demystified**

This presentation also explains how you can turn leaves, grass, and vegetable matter into black gold in your own backyard. It contains additional pictures

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenter: Ed Blacka

### **1001 Worms: A Vermicomposting Primer**

Every gardener wants to have worms in their garden. This presentation will explore why it's also desirable to have worms living in your house – in an indoor worm bin! Learn how worms can help reduce waste while transforming your kitchen scraps into a rich soil amendment for your garden and container plants. The presentation will cover the basics of setting up a worm composting bin. It's fun, easy, inexpensive and an educational project for kids. (A children's version is also available.)

Length of presentation: 1 hour  
Method of presenting: Power Point  
and demonstration

Presenter: Susan Levi-Goerlich

## **GENERAL FOOD GARDENING**

### **Companion Planting**

This PowerPoint presents a general overview on the topic of companion planting. Companion planting is a planting method that allows plant to develop a symbiotic relationship. Probably the most well know is the three sisters method of planting corn, pole beans and squash together. Here, squash shades the soil, beans provide nitrogen and corn provides structure for pole bean to climb.

Length of presentation: 1 hour  
Type of presenting: PowerPoint

Presenter: Member of GIEI Team

### **Container Vegetable Gardening**

(Given anytime during the year) Are you limited by space in your yard? Join us for some great tips to maximize your space by using containers. Topics include selecting the right

containers, locations, soil and suitable plants. In fact everything needed to get started.

Length of presentation: 1 hour

Presenter: Member of GIEI Team

Method of presenting: Power Point

## **Deer: Gardening in Deer Country**

This discussion and PowerPoint presents a general overview on how to live with deer. It presents methods of protecting your vegetable garden from deer predation, a list of plants that maybe resistant to predation (deer will eat anything when they are hungry) and sprays and their application which may keep the deer from eating your favorite flowers.

Length of presentation: 1 hour

Presenter: Member of GIEI Team

Type of presenting: PowerPoint

## **Fruits: Growing Fruit Trees and Small Fruits in your Garden**

This talk presents a general overview of fruit trees and small fruit. It includes cultural requirements, pruning tips, pest concerns, pollination, and soil preparation. Tips on growing strawberries, raspberries, blackberries, grapes and blueberries will be presented.

Length of presentation: 1 hour

Presenter: Member of GIEI Team

Type of presenting: PowerPoint

## **Herbs: Indoor Herb Gardening**

Indoor cultivation of herbs is simple, given the right conditions. However, not all herbs are suitable for indoor cultivation. This presentation discusses herbs that are easily grown indoors, their cultural and light requirements and how to harvest them.

Length of presentation: 1 hour

Presenter: Sid Abel or

Type of presenting: PowerPoint

member of GIEI team

## **Herbs: Growing Herbs Year Round Inside and Out**

Herbs like sunny locations indoors and out. Whether you grow them from seed or buy plants, by following simple suggestions for growing, maintaining, and harvesting indoors or outside you can have a ready supply of herbs year round. This presentation provides general care ideas that apply to a variety of herbs.

Length of presentation: 1 hour

Presenter: Member of GIEI Team

Method of presenting: PowerPoint

## **Tomatoes: How to Grow Great Tomatoes**

Learn how to grow prolific tomato plants. Participants will learn how to maximize the yield from their plants by optimizing soil quality and moisture levels. Presentation will also focus on common tomato pests and disease and how to control and eliminate these problems.

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenter: Member of GIEI Team

## **Tomatoes: Tomatoes Diseases and Abiotic Problems**

Learn about the two main causes of problems associated with tomatoes. They are abiotic (soil and air) and biotic (disease, pests and weeds) that cause tomato harvests to be below what the gardener expects. Learn how to determine picking tomatoes at the breaker stage to prevent problems as fruit ripens on the plant. By picking at this stage, fruit can ripen indoors without loss of quality or taste.

Length of presentation: 45 minutes – 1 hour  
Method of presenting: Power Point

Presenter: Member of GIEI Team

## **Vegetable: 12 Simple Steps for starting a Vegetable Garden**

In this presentation we will discuss the 12 steps which can be used by the novice gardener to plan (type, size and location), prepare (soil testing, preparation and improvement), planting (seeds or transplants and how to plant each) and production and maintenance (feeding, watering, pests, diseases, weeds and harvesting).

Length of presentation: 1 hour  
Type of presenting: PowerPoint

Presenter: Member of GIEI Team

## **Vegetable: Starting a Vegetable Garden**

Learn the basic components of how to establish your own vegetable garden and effective ways to sustain it. The plan emphasizes planning your garden preparing your soil, planting crops and taking care of your garden. Basic organic or sustainable vegetable gardening will be discussed.

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenter: Member of GIEI Team



but best time is prior to the onset of the summer dry season.)

Length of presentation: 1 hour

Presenter: Kent Phillips

Length of irrigation planning session: 1 hour

Method of presenting: PowerPoint presentation along  
with drip irrigation equipment

## **Growing Cucumbers and other Cucurbits (squash and melons)**

Learn the cultural requirement for all members of the cucurbits family. Participants will also learn about common pests and diseases and how to combat them.

Length of presentation: 1 hour

Presenter: Member of GIEI Team

Method of presenting: Power Point

## **Growing Healthy Brambles**

Learn how to start and maintain a raspberry or blackberry patch in your back yard. Participants will learn how easy it is to have cultivated raspberries and blackberries, their soil requirements, trellising types and pests. Also learn how you can have raspberries in both the spring and fall by planting ever-bearing raspberries.

Length of presentation: 1 hour

Presenter: Member of GIEI team

Method of presenting: PowerPoint

## **Growing Peas and Beans**

Peas and beans are easy crops to grow for both the novice and experienced gardener. Learn the cultural requirements for legumes and how they improve the soil by adding nitrogen. Tall beans and peas can be grown on a trellis to save space in the garden. We will discuss common pests and integrated pest management methods of dealing with them.

Length of presentation: 1 hour

Presenter: Member of GIEI Team

Method of presenting: PowerPoint

## **Growing Root Crops**

Learn the cultural requirement for most root crops, like carrots, beets, potatoes parsnips and sweet potatoes. Crops like beets, parsnips and carrots can produce large yields out of small spaces. Potatoes and sweet potatoes take up more space but can produce bountiful yields. We will discuss common pests and methods of dealing with them.

Length of presentation: 1 hour

Presenter: Member of GIEI Team

Method of presenting: PowerPoint

## **Indoor: Growing Vegetable Transplants under Fluorescent lights**

Learn how to start vegetable transplants from seed, using heat mats and fluorescent lights. Participants will learn how easy and inexpensive it is to grow healthy, disease free broccoli, pepper, tomato, etc. transplants, using an inexpensive shop light. Using this technique, you can grow the varieties of vegetables you love and not rely on the local garden center to have the plants you want

Length of presentation: 1 hour  
Method of presenting: PowerPoint and demonstration  
Showing an inexpensive light and support

Presenter:  
Kent Phillips or  
member of GIEI team

## **Strategies for Dealing with Weeds and Insect Pests in the Garden**

This talk covers 11 different insect pests and 22 (count 'em 22!) weeds that frequently show up in veggie gardens and provides a lot of strategies and solutions for dealing with these invaders organically. It's a fun and information-packed!

Length of presentation: 1 hour  
Method of presenting: PowerPoint

Presenter: Susan Levi-Goerlich

## **Integrated Pest Management for Vegetable Gardeners**

Learn about identifying common insect pests attacking your vegetables and organic ways of dealing with them. Also learn about some common vegetable diseases and what can be done to avoid them.

Length of presentation: 1 hour  
Method of presenting: PowerPoint

Presenter: Member of GIEI Team

## **Root Crops**

This talk presents a general overview of the large number of root crops which can be grown in the home garden. It includes cultural requirements, pest and disease concerns. Because root crops require no pollination, they can be grown without pesticides by growing the crop under row cover.

Length of presentation: 1 hour  
Type of presenting: PowerPoint

Presenter: Member of GIEI Team

## **Soil: Better Yields through Better Soils**

Learn how to increase the yield from your vegetable garden. Participants will be taught the importance of a soil test, how to interpret soil test results and based on those

results, what nutrients or amendments should be added to optimize yield. Nutrients and amendments can be either organic or synthetic. Participants will also learn about the importance of maintaining high levels of organic material in soils.

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenter: Member of GIEI Team

### **Technique: 100 Square Foot Gardening for all Seasons**

Here, Master Gardeners will discuss how to optimize the production from a 100 square foot garden. The presentation includes design ideas (including intensive planting), soil preparation, container planting and succession planting from spring, through summer and fall.

Length of presentation: 1 hour  
Type of presenting: PowerPoint

Presenter: Member of GIEI Team

### **Technique: Holistic Vegetable Gardening**

Learn how to create a sustainable organic vegetable garden using locally available resources. Soil improvement is the key to creating a great vegetable garden; and the best way to improve your soil is to add lots of organic material. Along with soil improvement, learn why doing a soil test is imperative for a great garden. Learn about plant nutrients and good sources for adding organic (slow release) nitrogen to the soil. Finally, learn about integrated pest management and which pesticides are considered organic.

Length of presentation: 45 minutes – 1 hour  
Type of presenting: Power Point

Presenter: Member of GIEI Team

### **Technique: Organic Vegetable Gardening: Methods for Success**

This presentation illustrates the steps required to have a successful organic vegetable garden. They are: 1) building the organic material in the soil; 2) choosing the right vegetable to plant at the right time and place; 3) proper fertilization and the use of organic nitrogen sources; 4) Managing pest problems organically, and 5) caring for the garden on a regular basis.

Length of presentation: 1 hour  
Type of presenting: PowerPoint

Presenter: Member of GIEI Team

## **GARDENING STRATEGIES/PROCEDURES**

## **Container Gardening: Posies in a Pot**

When properly planted, a pot of blooming flowers can brighten your outdoor environment throughout the growing season. Learn about the variety of containers, types of soil and nutrients, suitable plants, and colorful uses for container gardens.

Length of presentation: 1 hour

Presenter: Pat Greenwald

Method of presenting: Demonstration

## **Easy Gardening for Busy People**

Description: Would you like to have a garden but feel it's too much hard work? What are the secrets to doing less work and yet have the rewards of nature's bounty and beauty? If you have limited time, energy or space for gardening, let us help you keep things simple. Learn about plants that are easy to grow and the benefits of growing them. We will provide information on soil and other tips that will allow you to save time and be a lazy gardener.

Length of Presentation: 2 hours

Presenter: Ann Coren

Type of Presentation: Power Point

## **Ecosystem Landscaping**

Ecosystem Landscaping is the art of creating landscapes that are visually beautiful and that support biological diversity. Our pollinators, the basis of our food chain, need our help. Decline of pollinators and the ecosystems that support are in progress here and now in Howard County. Our gardening practices can reverse this trend. Come learn how your yard can contribute to ecosystem services and the survival of our native pollinators.

Length of presentation: 45 minutes to 1 hour

Presenter: Ann Coren

Method of presenting: Power point with lecture  
and discussion

## **Frugal Gardener**

This talk discusses how homeowners can create a desirable and sustainable landscape while conserving on the use of water, fertilizer, and pesticides. It also discusses controlling soil erosion and rainwater runoff plus composting garden and kitchen waste.

Length of presentation: 1 hour

Presenter: Caroline Feil

Method of presenting: Power Point

## **Gardening in a Warming Climate**

This talk covers what climate change is and why it is happening. It discusses the

impacts of climate change on everyone and what homeowners can do about it. Finally, suggestions are made for what gardeners can do to reduce global warming.

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenters: Sylvia Huestis  
Carolyn Cradler

## **Invasive Plants: What You Need to Know and Do about Them**

Invasive plants seem to be multiplying every year and are a burden to every gardener. This presentation will talk about things you need to know about invasives and will inform you about ways to deal with them so you can make the right decisions for your landscape. Emphasis is on both ornamental plants and weedy species.

Length of presentation: 1 hour  
Method of presenting: Power point, lecture and  
interactive discussion

Presenter: Judy Fulton

## **Native Ferns for Various Growing Conditions**

Ferns are an excellent addition to many types of landscapes. They can even be used for a food source. In this talk you will learn about the ferns native to the mid-Atlantic region and the many growing conditions in which they thrive.

Length of presentation: 1 hour  
Method of presenting: Power point, lecture and  
interactive discussion

Presenter: Judy Fulton

## **Native Plants in the Home Landscape**

Find out how growing native plants benefits both the gardener and the environment. Explore the concept of “right plant, right place” and select from a variety of trees, shrubs, flowering perennials and more that will be perfectly at home in your yard.

Length of presentation: 45 minutes  
Method of presenting: Power Point

Presenter: Pat Greenwald

## **Native Plants for Difficult Growing Conditions**

Many gardeners today focus on native plants. However, not all landscapes have ideal growing conditions. This talks presents ideas and methods to successfully grow native plants in less than ideal growing environments.

Length of presentation: 1 hour  
Method of presenting: Power point, lecture and

Presenter: Judy Fulton

interactive discussion

## **Seed: Starting a Garden from Seed**

Get an early start on growing annuals, perennials, and vegetables by growing your own seedlings. Learn how to plant seeds, care for, and transplant seedlings. Techniques will be shared to help avoid some common problems.

(Available only during January or February.)

Length of presentation: 1 hour

Presenter: Pat Greenwald

Method of presenting: Demonstration

## **Spring: Getting your Garden Ready for Spring**

This session provides guidance on sustainable gardening best practices for the Spring season. The session is appropriate for beginning and casual home gardeners who can benefit from tips on what gardening tasks to do in the Spring, how best to do each task, and when during the season to do them. A full range of gardening types – vegetable, perennial, and native plant gardens – is discussed, along with design and on-going care recommendations.

Length of presentation: 1 hour

Presenter: Paul Beares

Method of presenting: Power Point & interactive  
group participation

## **Fall-Winter: Putting the Flower Garden to Bed for Winter**

When the gardening season is winding down, there are still things to be done to prepare for that most glorious season: Spring! This talk addresses the clean-up of annual beds, dividing perennials, planting of bulbs, establishment of new beds to be planted in the spring, prepping tools for their hiatus, winter deer-proofing, and other tips.

Length of presentation: 1 hour

Presenter: Pat Greenwald

Method of presenting: Power Point

## **Using Citizen Science to Guide Your Gardening Practices**

Description: Where did all the fireflies go? How can you use the data from a Citizen Science project to guide your gardening? We will discuss programs such as Project Bud Burst, Project Feeder Watch, Monarch Watch, and Million Pollinator Gardens, among others.

Length of Presentation 1-1 ½ hour

Presenters: Ann Coren

Type of Presentation: Power Point and discussion

or Barbara Schmeckpeper

## **GARDENING SPECIALITIES**

### **Bamboo Cultivation and Uses**

Describe what bamboo is from roots up, how to cultivate and control and show the many uses and benefits of using bamboo a renewable resource.

Length of presentation: 30-45 minutes

Method of presentation: Power Point, discussion,  
plant/product samples to pass around

Presenter: Bob Doyle  
or Marie McGing

### **Bulbs: Part I**

This presentation will offer a whirlwind tour of bulbs – their history, nature, selection, planting, care, and names – including a mini-course on all that Latin. Slides will accompany an overview of three major bulbs: narcissus, tulips, and lilies.

Length of presentation: 1 hour

Method of presenting: Slides

Presenter: Judy Petersen

### **Bulbs: Part II**

This slide presentation will feature bulb treasures, other than narcissus, tulips, and lilies, that provide almost year-round interest, from the snowdrops of late winter to the colchicums of late autumn, with many more in between.

Length of presentation: 1 hour

Method of presenting: Slides

Presenter: Judy Petersen

### **Bulbs: Forcing Bulbs for an Early Spring**

This presentation addresses the forcing of spring bulbs for conventional indoor bloom or outdoor pots and window boxes. The topics covered include step-by-step directions for preparing the soil and planting the bulbs, for chilling and storing bulbs to facilitate blooming, choice of bulbs and containers, and suggestions for attractive arrangement in planters. (This presentation is appropriate for Early Autumn.)

Length of presentation: 1 hour

Method of presenting: Power Point

Presenter: Pat Greenwald

### **Bulbs: Spring and Summer Bulbs, Fun and Easy**

Bulbs have been decorating our landscape for over 500 years because they are pretty and easy to grow and maintain. For both spring and summer bulbs, this presentation

discusses where to plant bulbs and the best times for planting. It discusses caring for bulbs and presents simple rules for planting and transplanting bulbs.

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenter: Caroline Feil

## **Butterfly Gardening**

This presentation covers the basics of attracting butterflies to your garden. Find out about the developmental stages of the butterfly and their relationship with plants. The host plants that the caterpillars must eat will be identified. What are the best nectar plants for attracting adult butterflies? The basics of butterfly ecology will be presented. How to use some basic principles to transform your garden into an ornamental butterfly habitat, and the types of local butterflies that may visit your garden will be included. Alternative presentations are available.

Length of presentation: 1 hour  
Method of presenting: Power Point, Exhibits and Props

Presenter: Pat Greenwald

## **Color in the Shade**

Learn how to design a colorful shade garden. This will be a discussion of the best practices for shade gardening and some plant suggestions for bringing color into a shaded area. A sample design shows the application of the suggested tips.

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenter: Pat Greenwald

## **Creating Outdoor Garden Rooms**

Extend your living space to the great outdoors by creating individual *rooms* for relaxing, entertaining, dining, and many other uses. Plants, structures, paths, and focal points can all be used to define separate areas within your yard that flow from one space to the next.

Length of presentation: 1 hour  
Method of presenting: Power Point

Presenter: Pat Greenwald

## **Cul De Sac Beautification**

Lessons learned about the Dos and Don'ts of turning a cul-de-sac from a simple grass covered island into a landscaped area. Topics covered include design, maintenance, the use of natives, and related costs. Advice is also given on obtaining and using Columbia Association grants.

Length of presentation: 1 hour

Presenters: Roy Heath,

Method of presenting: Power Point

Carolyn Rimes

## **Edible Heirlooms**

Great-great grandma could not order hybrid seed from Park, Johnny, or Gurney. Yet, the veggies she grew from seed she collected had a tastiness that we cannot find today. Discover the world of heirloom seeds and the magnificent bounty they offer.

Length of presentation: 1 hour

Presenter: Pat Greenwald

Type of presenting: Demonstration

## **Edible Landscaping**

Learn how to turn your landscape plan from one that only contains shrubs, flowers and weeds into one that incorporates food for your table. Many vegetable and herbs can add ornamental quality to your landscape while providing nutritious, great tasting fare for your table.

Length of presentation: 1 hour

Presenters: Kent Phillips  
or member of GIEI team

Method of presenting: Power Point  
and demonstration

## **Gardening under Glass**

An inexpensive greenhouse can elevate your gardening to a new level. Cold frames, windowsills, portable greenhouses, and bell jars extend the gardening season. This talk explores the joys of under-glass propagation, demonstrating how to grow under glass from January until mid-May.

Length of presentation: 1 hour

Presenter: Pat Greenwald

Method of presenting: Power Point

## **Microgreens**

This presentation shows how easy it is to grow nutrient dense microgreens. We discuss the easiest microgreens for the homeowner to grow, how to grow them (including equipment) and resources where seed and equipment can be purchased.

Time of presentation: 1 hour

Presenter: Kent Phillips or  
member of GIEI team

Type of presenting: PowerPoint

## **Native Graminoids: Grasses, Sedges, and Rushes for Your Landscape**

Graminoids are a multi-purpose herbaceous plants that can serve many purposes. They can fill an open habitat such as grasslands or marshes and fill a layer of vegetation in a forest or wooded area. This talk will provide you examples of how Graminoids can improve your landscape.

Length of presentation: 1 hour

Presenter: Judy Fulton

Method of presenting: Power point, lecture and interactive discussion

## **Perennial Gardening**

This session provides an in-depth forum for creating and maintaining beautiful perennial gardens. It includes a discussion of design concepts, plant selection, soil preparation, on-going plant care, and sustainable practices. Recommendations for tree, shrub, and perennial plants, with an emphasis on native plants are provided.

Length of presentation: 1 hour

Presenter: Paul Beares

Method of presenting: Power point, lecture and interactive discussion

## **Pruning**

The how, when, and why of pruning ornamental trees and shrubs. This entertaining program includes techniques and tools used in pruning presented through lecture and demonstration. He will also cover what critters you may encounter along the way.

Length of presentation: 1.5 hour

Presenter: Joe Di Giovanni

Method of presenting: Power Point and demonstration

## **Water Gardening**

Learn how to incorporate a water garden into your landscape. This program discusses The benefits of installing a pond on your property, planning and construction of your pond, pond maintenance, and recommended plants and fish for your water garden.

Length of presentation: 1 hour

Presenter: Michelle Bryden

Method of presenting: Power Point

## **ATTRACTING & DETERRING WILDLIFE**

### **Attracting Bats to Your Backyard: how and why to do it**

This talk explores the reasons why gardeners and homeowners might wish to attract bats to their yards; dispels some of the negative myths about bats; and explains their preferred habitats. The particulars of appropriate houses and their sightings are

discussed, as are plant selections to lure and keep bats in your landscape. Presentation includes birds, butterflies, moths, good bugs and other small animals in the discussion of the four basic needs - food, housing, shelter, and places to raise young.

(Recommended for very early spring or fall)

Length of presentation: 45 minutes with Q & A hour      Presenter: Lisa Wingate  
Method of presenting: Power Point

## **Attracting Birds & Wildlife to the Garden**

This session focuses on gardening techniques and tools designed to attract a wide range of birds and wildlife to the garden. It includes a discussion of the basic requirements, suggestions for the types of plants that can be used, and some of the challenges to successfully manage this effort. There is also a discussion of some of the tools that can be used to discourage wildlife, such as deer, from damaging the garden.

Length of presentation: 45 minutes to 1 hour      Presenter: Paul Beares

Method of presenting: Power point with lecture  
and discussion

## **Bluebirds in your Garden**

Learn about the beneficial bluebird. Why install nesting boxes? Where to install, requirements of a box, native plants that attract, the insects they eat and much more.

Length of presentation: 30 minutes to 1 hour      Presenter: Pat Harrington  
Method of presenting: Power Point and demo

## **Deterring Deer and other Critters**

This presentation addresses the four points Integrated Pest Management for deer – Population Control, Vegetation Control, Repellents and Fencing. The first segment talks about techniques our government (and others) has tried to control deer population growth. The second addresses what plants deer (generally!) do and do not like, so you can avoid planning dear buffet. Repellents include chemical and physical repellents, including large dogs. Fencing address a number of types of fences, both electrified and non-electrified.

Length of presentation: 1 hour

Presenter: Kent Phillips

Method of presenting: Power Point

## **Honeybees, Beekeeping, and Sustainability**

The learning objectives of this presentation are:

1. To have a working knowledge of the vital role of the honeybee as a major pollinator.
2. To understand the first principles of beekeeping.
3. To make a positive contribution to the health of the honeybee.

It is a critical time in the interacting history of pollinators and agriculture; we will consider the changes facing the world's honeybee population and the research initiatives in place so far. Everyone has a part to play from beekeeper to farmer, to city and suburban dweller. Find out what exactly goes on inside a beehive and how do our various activities affect the life of the honeybee.

Length of presentation: 1 hour

Presenter: Carol Link

Method of presenting: Lecture and Power Point

## **Attracting Hummingbirds into your Garden**

Hummingbirds are nature's smallest bird and many people find them fascinating. Here you will learn about the Ruby Throated hummingbird's migration, nests, and preferences. Find out what the needs of the hummingbird are and how you can provide them thru a combination of plants, feeders, and water. Many plants are nectar and insect sources for the hummingbirds and can be grown in your garden to attract them.

Length of presentation: 1 hour

Presenter: Beth Blum Spiker

Method of presenting: Power Point

## **GARDENING RELATED**

### **Bringing in the Greens**

Interesting combinations of natural greens can last from December 1 until New Year's Day. Learn how to make arrangements that last, whether hanging on a wall or topping a candlestick. Fresh flowers and unusual dried materials will be added to the creations.

Length of presentation: 1 hour

Presenter: Pat Greenwald

Method of presenting: Demonstration

### **Decking the Halls with Natural Materials**

Materials found on the forest floor, in the supermarket, and in the winter garden can be

turned into decorations to instill the warmth of the holiday season into your home. Tips on creating a variety of items will be shared. Versions of this presentation are available for both autumn and Christmas.

Length of presentation: 1 hour  
Method of presenting: Demonstration

Presenter: Pat Greenwald

## **Caring for Creation**

This session is appropriate for church/synagogue groups and individuals interested in the spiritual aspect of gardening from an ecumenical perspective. The session begins with a focus on Biblical perspectives on the call to care for creation and our role as stewards of God's gift of the earth and its creatures. The discussion then moves to the practice of sustainable gardening, with tips on how to create gardens which nourish the soul and maintain and improve the soil, water, and our overall environment.

Length of presentation: 45 minutes to 1 hour  
Method of presenting: Power point, lecture  
and interactive discussion

Presenter: Paul Beares

## **The History of Gardening & how to use it in your own landscape**

Take a look at how the garden has evolved from the Italian Renaissance parterre to today's suburban backyard, noting the garden elements and plants we might use to give an ageless appeal to our outdoor environments.

Length of presentation: 1 ½ hour  
Method of presenting: Power Point

Presenter: Pat Greenwald

## **CLASSROOM PRESENTATIONS**

### **Developed in conjunction with the HC Public School System**

#### **Kindergarten: 1001 worms**

1001 worms live in my house, eat my garbage and make fertilizer for my plants! In this 45 minutes to 1 hour presentation, students will explore an indoor worm bin, learn about worms and how they help plants grow, and discuss different ways of dealing with trash and garbage. Target - Kindergarten

Length of presentation: 45 to 60 minutes  
Method of presenting: Demonstration

Presenter:  
Barbara Schmeckpeper

#### **K to 2<sup>nd</sup> grade: We like spiders**

This presentation emphasizes the role various spiders play in natural ecosystems as insect predators and how the vast majority of spiders are not harmful to humans. The physical characteristics of spiders are presented including how they see and sense the world around them, how they move from place to place, and how they seek and find food. The many types of webs that different kinds of spiders produce for trapping their food are shown as well as the other ways spiders use their silk. Also, presented is the life cycle of spiders as well as how they grow. Target – K to 2<sup>nd</sup> Gr

Length of presentation: 1 hour

Presenter:

Method of presenting: Demonstration and Power Point

Carolyn Cradler

### **K to 3<sup>rd</sup> grade: Frogs and Salamanders of Maryland**

Students learn about our local frogs and salamanders and why they are such an important part of our ecology. Topics include the frog and salamander life cycles, frog habitats, frog calls, and their importance in the food web. In addition, find out why frogs and salamanders are in peril and what you can do to help them. Target – K to 3<sup>rd</sup> Gr

Length of presentation: 1 hour

Presenter:

Method of presenting: Demonstration and Power Point

Janice Winter

### **K to 3<sup>rd</sup> grade: Howard County Wildlife Habitats**

Children review the features that a habitat has to provide if it is going to support plant and animal life. Many diverse habitats are found in Howard County each with a wide variety of animals. Children learn how the physical features of our county such as the amount of precipitation, seasonal temperatures and topography determine which animals can live in each habitat. Students also observe how these animals survive as the seasons change. The presentation concludes with suggestions on how we can make our backyards and school grounds better habitats for the plants and animals that live in Howard County. Children also have an opportunity to touch and see pelts and bones of some species that are common in our area. Target – K to 3<sup>rd</sup> Gr

Length of presentation: 1 hour

Presenter:

Method of presenting: Demonstration and Power Point

Carolyn Cradler

### **K to 4<sup>th</sup> grade: Birds in Your Backyard**

Which birds may visit your backyard in Howard County? What can you do to make your backyard a more inviting habitat for our feathered friends? In this presentation, children not only see pictures of the birds that are our neighbors but they also get to hear their songs when they squeeze Audubon plush birds. They also discover how the structures of the beaks of different birds allow them to specialize in certain foods. Different examples of bird nests and feathers accompany this program. Target – K to 4<sup>th</sup> Gr.

Length of presentation: 1 hour  
Method of presenting: Demonstration and Power Point

Presenter:  
Carolyn Cradler

### **K to 4<sup>th</sup> grade: Container Gardening**

The students will learn how to start and care for vegetable plants being grown in containers. Students will learn that plants need air, water, growing medium and nutrients to grow. We will teach the students about how plants grow and how to start new plants from seed. Class is best given in September when fall greens (lettuces) can be grown and from February through May when early spring vegetables and summer main season vegetable can be started from seed and grown through the spring and summer. For a nominal fee (approximately \$1.25 per student) students will be provided with pots, growing medium and vegetable transplants of seeds that are appropriate for the season. A video tutorial on seed starting can be viewed by clicking on seed starting or copying this url <https://www.youtube.com/watch?v=tmEEX6-8HEo&list=UUwqjsyyQpwZ-HhcFE9L6ung> into your browser. Target – K to 4<sup>th</sup> Gr

Length of presentation: 1 hour  
Method of presenting: Demonstration and Power Point

Presenter: Member of GIEI Team

### **K to 5<sup>th</sup> grade: The Majestic White Oak**

What is one of the most valuable plants for wildlife? It is the oak. The white oak, *Quercus Alba*, is Maryland's state tree, an honor it well deserves. Learn how all parts of this wonderful tree support all kinds of wildlife including the leaves, acorns, bark and roots. If your school is planning on planting a tree, consider planting a white oak and use this presentation to enrich the experience for your students. However, even if you do not plan on planting a tree, this program acquaints students with the marvels of the majestic tree. Target – K to 5<sup>th</sup> Gr

Length of presentation: 1 hour  
Method of presenting: Demonstration and Power Point

Presenter:  
Peggy Hannon

### **1<sup>st</sup> to 3<sup>rd</sup> grade: Good bugs vs. bad bugs**

This presentation covers the definition of an insect, illustrates the diversity of the insect population with details of 8 different common insects, and concludes that all insects are part of the greater ecosystem we live in. There is a focus on the balance of nature. The good bugs discussed are the bee, dragonfly, ladybug, butterfly, and preying mantis and the bad bugs are the aphid, Japanese beetle, and the mosquito. Target – 1<sup>st</sup> – 3<sup>rd</sup> Gr

Length of presentation: 1 hour  
Method of presenting: Demonstration and Power Point

Presenter:  
Jerry Kissel

## **1<sup>st</sup> to 5<sup>th</sup> grade: Who Lives in your Backyard**

Students will apply skills such as observation, research, etc. to investigate insects living in their own yard. They will practice examining outside habitat in their yard or outside their apartment to look for, identify, and document insects or other residents of the space. Handouts of common insects and an ID card to document unidentified insects will be available. This presentation will support other outdoor activities at the school especially the Environmental Report Card project in 5<sup>th</sup> grade. Target – 1<sup>st</sup> to 5<sup>nd</sup> Gr

Length of presentation: 1 hour

Presenter:

Method of presenting: Demonstration and Power Point

Richard Freas

## **2<sup>nd</sup> to 4<sup>th</sup> grade: Soil – Earth’s Treasure**

This presentation focuses on why soil is important to us. Students will discuss and learn what soil is, how soil is formed, and what makes soil good or bad. They will also learn about soil erosion; what causes it and how it can be prevented. Students will learn why soil is called “Earth’s Treasure”. Target – 2<sup>nd</sup> to 4<sup>th</sup> Gr

Length of presentation: 1 hour

Presenter:

Method of presenting: Demonstration and Power Point

Carolyn Cregan

## **3<sup>rd</sup> grade: The Flight of the Monarch**

This program follows the life cycle of monarch butterflies from their hatching from an egg, through their caterpillar stages, chrysalises, and finally adult butterflies. Special attention is given to the generation of monarchs that hatch in the late summer and then embark on their perilous journeys all the way to Mexico. Flying hundreds of miles, they are faced with numerous dangers, and even when they reach their destination in the mountainous forests of Mexico, their fight for survival is never over. The program then follows the survivors as they and new generations of monarchs return north. Suggestions are made how we can help reverse the decline of these magnificent insects. Target – 3<sup>rd</sup> Gr

Length of presentation: 1 hour

Presenter:

Method of presenting: Demonstration and Power Point

Carolyn Cradler

## **3<sup>rd</sup> to 5<sup>th</sup> grade: Native Plants**

The right plant in the right place can provide the ecological balance needed by local wildlife as well as creating lush gardens, which are not fussy about Howard County weather conditions. The philosophy of growing native plants will be explored, followed by a look at some of our local natives. Target – 3<sup>rd</sup> to 5<sup>th</sup> Gr

Length of presentation: 1 hour

Presenter:

Method of presenting: Demonstration and Power Point      Janice Winter

### **3<sup>rd</sup> to 5<sup>th</sup> grade: Edible heirlooms**

Great-great grandma could not order hybrid seed from Park, Johnny, or Gurney. Yet, the veggies she grew from seed she collected had a tastiness that we cannot find today. Discover the world of heirloom seeds and the magnificent bounty they offer. Target – 3<sup>rd</sup> to 5<sup>th</sup> Gr

Length of presentation: 1 hour      Presenter: Pat Greenwald  
Type of presenting Demonstration

### **4<sup>th</sup> grade: The Physics of Flight**

This program introduces students to the amazing structural adaptations found in birds that not only make flight possible but also allow some species to make long annual migrations. Students will learn that it is more than wings and feathers that are needed for birds to fly. Many birds also have special sense receptors that they use to navigate long distances each fall and the return to their summer breeding grounds the following spring. Target – 4<sup>th</sup> Gr.

Length of presentation: 1 hour      Presenter:  
Method of presentation: Demonstration and Power Point      Carolyn Cradler

### **4<sup>th</sup> grade: Native foods from Native Peoples**

The American Indians who lived here were excellent farmers and were very knowledgeable about protecting and sustaining the environment. Many of the foods eaten around the world were developed by American Indians in this area and throughout North and South America. This presentation is about the foods that native peoples handed down to us, the unique farming methods that made those foods possible, and their relationship to the environment. Target – 4<sup>th</sup> Gr

Length of presentation: 1 hour      Presenter:  
Method of presenting: Demonstration and Power Point      Michelle Connolly

### **4<sup>th</sup> grade: Bats – Seeing in the Dark**

This program will help students appreciate the bats important role in our local ecosystem. Find out what makes good bat habitat. Learn how sound and echolocation help a bat to “see at night” to catch its prey. Target – 4<sup>th</sup> Gr

Length of presentation: 1 hour      Presenter:  
Method of presenting: Demonstration and Power Point      Janice Winter

## **4<sup>th</sup> grade: The Baltimore Checkerspot, Maryland's State Insect**

Since 1973, Maryland has a designated state insect, The Baltimore Checkerspot Butterfly. In this presentation, students review the historical reasons for the selection of this insect by our state legislators. They also learn about the life cycle of this insect and how it differs from the life cycles of the painted lady and the monarch butterflies and how it contributes to Baltimore Checkerspot's decline in Howard County. The external and internal structures of the butterfly are also examined. This program also emphasizes the importance of preserving the right habitat if this insect is going to survive and thrive in our state. Target – 4<sup>th</sup> Gr

Length of presentation: 1 hour

Method of presenting: Demonstration and Power Point

Presenter:

Carolyn Cradler

## **5<sup>th</sup> grade: You, Me and the Chesapeake Bay: Let the Rain Soak In!!**

This program shows students how to connect their backyards to the Chesapeake Bay via our local streams and rivers. Discover what makes healthy water in our streams and how each of us affects water quality. Learn about the water cycle and flow of rainwater. Learn how to live "Bay-Wise". Target – 5<sup>th</sup> Gr

Length of presentation: 1 hour

Method of presenting: Demonstration and Power Point

Presenter:

Barbara Schmeckpeper

## **CHILDREN'S PRESENTATIONS**

### **K to 5<sup>th</sup> grade: I love honeybees**

Honeybees give us so many good things... honey for one. But what is the most important thing they do for us? Pollination, of course. Think of all the delicious food we eat. Well, we have the honeybee to thank for pollinating most of these yummy foods. What does a beehive look like, and who are the members of the bee family? Why are the honeybees in trouble, and what can I do to help. I love honeybees and so will you! For Elementary aged children.

Length of presentation: 45 minutes – 1 hour

Method of presenting: Power Point

Presenter: Carol Link

### **K to 5<sup>th</sup> grade: Butterflies**

Butterflies will come if we lure them to our gardens. Young gardeners will learn how to provide for each stage of the life cycle of the butterflies that can be found in Howard County. (A craft project can be incorporated, if desired.) Alternative presentations are available.

Length of presentation: 1 hour, with craft 1½ hour      Presenter: Pat Greenwald

Method of presenting: Power Point

### **K to 5<sup>th</sup> grade: Nature crafts**

Nature gives us beautiful things with interesting colors, textures and shapes. We will use things found on the forest floor to create pieces of art. Participants, aged 5 – 11, may use items they have found as well as using the provided natural objects to design their unique creations.

Length of presentation: 45mins-1hr

Presenter: Pat Greenwald

Method of presenting: Demonstration

### **Middle school: You, me, and the honeybee**

Why are honeybees so vital to us? What do beekeepers do? What can you do for the health of the honeybee? Learn about each distinct member of the hive and how they share the work. What is pollination and how do the honeybees accomplish this important service? Learn about the work of the beekeeper and also the challenges facing the world honeybee population. Finally, find out what you can do to help! For Middle School aged children.

Length of presentation: 45 minutes – 1 hour

Presenter: Carol Link

Method of presenting: Power Point

### **High school: Honeybees, beekeeping, and society**

The learning objectives of this presentation are:

1. To have a working knowledge of the vital role of the honeybee as a major pollinator.
2. To understand the first principles of beekeeping.
3. To make a positive contribution to the health of the honeybee.

It is a critical time in the interacting history of pollinators and agriculture; we will consider the changes facing the world's honeybee population and the research initiatives in place so far. Everyone has a part to play from beekeeper to farmer, to city and suburban dweller. Find out what exactly goes on inside a beehive and how do our various activities affect the life of the honeybee. For High School aged children.

Length of presentation: 1 hour

Presenter: Carol Link

Method of presenting: Lecture and Power Point

