Hello Master Naturalists!

Join us for this exciting event. It’s time again for our statewide Annual Meeting and Training Day on University of Maryland, College Park campus. Last year’s inaugural event was lots of fun. This is a great opportunity for Master Naturalist Volunteers from around the state to convene as a group. Here’s your chance to meet and compare experiences with volunteers from other host sites.

We will again be joining the Maryland Master Gardeners for meals, keynote speaker and tradeshow/marketplace. New this year is the opportunity to attend all 3 concurrent sessions. We’ll have our “business” meeting first thing in the morning. Many classes will be open to both groups so you can choose your preferences. Pick a first and second class choice in each session. To speed up the process, please register online if at all possible. If not, use the form included here. Come join us for this informative fun-filled day! Classes fill up quickly so register as soon as you can.

Wanda MacLachlan, Master Naturalist Statewide Coordinator
SCHEDULE

7:45-8:30- Registration and Refreshments – Stamp
8:00-9:00 - Master Naturalist Business Meeting
(8:30-9:15- MG Opening Remarks & Skit - Stamp)
9:15-10:15- Keynote Speaker - Stamp
10:30-noon Session I - Concurrent Workshops
12:00-1pm- Lunch, Tradeshow, Marketplace – Stamp
1:15-2:45- Session II - Concurrent Workshops
3:00-4:30- Session III - Concurrent Workshops

KEYNOTE ADDRESS

9:15-10:15 KEYNOTE: “Why We Need Bees” - Dennis vanEngelsdorp, Ph.D. UMD Research Scientist.

Leading apiarist and U. of MD Research Scientist Dennis vanEngelsdorp will look at these gentle, misunderstood creature’s importance in agricultural and natural ecosystems and the alarming evidence of their “mysterious” decline. He will cover the latest theories behind honey bee losses, the evidence supporting these theories, and present ways in which all of us can help ensure a robust and health pollinator supply in our own communities.

WORKSHOPS

Below is a list of workshops recommended for Master Naturalists. Choose at least a first and second choice in each time period. Listings in this brochure -that have (MN) designations- will earn you MN advanced training credit. There are many additional Master Gardener workshops you could attend (but not for MN credit). To see all classes please go to http://extension.umd.edu/mg/annual-training-day/workshops.

SESSION 1 10:30am -12 noon

1A MN Creating Pollinator-Friendly Yards: hands-on learning activities that can engage the public in restoring pollinator habitat in their own communities. Dennis vanEngelsdorp, Ph.D. UMD Research Scientist and Carin Celebuski, Volunteer Coordinator, Campus Arboretum.

How do you engage the public to encourage pollinator friendly habitats in their communities? Learn how to invite pollinators into your communities by creating pollinator gardens, native bee nest boxes and display kits. Make pollinator seed “bombs”, and learn about other resources. There will also be a chance for open discussion and Q&A about bees. (All)

1C MN What a Warming World Means for Pest Outbreaks. Michael J. Raupp, Ph.D., is a professor and extension specialist at the University of Maryland at College Park and Science Channel Expert.

We will review evidence of climate and change and explore possible causes. We will see how warmer temperatures can alter ranges of pests, seasonal phenology of insects and mites, and interactions among plants, herbivores, and their natural enemies. Special emphasis will be placed on urban heat islands. (All)

1P MN Discovering the Mysteries of Bird Migration.

Gwen Brewer, Ph.D. Science Program Manager for the Natural Heritage Program, Wildlife and Heritage Service, Maryland Department of Natural Resources.

The migration of birds has fascinated bird watchers and researchers alike for centuries. The amazing journeys of birds have been chronicled in song, poetry, and film, but how do they do it? This talk will summarize what we know about bird migration today. (A)

1Q MN An Overview of Maryland's Varied Geology.

Martin Schmidt, author and teacher, McDonogh School.

This session will be a synopsis of the geology of Maryland - the landforms, the underlying rocks & their structure, and a bit on the long history that put it all together. Maryland has a quite diverse geology, so there’s plenty to talk about & look at with maps - we’ll do a quick tour of the basics. Speaker will also always happy to learn of places you have found of geologic interest in your naturalist travels. (B-I)

12:00- 1:00 PM  LUNCH
TRADESHOW /MARKETPLACE/ EXHIBITS
**SESSION 2  1:15-2:45 PM**

**2C MN Native Ground Covers.** Janet Davis, Owner, Hill House Farm and Nursery.

Excellent native plant ground “covers” and how to use them. Typically, the term “groundcover” refers to low-growing, evergreen plants, often non-native species that are employed under trees or other structures--often with disastrous and invasive results. We will look at how many of our hardest working native plants can enrich our landscapes by “covering ground” in some of our most difficult garden situations. You’ll be pleasantly surprised! (B-I)

**2F MN Ecology of Oaks and Acorns.** Bill McShea, Ph.D., wildlife ecologist for the Smithsonian’s Conservation Biology Institute at Front Royal, Virginia.

Oak forests are very important for wildlife. Learn how an oak forest works and research on ways we can solve some of the human/animal conflicts and conserve biodiversity to bring our forests back into balance. (I)

**2P MN A Look at Nature’s Puzzle.** Alonso Abugattas, Natural Resource Manager, Arlington Co. Parks, VA.

Although nature is incredibly diverse, it also is intricately interconnected. Join us for an interesting look at how our local pieces of the nature puzzle fit together, focusing on our native flora. Get a peek at just how interdependent our insects, plants, other wildlife, and even humans can be and try to put together some parts of our local nature puzzle. Take a look at host plants, ethnobotany, and other wildlife interactions. You may not look at our natural world the same way again. (B)

**2Q MN Snakes of Maryland.** Ray Bosmans, President of the Mid Atlantic Turtle and Tortoise Society.

Learn all about common Maryland snakes, their habits and habitats. Live snakes with “hands-on” possibilities. (B)

**SESSION 3  3:00-4:30 PM**

**3A MN The Forest Unseen.** David George Haskell, Ph.D., Professor of Biology, University of the South, and author. FEATURED PRESENTATION

Learn how the speaker's research and study on one square meter of forest for one year contains amazing revelations for our past, present and future. “Invite a great rush of wonder into your life” as you learn from Haskells’ personal and scientific insights. His research and teaching examine the evolution and conservation of animals, especially forest-dwelling birds and invertebrates. (All)

**3B MN Top Plant Picks for Pollinators.** Connie Schmotzer, Horticulture Educator, Penn State Extension, York Co.

Our pollinators are currently threatened by a number of factors, including lack of nutritious floral resources. Although many plants are available for gardens, they are not all equal when it comes to availability of pollen and nectar. To determine which plants are more attractive to pollinators, Penn State Extension began Bees, Bugs and Blooms, a trial which includes 84 species of native plants and some of their cultivars. This presentation details the current results of the trial. (B-I)

**3D MN Climate Change and the Gardener.** Sara Via, Ph.D., ecologist and evolutionary biologist, UMD.

Climate change is already affecting gardening by altering temperature and rainfall patterns. Gardeners can increase their success in this changing climate by planting heat- and drought-tolerant varieties as well as by planning for flooding, drought and a probable increase of invasive pests. At the same time, gardeners can be part of the climate change solution by adopting some easy climate-friendly practices. By providing local sources of food and the opportunity to enjoy and experience outdoor spaces, gardens will be more important than ever as the effects of climate change become more pronounced. (B)

**3F MN Native Shrub Propagation.** Sara Tangren, Ph.D., MG Trainer and Carin Celebuski, Volunteer Coordinator, Campus Arboretum.

Shrub propagation can be a rewarding part of your gardening and extension work. In this class we’ll discuss seed collection and stratification, cutting methods, air layering, and division. You’ll leave class with everything you need to know to start growing your own shrubs and vines! (I)
**ANNUAL TRAINING DAY SPEAKERS**

**Alonso Abugattas** is a well-known local naturalist and storyteller. A former officer, including president, with the Potomac Chapter of the Virginia Native Plant Society, Alonso is a master naturalist and master gardener and serves as an instructor for both. He is a co-founder of the Washington Area Butterfly Club and is currently the Natural Resources Manager for Arlington County Parks, VA. He also is the long-time Co-Chair for this region’s chapter of the National Association for Interpretation, the professional association for naturalists, zookeepers and environmental educators and has been certified by them as a Heritage Interpreter. He has had numerous mentions in the press and media, including an appearance on Animal Planet.

**Ray Bosmans**, President of the Mid Atlantic Turtle and Tortoise Society has had a lifetime love for reptiles. He also worked in many capacities for the University of Maryland Extension over his 30 years there. He was ag agent in both Howard and Prince George’s, Regional Extension Specialist in Horticulture at HGIC, and Extension Director for UME Western Region. Ray is also currently serves on the faculty at Howard Co. Community College.

**Dr. Gwen Brewer, Ph.D.** is the Science Program Manager for the Natural Heritage Program, Wildlife and Heritage Service, Maryland Department of Natural Resources. In this capacity, she works with staff to carry out inventory, monitoring, research, and conservation projects for rare species, rare plant communities, and nongame animals. Gwen also represents the state in several regional bird conservation partnerships. She holds M.S. and Ph.D. degrees in Ecology from the University of Minnesota and a B.S. in Zoology from Michigan State University. Before coming to the DNR 11 years ago, Gwen was an Associate Professor at Frostburg State University, where she taught ecology, ornithology, conservation biology, and tropical ecology and conservation.

**Carin Celebuski** is the Coordinator of Volunteers for the University of Maryland Campus Arboretum. She earned a Certificate in Ornamental Horticulture from the Institute of Applied Agriculture at the University of MD in 2010. In addition to developing and coordinating volunteer projects, she also works with student gardeners and beekeepers on campus, and with the PollinatorTers group. She’s co-presenting in both the Pollinator Habitat class with Dennis VanEngesdorp, Ph.D. and in the plant propagation class with Sara Tangren, Ph.D.

**Janet Davis** received her Bachelor’s Degree in Horticulture from VA Tech, and has spent the last 30 years working in various horticultural pursuits—from growing apples to designing gardens—all the while spending as much time as possible hiking in our beautiful Blue Ridge Mountains. Her time spent in “the woods” fostered her passion for our native flora and plant communities, and spurred her desire to learn more about native plants.

For the past 18 years, Davis has operated a landscape design-install-care business, incorporating native plants into garden settings and “managed” areas while employing sustainable garden techniques. In 2006, she and her husband, Robert Devening, opened their greenhouse/nursery business, Hill House Farm & Nursery, which grows and sells only US native plants, primarily natives and select cultivars that occur naturally in the Mid-Atlantic region.

**David George Haskell** holds degrees from the University of Oxford and from Cornell University. He is Professor of Biology at the University of the South, where he served as Chair of Biology. He is a Fellow of the American Council of Learned Societies. His scientific research on animal ecology, evolution and conservation has been sponsored by the National Science Foundation, the Environmental Protection Agency, the Fish and Wildlife Service, the World Wildlife Fund, among others.

Haskell’s work integrates scientific and contemplative studies of the natural world. His book, *The Forest Unseen: A Year’s Watch in Nature* (http://theforestunseen.com; Viking Penguin, 2012), was winner of the National Academies’ Best Book Award for 2013 and a finalist for the 2013 Pulitzer Prize in non-fiction. The book was the winner of the 2013 Reed Environmental Writing Award, the 2012 National Outdoor Book Award for Natural History Literature, and was runner-up for the 2013 PEN E. O. Wilson Literary Science Writing Award. A profile in *The New York Times* said of Haskell that he “thinks like a biologist, writes like a poet, and gives the natural world the kind of open-minded attention one expects from a Zen monk rather than a hypothesis-driven scientist” (http://ow.ly/ojNZo).

**Dr. Bill McShea** is a wildlife ecologist for the Smithsonian’s Conservation Biology Institute at Front Royal, Virginia. He received his education at Bucknell University (B.S.), University of New Hampshire (M.S.), and State University of New York at Binghamton (PhD). He has worked at the Front Royal facility since 1986. He is currently co-chair of the IUCN Deer Specialist Group which is responsible for setting endangerment levels for deer species worldwide, as well as member of bear and bovid specialist groups. He has edited 4 volumes on wildlife management (deer, oak forests, giant pandas and Asian wildlife) and a co-authored a book on deer ecology. When not in Virginia, Bill currently works in Southeast Asia and China. He has over 110 publications in scientific journals, many involving wildlife in the Virginia area. Bill’s current research focuses on the management of wildlife populations in forested...
ecosystems, including giant pandas in China, rare deer in Cambodia, large mammals along the Appalachian Trail, invasive plant/animal interactions, chestnut tree restoration, and wood turtles in Virginia.

Michael J. Raupp, Ph.D., is a professor and extension specialist at the University of Maryland at College Park and Science Channel Expert. As internationally recognized expert, Mike has more than 200 publications and has made more than 900 presentations on the ecology and management of insects and mites. He is has appeared on all major television networks and has been featured on The Science Channel, National Geographic, Dr. Oz and Jay Leno. His “Bug of the Week” website, www.bugoftheweek.com, an information source on the natural history of insects, received more than one million visits since its inception. Mike has received a dozen regional or national awards for excellence in extension programming and media communications including the Secretary of Agriculture’s Award for Environmental Protection. His most recent book “26 Things that Bug Me” introduces youngsters to the wonders of insects and natural history using pictures and rhymes while “Managing Insect and Mites on Woody Landscape Plants” is a standard for the arboricultural industry.

Martin Schmidt is author of the book, Maryland’s Geology, published by Schiffer Publishers, which is designed to give a basic geologic background & then apply it to the state, for students, teachers, and laymen. He has been teaching grades 9-12 at McDonogh School since 1978, including physics, chemistry, and geosciences over the years.

Connie Schmotzer is the consumer Horticulture Educator for Penn state Extension in York County where she coordinates the county Master Gardener Program and the statewide Pollinator Friendly Garden Certification Program. A graduate of Dickinson College, Connie worked as a ranger naturalist in Grand Teton National Park for 10 seasons. Her program duties include creating ecologically friendly landscapes, gardening for pollinators and helping homeowners with integrated pest management. In 2003 She co-founded York County’s Mid-Atlantic Ecological Landscapes (MAEscapes) to promote the use of native plants in the landscape.

Sara Tangren, Ph.D. teaches native plants and sustainable landscaping for the Master Gardener program. She received her Ph.D. in Natural Resources from the University of Maryland in 2001. Her areas of specialization include plant biogeography, native landscaping, plant propagation, the native plant and seed industry, native meadows, and rare plant conservation. She established the first native gardens at the University of Maryland Arboretum & Botanical Garden in 2006, where she continues to volunteer.

Dennis vanEngelsdorp, Ph.D. is research Scientist at the University of Maryland, a recent appointment he obtained after 7 years with Penn State University where he served as a Sr. Extension associate and Acting State Apiarist. Dr. vanEngelsdorp is one of the leading researchers attempting to understand poor colony health. His research focus involves using epidemiological approaches to understanding and (importantly) improving honey bee health. These approaches are multi-faceted, requiring understanding both the etiology of individual bee diseases and the large scale colony monitoring.

Currently Dennis is the lead PI and the director of the Bee Informed Partnership (BeeInformed.org) which attempts to identify management practices and environmental factors (such as proximity to different crops) which correlate to higher or lower colony mortality through cross sectional surveys. He is also on the leadership team of APHIS national honey bee health survey which attempts to determine the prevalence of disease, pesticides, and parasite loads in US operations.

Sara Via, Ph.D. is an ecologist and evolutionary biologist with a long-standing interest in applications to agriculture. She received her PhD from Duke University and held faculty positions at the University of Iowa and Cornell University before coming to University of MD with a joint appointment in Biology and Entomology. Sara has a strong interest in climate change education, and has recently begun training Master Gardeners to garden more successfully in a changing climate and to adopt climate-friendly gardening strategies.

All Master Naturalist classes are listed in this brochure.

To see additional classes open to you, go to:
http://extension.umd.edu/mg/annual-training-day-2014

Click on Workshops or Speakers on the left.
Registration Information and Form

Registration must be postmarked by 5/1/14 (for $69 rate). **No Refunds after May 15, 2014**
Please include fee of $69.00 if postmarked by May 1; $79 if postmarked after May 1.

Please use ONLINE registration if possible.
Online Registration: https://webtools.moo.umd.edu/mgatd/.
More info. on Annual Training Day: http://extension.umd.edu/mg/annual-training-day-2014

Space is limited. Registrations will be accepted on a first come, first served basis. Parking, morning refreshments and a box lunch with a drink are included with registration fee. You will receive a campus map and confirmation letter in mid-May giving you information on which classes you have been assigned and where to park.

Registration Form

Would you prefer: ☐ regular lunch ☐ vegetarian lunch

Name: ________________________________________________

Address: ____________________________________________

_________________________________________________

MN Host site _______________________________________

County: _______ Phone __________________________

Email: _____________________________________________

TO PAY BY CREDIT CARD

Check one: Visa___ MC__ Discover__

Your Name (as it appears on card)

_________________________________________________

Credit Card Number

_________________________________________________

Security Code Expiration Date

Signature

TO PAY BY CHECK

Make all checks payable to the University of Maryland.

Please mail form & payment to:
MG/MN ATD • 12005 Homewood Road
Ellicott City, MD 21042

Or fax/email with credit card info to:
410-531-5567; rmhessey@umd.edu

Registration Questions?
Contact Robin at 410-531-1754; rmhessey@umd.edu

Master Naturalist Questions?
Contact Wanda at 410-531-5973; wtm@umd.edu