

PLANTS, PESTS, AND PATHOGENS 2009**May 2009**

- ❖ Diseases
 - How to take a good tree sample
 - Normal leaf drop of magnolia and holly
 - Abiotic problems
 - Cold injury
 - Mechanical damage
 - High pH / iron chlorosis
 - Anthracnose (*Colletotrichum*) on liriopoe
 - Oak leaf blister (*Taphrina*)
 - Exobasidium leaf gall of camellia, rhododendron
 - Quince rust (*Gymnosporangium clavipes*) on callery pear
 - Seiridium canker on Leyland cypress
 - Dog vomit slime mold (*Fuligo septica*)
 - Lacebug injury on azalea
- ❖ Insects and another arthropod
 - Some common spring scales
 - Galls
 - Eriophyid mite galls
 - Homopteran galls
 - Midge galls
 - Wasp galls
 - Millipede (live on web cam)

June 2009

- ❖ Diseases
 - Powdery mildews
 - Daylily leaf streak (*Aureobasidium microstictum*)
 - Armillaria (mushroom) root rot
 - Southern blight (*Sclerotium rolfsii*)
 - Comparison of southern blight and southern bacterial wilt
 - *Tomato spotted wilt virus* on tomato
 - Plant virus "Need to know" facts
 - Glyphosate injury on tomato
 - Root knot nematodes
 - Downy mildew of cucurbits (*Pseudoperonospora cubensis*)
- ❖ Insects
 - Carrot beetle (*Bothynus (=Ligyris) gibbosus*)
 - True bugs
 - A predatory stink bug (*Euthyrhynchus floridanus*)
 - Leaf-footed bug (*Leptoglossus* sp.)
 - Stink bug (*Euschistus* sp.)
 - Townsend scale (*Abgrallaspis townsendi*)
 - Snail fecal material
 - True flies
 - Migrating darkwinged fungus gnat larvae (*Bradysia* sp.)
 - Warble/bot fly (*Cutereba buccata*)
 - European earwig (*Forficula auricularia*)

July 2009

- ❖ Diseases
 - Leaf spot on *Loropetalum* caused by *Pseudocercospora*
 - Entomosporium leaf spot on Indian hawthorn
 - Botryosphaeria canker on redbud
 - Two rusts on hemlock
 - Hemlock-hydrangea rust (*Thekopsora hydrangea*)
 - Hemlock twig rust (*Melampsora farlowii*)
 - Phytoplasma diseases
 - Confirmations and suspicions on crape myrtle
 - Aster yellows on marigold, carrot, coneflower
 - Hydrangea showing virescence
 - Others
 - Suspected herbicide injury on crape myrtle
 - Foliar nematodes (*Aphelenchoides* spp.)
 - Tomato woes
 - Southern bacterial wilt (*Ralstonia solanacearum*)
 - Keep a watch out for late blight (*Phytophthora infestans*)
 - Root knot nematode
 - Septoria leaf spot
 - Early blight (*Alternaria*)
- ❖ Insects and other arthropods
 - Mystery photo (cicada tympanum)
 - One of the fishing spiders (*Dolomedes* sp., probably *tenebrosus*)
 - Ticks
 - Lone star tick (*Amblyomma americanum*)
 - American dog tick (*Dermacentor variabilis*)
 - Squash bug (*Anasa tristis*)
 - One of the annual cicadas (*Tibicen* sp.)
 - Scale insects
 - Pyriform scale (*Protopulvinaria pyriformis*)
 - Pine needle scale (*Chionaspis pinifoliae*)
 - Beetles
 - Striped cucumber beetle (*Acalymma vittatum*)
 - Whitefringed beetle (*Graphognathus* sp.)
 - Mottled tortoise beetle (*Deloyala guttata*)
 - Parasitoid wasp pupae, probably Eulophidae
 - Miscellaneous leaf-tier caterpillars on hardwoods
 - Damage to white oak by unidentified spider mite

August 2009

- ❖ Diseases
 - Late blight confirmed in Henderson Co.
 - Anthracnose diseases
 - on English ivy caused by *Colletotrichum trichellum*
 - on lima bean caused by *Colletotrichum lindemuthianum*
 - Black rot of crucifers (*Xanthomonas campestris* pv. *campestris*)
 - Wetwood and Slime Flux of hardwood trees
 - Bacterial leaf scorch (*Xylella fastidiosa*) of oaks, sycamore, grape, and oleander

- Algal leaf spot (*Cephaleuros* sp.)
- Nuicance fungi in mulch (dog vomit slime mold; birds' nest fungi; artillery fungus)
- J-rooting and weed-trimmer damage
- ❖ Insects
 - Greenhouse thrips (*Heliothrips haemorrhoidalis*)
 - Elongate hemlock scale (*Fiorinia externa*) and hemlock woolly adelgid (*Adelges tsugae*)
 - Beetles
 - Cottonwood leaf beetle (*Chrysomela scripta*)
 - Green June beetle (*Cotinis nitida*)
 - Caterpillars
 - Viceroy butterfly (*Limenitis archippus*)
 - Big cranberry spanworm, a.k.a. purplish-borwn looper (*Eutrapela clemataria*)
 - Wasps
 - Paper wasp (*Polistes* sp.)
 - Black and yellow mud dauber (*Sceliphron caementarium*)
 - One of the potter wasps (*Monobia quadridens*)
- ❖ Plants
 - Harlequin glory bower, a.k.a. Kashmir boquet (*Clerodendrum trichotomum*)
 - Virginia buttonweed (*Diodia virginiana*)

PLANTS, PESTS, AND PATHOGENS 2010

March 2010

- ❖ Insects and another arthropod
 - Boxwood mite (*Eurytetranychus buxi*)
 - Boxwood leafminer (*Monarthropalpus flavus*)
 - Scales
 - Pine oystershell scale (*Lepidosaphes pini*)
 - Tea scale (*Fiorinia theae*)
 - Townsend scale (*Abgrallaspis townsendi*)
 - Peony scale (*Pseudaonidia paeoniae*)
 - Cottony soft scales (*Pulvinaria* spp.)
 - Vegetable weevil (*Listroderes difficilis*)
 - Tent caterpillars (*Malacosoma* spp.)
 - Cynipid gall wasp (*Bassetia pallida*)
 - Winter stoneflies (Plecoptera)
- ❖ Feature weed
 - Beach vitex (*Vitex rotundifolia*)
- ❖ Diseases
 - Sampling tips – woody ornamentals
 - Dogwood diseases
 - Spot anthracnose of dogwood (*Elsinoë corni*)
 - Dogwood anthracnose (*Discula destructiva*)
 - A Primer on Rose Diseases
 - Crown gall (*Agrobacterium tumefaciens*)
 - Canker diseases of rose
 - Black spot (*Diplocarpon rosae* = *Marssonina rosae*)
 - Rose mosaic (virus complex)
 - Rose rosette (virus)

May 2010

- ❖ Special Presentation on Vertebrate Pests
 - Yellow-bellied sapsucker (*Sphyrapicus varius*)
 - Eastern gray squirrel (*Sciurus carolinensis*)
 - Pine vole (*Microtus (=Pitimus) pinetorum*)
 - Copperhead (*Agkistrodon contortrix*)
- ❖ Special presentation on plant parasitic nematodes by Dr. Weimin Ye
- ❖ Diseases
 - Pine wilt (pine wood) nematode (*Bursaphelenchus xylophilus*)
 - Advice on buying transplants
 - *Gymnosporangium* rusts
 - Cedar-apple rust (*G. juniperi-virginianae*)
 - Quince rust (*G. clavipes*)
 - Japanese apple rust (*G. yamadae*) – recently introduced

July 2010

- ❖ Insects and another arthropod
 - Deodar weevil (*Pissodes nemorensis*) and other *Pissodes* spp.
 - Leaf beetles (Family Chrysomelidae)
 - Larger elm leaf beetle (*Monocesta coryli*)
 - Colorado potato beetle (*Leptinotarsa decemlineata*)
 - Flea beetles (Tribe Alticini), incl. readheaded flea beetle (*Systema frontalis*)
 - Stag beetles, including the giant stag beetle (*Luanus elaphus*)
 - Fishing Spiders (Family Pisauridae), incl. *Dolomedes* spp.
 - Giant resin bee (*Megachile sculpturalis*)
 - A predatory stink bug, *Euthyrhynchus floridanus*
 - Obliquebanded leafroller (*Choristoneura rosaceana*)
- ❖ Diseases (NOTE: The feature presentation on turf today had a lot of info on turf diseases.)
 - Heat/Drought stress on trees
 - Ozone injury to plants

September 2010

- ❖ Insects
 - Sweet potato sawfly (*Sphacophilus cellularis*) and other sawflies
 - Mantids
 - Carolina mantid (*Stagmomantis Carolina*)
 - Chinese mantid (*Tenodera aridifolia sinensis*)
 - Linden wart gall midge (*Contarinia verrucicola*)
 - Unknown insect injury on *Tilia*
 - Greenstriped mapleworm, a.k.a. rosy maple moth (*Dryocampa rubicunda*)
 - Milkweed tussock moth (*Euchaetes egle*)
- ❖ Diseases
 - Thousand cankers disease of walnut (*Geosmithia morbida*, vectored by *Pityophthorus juglandis*)
 - Focus on fruits
 - Mummyberry of blueberry (*Monilinia vaccinii-corymbosi*)
 - Brown rot of peach (*Monilinia fructicola*)
 - Peach scab (*Cladosporium carpophilum*)
 - Bitter rot of apple (*Colletotrichum/Glomerella*)
 - Black rot of apple (*Botryosphaeria obtusa*)

November 2010

- ❖ Insects
 - Lantana lace bug (*Teleonemia scrupulosa*)
 - Bat bug (*Cimex adjunctus*)
 - Prionus beetle (*Prionus* sp.)
 - Special feature: How do insects overwinter? Utilizing various examples among the true bugs, lepidopterans, mantids, and scales, with special mention of winter-active species of stoneflies.
- ❖ Diseases
 - Follow-up on management of fruit diseases
 - Downy mildew of sunflower and related hosts (*Plasmopara halstedii*)
 - Artillery fungus (*Sphaerobolus* sp.)
 - *Wolfiporia extensa* (= *W. cocos*), a wood-rotting basidiomycete fungus
 - Black root rot (*Thielaviopsis basicola*)
 - Special feature: How pathogens survive the winter. With examples among the fungi, bacteria, nematodes, and viruses.

PLANTS, PESTS, AND PATHOGENS 2011**February 2011**

- ❖ Insects and other arthropods
 - Special focus on houseplant pests
 - Broad mite (*Polyphagotarsonemus latus*) and cyclamen mite (*Phytonemus pallidus*)
 - Spider mites (*Tetranychus* sp.)
 - Aphids (Family Aphididae), including the green peach aphid (*Myzus persicae*)
 - Greenhouse whitefly (*Trialeurodes vaporariorum*)
 - Brown soft scale (*Coccus hesperidum*)
 - Hemispherical scale (*Saissetia coffeae*)
 - Citrus mealybug (*Planococcus citri*)
 - Longtailed mealybug (*Pseudococcus longispinus*)
 - Western flower thrips (*Frankliniella occidentalis*)
 - Darkwinged fungus gnat (*Bradysia* sp.)
 - Images submitted by our audience
 - Chrysalis of viceroy or red-spotted purple
 - Noctuid moth caterpillar on *Solidago* inflorescence
 - Sulfur butterfly (*Colias* sp.)
 - Pyralid moth caterpillar on *Monarda* leaf
- ❖ Diseases
 - Viruses on woody plants
 - *Cucumber mosaic virus* on dwarf nandina
 - Rose mosaic
 - Rose rosette
 - Infectious variegation of camellia (*Camellia yellow mottle virus*)
 - Fig mosaic virus(es)?
 - Not in North Carolina: *Plum pox virus*
 - Unsolved mysteries
 - Galls on *Forsythia*
 - Dead branch tips on *Cryptomeria*
 - Actinorrhizae on *Elaeagnus* roots

April 2011

- ❖ Insects and another invertebrate
 - Horsehair worms, a.k.a. Gordian worms, Phylum Nematomorpha
 - Carpenterworms, including the little carpenterworm (*Prionoxystus macmurtrei*)
 - Cankerworms, including the fall cankerworm (*Alsophila pometaria*)
 - Caterpillar hunters (beetles)
 - *Calostoma scrutator*
 - *Calostoma wilcoxi*
 - Holly pit scale (*Asterodiaspis puteanum*)
 - Sooty mold on American holly
 - Juniper webworm (*Dichomeris marginella*)
- ❖ Diseases
 - Special presentation by Shawn Butler on laurel wilt, recently confirmed in North Carolina
 - Fire blight (*Erwinia amylovora*)
 - Shot-hole in Prunus
 - Bacterial leaf spot (*Xanthomonas*)
 - Cherry leaf spot (*Blumeriella jaapii* - fungus)
 - Peach leaf curl (*Taphrina deformans*)
 - Abiotic leaf spot (possibly Mg deficiency) on pepper transplants
 - Bacterial leaf spot of pepper and tomato (*Xanthomonas* spp.)
 - Comment on news of downy mildew on squash transplants at a Charleston, SC “big box” store

June 2011

- ❖ Insects and other arthropods
 - Eyed Click Beetle or Eyed Elater, *Alaus oculatus*
 - Robber Fly, family Asilidae, *Laphria* sp.
 - Giant Water Bug, family Belostomatidae, *Lethocerus* sp.
 - Diaspidid Scale, *Abgrallaspis* sp., on Oakleaf Hydrangea
 - Darkwinged Fungus Gnat, *Bradysia picea* (Rubsamen)
 - Longlegged Fly, family Dolichopodidae, *Condyllostylus* sp.
 - Elderberry Borer, *Desmocerus palliatus* (Forster)
 - Buthid Scorpion, *Centruroides* sp. prob. *vittatus* (Say)
 - Buthid Scorpion, *Centruroides hentzi* (Banks)
 - Carolina Wolf Spider, *Hogna carolinensis* (Walckenaer)
 - “Brown Prionus,” *Orthosoma brunneum* (Forster)
 - European Hornet, *Vespa crabro* L., damage on *Elaeagnus*
- ❖ Diseases
 - Dutch elm disease (caused by *Ophiostoma ulmi* and *O. novo-ulmi*)
 - Slime molds
 - “Dog-vomit slime mold”, *Fuligo septica*
 - *Physarum cinereum*
 - *Stemonitis* sp.
 - The “peat mold”, *Chromelosporium ollare* (*Peziza ostracoderma*)
 - Small pears on rootstock suckers
 - Two tomato diseases
 - Septoria leaf spot
 - Buckeye rot (*Phytophthora nicotianae*)
 - Fasciation
 - Cucurbit diseases

- Downy mildew (*Pseudoperonospora cubensis*)
- Powdery mildew (*Podosphaera xanthii*)

August 2011

❖ Insects

- Cypress Twig Gall Midge (*Taxodiomyia cupressiananassa*)
- A Rhopalid Bug (*Niesthrea louisianica*)
- Leaf-footed Bug (*Leptoglossus* sp.)
- Zebra Swallowtail (*Eurytides marcellus*)
- Squash Beetle (*Epilachna borealis*)
- A Cerambycid Beetle (*Physocnemum andreae*)
- Katydid (Family *Tettigoniidae*)
- multiple bee and wasp species on the invasive porcelainberry (amur peppervine), *Ampelopsis brevipedunculata*
- a word about spider/magic/hurricane Lilies (*Lycoris* spp.)

❖ Diseases

- Turf diseases (presented by Lee Butler)
 - Fairy ring
 - Spring dead spot
- Impellis damage on landscape trees, esp. conifers
- Leaf spot comparisons
 - On English ivy
 - anthracnose (*Colletrichum trichellum*)
 - bacterial leaf spot (*Xanthomonas* sp.)
 - On red maple
 - anthracnose (*Discula* sp.)
 - Phyllosticta leaf spot
 - On bigleaf hydrangea
 - old drought injury
 - Cercospora leaf spot
- Leaf spots caused by cercosporoid fungi
 - *Cercospora* on rose
 - *Pseudocercospora* on ligustrum
 - *Passalora sequoiae* on Leyland cypress and relatives
- Peony problems
 - Discosia leaf spot
 - Peony leaf blotch (a.k.a. Measles) caused by *Cladosporium paeoniae*
 - Rhizoctonia stem rot

October 2011

❖ Insects and other arthropods

- The Orb Spiders, family *Araneidae*
 - White Micrathena (*Micrathena mitrata*)
 - Arrowhead Spider (*Verrucosa arenata*)
 - Yellow Garden Spider (*Argiope aurantia*)
 - Orb Spider (*Neoscona hentzi*)
 - Marbled Orb Spider (*Araneus marmoreus*)
 - Golden Silk Orb Spider (*Nephila clavipes*)
- Whitebanded Crab Spider (*Misumenoides formosipes*)

- Ant (*Formica integra*)
- Velvet Ant (*Dasymutilla occidentalis*) – actually a wasp!
- Glowworm (*Phengodes* sp.)
- Azalea Caterpillar (*Datana major*)
- Cambarid Crayfish (*Cambarus latimanus*)
- ❖ Diseases
 - Announcement of new publication: AG-747 Suggested Plant Species for Sites with a History of Phytophthora Root or Crown Rot
 - Wood Decay in Trees
 - General concepts
 - Some easily recognizable wood decay fungi
 - *Stereum complicatum*
 - *Trametes versicolor* (turkey-tail)
 - *Ganoderma* spp.
 - *Pseudoinonotus dryadeus* (the weeping polypore)
 - *Hericium erinaceus* (the Hedgehog "mushroom")
 - *Armillaria* root rot (and wood decay)
 - *Papaya ringspot potyvirus* causing dramatic ringspots on watermelon fruit

PLANTS, PESTS, AND PATHOGENS 2012

Note: The new "pests to watch for in the coming months" slides are not indexed here.

February 2012

- ❖ Featured Presentation: Mushrooms and other Macrofungi (Larry Grand)
- ❖ Demystifying Scientific Names
- ❖ Insects and other arthropods
 - Eastern gray squirrel (*Sciurus carolinensis*) feeding and pruning damage
 - Eggs of the angularwinged/broadwinged katydid (*Microcentrum* sp.)
 - Vegetable weevil (*Listroderes difficilis*)
 - Arthropod pests on boxwood
 - Boxwood mite, *Eurytetranychus buxi*
 - Boxwood psyllid, *Cacopsylla buxi*
 - Boxwood leafminer, *Monarthropalpus flavus*
 - Occasionally, scale insects occur on our boxwoods:
 - Cottony cushion scale, *Icerya purchasi* (Maskell)
 - Wax scales, *Ceroplastes* sp.
 - Lace bugs
 - Azalea lace bug (*Stephanitis pyrioides*)
 - Hawthorn lace bug (*Corythucha cydoniae*)
 - Green Fruitworms and Climbing Cutworms
- ❖ Diseases
 - A Box Blight Primer
 - Update on Emerald Ash Borer and Laurel Wilt
 - Botrytis blight on pansy in the landscape
 - White mold (*Sclerotinia sclerotiorum*) on collards, snapdragon, and more
 - Two camellia diseases
 - Camellia petal blight (*Ciborinia camelliae*)
 - Infectious variegation of camellia (*Camellia yellow mottle virus?*)

April 2012

- ❖ Insects and other arthropods
 - Bean Plataspid/Kudzu Bug (*Megacopta cribraria*)
 - Eastern Subterranean Termite (*Reticulitermes flavipes*)
 - Ants vs. Termites
 - Carpenter ants (*Camponotus* spp.), with emphasis on the black carpenter ant
 - “Bowl and Doily” Spider (*Frontinella communis*)
 - A blister beetle (Meloidae, *Lytta* sp.)
 - Luna Moth (*Actias luna*)
- ❖ Diseases
 - Flower pot parasol mushroom (*Leucocoprinus birnbaumii*)
 - Abiotic problems
 - Uneven leaf-out of red maples
 - Frost injury
 - Sunscald
 - Hydrophobic soil and high soluble salts
 - Hollyhock rust
 - Septoria leaf spot on *Rudbeckia*
 - Leaf spots on Japanese maple
 - Rose downy mildew
 - Powdery mildews on various hosts
 - Watch for in May & June
 - In the vegetable garden (Tomato spotted wilt virus, Septoria leaf spot (tomato), *Southern blight**, *Southern bacterial wilt**, *root knot**) *=wilt diseases
 - In trees, shrubs, flowers (Rose rosette, quince rust on ornamental pear, oak leaf blister)
 - Keeping an eye on late blight (usablight.org)

June 2012

- ❖ Insects and Other Arthropods
 - Eastern Hercules beetle (*Dynastes tityus*)
 - Saltmarsh caterpillar (*Estigmene acrea*)
 - Orchard spider (*Leucage venusta*)
 - Scarab Beetle (*Polyphylla occidentalis*)
 - An eriophyid mite (*Eriophyes caulis*) causing an erineum gall on the petiole of black walnut
 - Tobacco budworm (*Heliothis virescens*) resting on unidentified stink bug eggs
 - Sawflies, with emphasis on the redheaded pine sawfly (*Neodiprion lecontei*)
 - Cottonwood leaf beetle (*Chrysomela scripta*)
 - Cicada killer (*Sphecius speciosus*)
- ❖ Diseases
 - Crown and root problems of liriopse, including *Fusarium* and *Phytophthora*
 - Downy mildew of impatiens (*Plasmopara obducens*)
 - Phytophthora aerial blight of Madagascar periwinkle (annual vinca) and petunia
 - Some diseases of grape
 - downy mildew (*Plasmopara viticola*)
 - powdery mildew (*Erysiphe (Uncinula) necator*)
 - black rot (*Guignardia bidwellii*)
 - Pierce's disease (*Xylella fastidiosa*)
 - herbicide injury

- Some diseases of peach
 - brown rot of stone fruit (*Monilinia fructicola*)
 - peach scab (*Cladosporium carpophilum*)

August 2012

- ❖ Diseases
 - Rose rosette
 - Armillaria root rot on shrubs and trees
 - The Good, the Bad, and the Ugly of Images
 - Sooty mold
 - Cherry leaf spot
 - Watermelon fruit blotch
 - Watch for in September and October
- ❖ Insects and Other Arthropods
 - A cerambycid beetle, *Physocnemum andreae*
 - Stinging caterpillars
 - Saddleback Caterpillar, *Acharia* (formerly *Sibine*) *stimulea*
 - Hag Moth, *Phobetron pithecium*
 - Stinging Rose Caterpillar, *Parasa indetermina*
 - Skiff Caterpillar, *Prolimacodes badia* – NOT A STINGING CATERPILLAR
 - Spiny Oak Slug, *Euclea delphinii*
 - Puss Caterpillar, *Megalopyge opercularis*
 - A longhorned beetle, *Parandra brunnea*
 - Lesser Canna Leafroller, *Geshna cannalis*
 - Amber Snails, family Succineidae
 - Unidentified crayfish burrows
 - European hornet, *Vespa crabro*, collecting bark from a live tree
 - Pests to be Watching for in the Next Two Months

October 2012

- ❖ Insects and Other Arthropods
 - Pileated Woodpecker, *Dryocopus pileatus*, damage to wood
 - Organpipe Mud Dauber Wasp, *Trypargilum politum*
 - Stephan's Scale of Household Pests (as opposed to household nuisances)
 - 10 = termites
 - 9 = bed bugs
 - 8 = carpenter ants, powderpost beetles
 - 7 = cockroaches
 - 6 = carpet beetles, clothes moths
 - 5 = fleas
 - 4 = household ants
 - 3 = flour, grain, and meal beetles and moths
 - 2 = household spiders, silverfish, booklice
 - 1 = springtails, darkwinged fungus gnats
 - Elm Sawfly, *Cimbex Americana*
 - Walkingsticks
 - Two-striped Walkingstick, *Anisomorpha buprestoides*
 - Walkingstick, *Diapheromera femorata*
 - Cecropia Moth, *Hyalophora cecropia*
 - Gall Midge, *Taxodiomyia sp.* on baldcypress

- ❖ Diseases to watch for during Oct-Feb
 - General: nuisance fungi
 - Woody ornamentals: box blight, Phytophthora root rot
 - Flower beds: black root rot, Sclerotinia stem rot, gray mold (Botrytis)
 - Cruciferous vegetables: black rot, white spot of turnip, Sclerotinia stem rot
- ❖ Surprise farewell program for Dave Stephan, with special invited speakers.

PLANTS, PESTS, AND PATHOGENS 2013

Note: The "pests to watch for in the coming months" slides are not always indexed here.

February 2013

- ❖ Insects and Other Arthropods
 - Presentation on Dr. Steven Frank's cankerworm project
- ❖ Plant Diseases
 - Disease Prevention for the New Year
 - Fungal Needle Blights of Conifers
 - Ploioderma needle cast
 - Brown spot needle blight
 - Rhizosphaera needle cast
 - Stuff on Bark
 - Fungi
 - *Septobasidium* spp.
 - *Dendrothele nivosa*
 - Lichens
 - Watch for in March and April

April 2013

- ❖ Special presentation by PDIC staff: Photography for diagnosis.
- ❖ Plant Diseases
 - Canker Diseases
 - Fungal, including
 - Cytospora canker
 - Botryosphaeria canker
 - Bacterial
 - Management of canker diseases, with an aside on Peachtree borer (*Synathedon exitiosa*)
 - Phytophthora root and crown rots on woody ornamentals
 - Watch for in May and June
 - Powdery mildew on many hosts
 - Baking soda vs. powdery mildew?
 - Impatiens downy mildew
 - Cucurbit downy and powdery mildews
 - Dog-vomit slime mold (*Fuligo septica*)
 - Oak leaf blister (*Taphrina*)
 - other diseases and disorders
- ❖ Insects and Other Arthropods
 - Periodical cicada (*Magicicada*) Brood II
 - Flies (Diptera)
 - Daylily leafminer (*Ophiomyia kwansonis*)
 - Maple eye-spot gall (*Acericecis ocellaris*)

- Common compost flies
 - Vinegar flies (*Drosophilidae*)
 - Moth flies (*Psychodidae*)
 - Black soldier flies (*Hermetia illucens*)
 - Dark-winged fungus gnats (*Sciaridae*)
 - Minute black scavenger flies (*Scatopsidae*)
 - House flies (*Musca domestica*)
- Narcissus bulb fly (*Syrphidae: Merodon equestris*)
- Hover flies versus bees/wasps

June 2013

- ❖ Featured speaker: Dr. Mark Windham, talking about rose diseases
- ❖ Insects and Other Arthropods
 - Barklice (*Psocoptera/Psocodea*)
 - Sawflies
 - Hibiscus sawfly (*Atomacera decepta*)
 - Hollyhock sawfly (*Neoptilia malvacearum*)
 - How to tell sawflies from caterpillars
 - Emerald ash borer (*Agrilus planipennis*) in NC
 - Beneficial spotlight
 - Carolina leaf-rolling cricket (*Camptonotus carolinensis*)
 - BOLO (Be On the Look Out)
 - Rain = millipedes (greenhouse millipede – *Oxidus gracilis*)
 - Ficus gall midge (*Horidiplosis ficifolii*)
 - Herbs with black swallowtail (*Papilio polyxenes*) larvae
 - Hornworms (*Manduca* sp.) on tomato
- ❖ Plant Diseases
 - Tree leaf spots (with different management recommendations)
 - Leaf spot on redbud caused by *Passalora cercidicola*
 - *Mycosphaerella* leaf spot of mulberry
 - Corn diseases, especially sweet corn
 - Common smut (*Ustilago maydis*)
 - Bacterial stalk rot (*Erwinia (Dickeya) chrysanthemi* and other bacteria)
 - Nematode injury
 - Cucurbit downy mildew
 - Watch for in July and August
 - *Entomosporium* leaf spot of Photinia and Indian hawthorn
 - Brown rot of stone fruits
 - Peach scab
 - Slime flux of hardwood trees
 - Bacterial leaf scorch
 - Late blight of tomato (and potato)
 - other diseases and disorders ("be on the lookout" lists)
 - Announcing the NCSU Plant Pathology Extension Portal (<http://plantpathology.ces.ncsu.edu>)

August 2013

- ❖ Lee Butler
 - Key concepts in turf diseases
 - The use of fungicides in turf
 - Dollar spot on Kentucky blue grass
- ❖ Plant Diseases
 - Leaf spots and blotches
 - Oak leaves with three diseases (oak leaf blister, Fusiform rust, bacterial leaf scorch)
 - Leaf spot of redbud caused by *Passalora cercidicola*
 - Bacterial leaf scorch (*Xylella fastidiosa*) of redbud
 - Leaf spot on *Hydrangea* caused by *Cercospora hydrangeae*
 - Mycosphaerella (Heterosporium) leaf spot of *Iris*
 - Leaf spot of birch caused by *Cryptocline betularum*
 - Root and butt rots caused by fungi
 - "Chicken of the Woods" (*Laetiporus cincinnatus*)
 - "Weeping Polypore" (*Pseudoinonotus dryadeus*)
 - "Be on the Lookout" lists for September and October
 - General
 - Phytophthora diseases
 - powdery mildew
 - root-knot nematodes
 - nuisance fungi in mulches
 - Woody ornamentals
 - fruiting bodies of *Armillaria*
 - Passalora needle blight
 - poor planting techniques
 - box blight
 - Flower beds
 - black root rot of pansy & viola
 - late season leaf spots
- ❖ "Critter or Not?" Images showing mystery damage – is it caused by a critter or something else?
 - *Phytophthora* on *Hosta*
 - Pear blister mite
 - *Eriophyes dinus* on blackgum
 - *Stemonitis* (slime mold) fruiting bodies
 - Pip gall on willow oak acorn
 - Shot-hole on ornamental cherry
 - Water beads/water pearls
 - Swamp cypress rust mite
 - Edema on *Euonymus*
- ❖ Insects and Other Arthropods
 - Fall webworms (*Hyphantria cunea*)
 - Two lace bugs
 - Sycamore lace bug (*Corythucha ciliata*)
 - Chrysanthemum lace bug (*Corythucha marmorata*)
 - Planthoppers vs. leafhoppers, etc.
 - Land flatworms (Platyhelminthes: Geoplanidae)
 - Hammerhead worm, *Bipalium kewense*
 - Beneficial spotlight: Atypical ladybugs

- Ash gray ladybug (*Olla v-nigrum*)
- *Diomus* sp.
- Twice-stabbed ladybug (Chilocorinae)
- Vedalia beetle (*Rodolia cardinalis*)
- Things to look out for:
 - Oakworms (*Anisota* sp.)
 - Annual cicadas (*Tibicen* sp.)
 - Cicada killers (*Sphecius* sp.)

October 2013

- ❖ Insects and Other Arthropods
 - How to identify common ants
 - General information on ants
 - Major subfamilies
 - Ponerinae
 - *Pachycondyla/Brachyponera chinensis*
 - Formicinae
 - *Camponotus* (carpenter ants)
 - *Formica* (meadow & wood ants)
 - *Lasius* (including citronella ants)
 - *Prenolepis* (winter ants)
 - Dolichoderinae
 - *Tapinoma* (including odorous house ants)
 - *Linepitheme* (Argentine ants)
 - Myrmicinae
 - *Crematogaster* (acrobat ants)
 - *Solenopsis* (fire & thief ants)
 - *Monomorium* (little black & pharaoh ants)
 - *Tetramorium* (pavement ants)
 - *Aphaenogaster* (winnow ants)
 - *Pheidole* (big-headed ants)
 - *Pogonomyrmex* (harvester ants)
 - Other ants
 - Overwintering insects
 - ladybugs (especially *Harmonia*)
 - cluster flies (*Pollenia*)
 - kudzu bugs (*Megacopta cribraria*)
 - stink bugs (especially BMSB *Halyomorpha halys*)
 - boxelder & leaf-footed bugs
 - prevention & control
- ❖ Garden Legends – Some we verify, some we debunk
 - It is illegal to kill praying mantises. (False)
 - Daddy longlegs are the most venomous organisms. (False)
 - Peonies won't open until ants lick away the sticky sap around the petals. (False)
 - Powdery mildew doesn't like water. (Partially true)
 - Watering plants on a hot or sunny day will hurt them. (False, mostly)
 - Stem galls on *Forsythia* are caused by the fungus *Phomopsis*. (False)
- ❖ Plant Diseases

- Phytophthora root rot on Leyland cypress
- Lumps, Bumps, and Burls: A Galling Story
 - Bacterial gall of *Loropetalum* caused by *Pseudomonas savastanoi*
 - Black knot of cherry and plum caused by the fungus *Apiosporina morbosa*
 - *Scorias spongiosa*: Beech sooty mold
 - Dodder (*Cuscuta* spp.) on muscadine grape and on creeping phlox
 - "Canker rot" of oaks caused by the fungus *Inonotus hispidus*
- "Be on the Lookout" lists for November through February
 - Woody ornamentals
 - Box blight
 - Pseudocercospora leaf spot on *Ligustrum*
 - Flower beds
 - black root rot of pansy & viola
 - Botrytis blight (esp. pansy)
 - Sclerotinia blight (esp. snapdragon)
 - Vegetable garden (Brassicas)
 - White leaf spot of turnip
 - Downy mildew
 - Black spot
 - Sclerotinia stem rot

PLANTS, PESTS, AND PATHOGENS 2013

Note: The "pests to watch for in the coming months" slides are not always indexed here.

February 2014

- ❖ Insects and Other Arthropods
 - pecan carpenterworm (*Cossula magnifica*) in *Corylus*
 - introduction
 - damage and control
 - magnificent myriapods!
 - Introduction
 - Part 1 Centipedes: Chilopoda
 - life cycle
 - kinds
 - facts
 - BOLO for March & April
 - fall cankerworms (*Alsophila pometaria*) and other caterpillars
 - scales breeding
 - emerging insects
- ❖ "Critter or Not?"
 - Empty cocoon of *Polyphemus* moth
 - Scale and powdery mildew on Euonymus
 - *Heliothrips* on Viburnum
 - Two-lined spittlebug and damage
 - Crown gall
 - Peony scale on azalea
 - Wax scale on Amsonia
 - Woolly apple aphids

- *Botrytis* on *Nemesia*
 - *Botrytis sclerotia* on *Helleborus*
 - *Sclerotinia sclerotia* in *Nigella* stem
- *Septobasidium* on scale insects
- ❖ Plant Diseases
 - Problems of Our Humble, Durable Junipers
 - Root rots
 - Annosum root rot
 - Armillaria root rot
 - Phytophthora root rot
 - Gymnosporangium rusts
 - Cedar-apple rust
 - Quince rust
 - Others
 - Tip blights
 - Phomopsis tip blight
 - Kabatina tip blight
 - Nematodes
 - Boxwood: Lesion, spiral, and (coastal plain only) root knot
 - Azalea: Stunt nematode
 - Liriope, Impatiens, Begonia, Gardenia, others: Root knot
 - BOLO for March & April

April 2014

- ❖ Insects and Other Arthropods
 - Spring highlights
 - ground nesting bees (Andrenidae)
 - silver-spotted skipper (*Epargyreus clarus*)
 - March flies (Bibionidae)
 - Brown-headed ash sawfly (*Tomostethus multicinctus*)
 - Boxwood leafminer (*Monarthropalpus flavus*)
 - BOLO for April/May
 - Eastern tent caterpillars (*Malacosoma americana*)
 - hickory phylloxera (*Phylloxera* sp.)
 - mosquitoes (Culicidae)
- ❖ Plant Diseases
 - What if it's not a disease?
 - hydrophobic soil and high salts
 - hail damage
 - cold injury to woody ornamentals
 - container "hangover"
 - planting and mulching too deep
 - improper pruning
 - sunscald on Aucuba
 - gradient due to soil moisture
 - physical and fire injury
 - wounds vs. cankers
 - herbicide injury

- lichens
- Crowd-sourcing spot anthracnose of dogwood
- Fusiform rust of pines (*Cronartium quercuum* f.sp. *fusiforme*)
- BOLO for May-June

June 2014

- ❖ “Critter or Not”
 - Pycnial stage of cedar-apple rust (*Gymnosporangium juniperi-virginianae*)
 - Feeding injury caused by the four-lined plant bug (*Poecilocapsus lineatus*)
 - Tomato russet mites (Eriophyidae: *Aculops lycopersici*)
 - Normal lenticels of *Ulmus parvifolia*
 - Sharpshooter eggs (Cicadellidae: Proconiini)
- ❖ Insects and Other Arthropods
 - encouraging butterflies
 - golden snipe fly (*Chrysopilus thoracicus*)
 - other *Chrysopilus*
 - some plant feeding scarabs
 - Japanese beetle (*Poillia japonica*)
 - Oriental beetle (*Exomala orientalis*)
 - grapevine beetle (*Pelidnota punctate*)
 - sand chafer (*Strigoderma arvicola*)
 - large sharpshooters (Cicadellidae: Proconiini)
 - examples
 - brochosomes
 - flatid planthopper nymphs
 - BOLO
 - caterpillars
 - *Demotina modesta* leaf beetle on oak
 - lace bugs
- ❖ Plant Diseases
 - Looking back
 - year-to-year unpredictability of diseases
 - quince rust on ornamental pear (*Gymnosporangium clavipes*) – Crowd-sourced
 - *Thekospora hydrangea* (hemlock-hydrangea rust) on *Tsuga caroliniana*
 - leaf browning and drop on ornamental pear – Crowd-sourced
 - All Points Bulletins
 - APB#1 – Late blight on potato
 - APB#2 – Cucurbit downy mildew
 - APB#3 – Powdery mildew on *Berberis*
 - BOLO Quiz for July-Aug
 - southern stem blight (*Sclerotium rolfsii*)
 - brown patch (*Rhizoctonia solani*) on tall fescue
 - bitter rot on apple (*Colletotrichum*)
 - ozone damage
 - daylily leaf streak (*Aureobasidium microstictum*)
 - Late blight (*Phytophthora infestans*) on tomato
 - More BOLO for July-Aug

August 2014

- ❖ Insects and Other Arthropods
 - gnat ogres (Asilidae: *Holcocephala* sp.)
 - yucca flower sap beetles (Nitidulidae: *Carpophilus melanopterus*)
 - mimosa webworm (Galacticidae: *Homadaula anisocentra*)
 - ...and now for something adorable (Encyrtidae: *Chrysoplatycerus splendens*)
 - striped mealybugs (Pseudococcidae: *Ferrisia virgata*)
 - have you seen?
 - orb weaver
 - kudzu bugs
 - BOLO
 - request: *Diaphania [=Stemorrhages] costata*
 - goldenrod insects
 - continued activity of many insects
- ❖ Plant Diseases
 - Phytophthora Aerial Blight
 - On Madagascar periwinkle
 - On *Arisaema* spp.
 - On petunia
 - Shot-hole of ornamental cherry (*Passalora circumscissa* = *Mycosphaerella ceracella*)
 - Stinkhorn fungi
 - *Clathrus columnatus*
 - *Phallus ravenelii*
 - Surprises from Mike & Bety's garden
 - *Alternaria zinniae* on zinnia
 - Cercospora leaf spot and blotch of bean
 - *Stemphylium solani* (gray leaf spot) on tomato
 - BOLO
 - Box blight (first Wake Co. report this summer)
 - Other BOLO

October 2014

- ❖ Insects and Other Arthropods
 - x=blood feeders: hematophagous arthropods
 - mosquitoes (Culicidae)
 - black flies (Simuliidae)
 - biting midges (Ceratopogonidae)
 - horse and deer flies (Tabanidae)
 - muscoid flies (Muscidae)
 - other biting flies
 - fleas (Siphonaptera)
 - bed bugs and kin (Cimicidae)
 - kissing bugs (Reduviidae: Triatominae)
 - lice ("Anoplura")
 - ticks (Ixodida)
 - bird mites etc. (*Ornithonyssus* sp.)
 - other biters
 - prevention
 - quiz

- BOLO
 - household invaders reminder
 -
- ❖ Plant Diseases
 - Mystery photo (close-up of sporulation of *Graphiopsis chlorocephala* on peony leaf)
 - Stromata of *Hypoxylon* sp., wood-decay fungus on oak branch
 - Large patch of warm-season turfgrass (*Rhizoctonia solani*)
 - Edema on *Euonymus*, *Ligustrum*, *Pelargonium*
 - Special feature: Peony Problems
 - Measles, Red Blotch (*Graphiopsis chlorocephala* = *Cladosporium paeoniae*)
 - Mosaic (*Tobacco rattle virus*)
 - Powdery mildew
 - Discosia leaf spot
 - “Cercospora” leaf spots
 - Botrytis blight
 - Herbicide injury
 - BOLO for Nov.-Jan.