

# What's Eating My Tree ?

## Nebraska Statewide Arboretum Brown Bag Series

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Some insects and diseases don't pose a threat to trees

Nuisance pests that cause minor damage don't usually require chemical control.

Fall Webworm



[Matthewwills.com](http://Matthewwills.com)



University of Florida

Leaf diseases that cause minimal spotting or light defoliation are little cause for concern.



*Mycosphaerella* sp. on ash



*Anthracnose* on oak



# Insects are a valuable source of food!



# Insect pests have natural enemies – keeping pest populations down for us



**Parasitic Wasps Control:**  
Aphids, leafminers,  
Beetles, scale,  
Caterpillars, flies,  
Spiders, and so many others!



**Beneficial Nematodes Control:**  
Thrips  
Fleas  
Fungal gnats  
Soil-dwelling insects  
Bacteria  
Fungus



## Parasitic wasp eggs on tomato hornworm and tobacco hornworm



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<http://aggie-horticulture.tamu.edu/galveston>



## Mites and Insects that hardly ever pose a threat:

- Galls - Wasps, midges, aphids, eriophyid mites & psyllids
- Twig Girdlers
- Twig Pruners
- Cicadas

Galls – abnormal plant tissue stimulated by organisms that cause the acceleration of growth hormones in their hosts







Poplar Petiole Gall – caused by aphids

Hackberry Nipple Gall – caused by psyllids (plant lice)



# Cedar-Apple Rust & Cedar-Hawthorn Rust

- Redcedar and Juniper species are winter hosts for the rust.
- Usually doesn't harm the tree but if the infection is severe, branch dieback will occur



[schneidertree.com](http://schneidertree.com)



# Eriophyid Mites





Hackberry  
Witches Broom



University of Minnesota Extension

Contorted spruce needles



Ash Flower Gall



# Oak Gall Midge and Oak Itch Mite

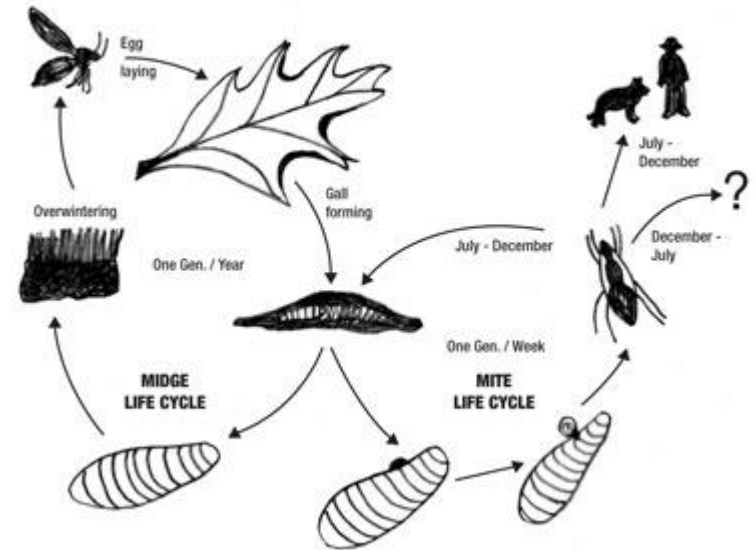




# Oak Gall Midge and Oak Itch Mite



**Figure 3. Life cycles of the gall-forming midge and the oak leaf itch mite.**



Source: Reference 8.



Potent neurotoxin that paralyzes the oak gall midge larva is irritating to human skin



Photo Credit: Jim Kalisch – Entomology  
University of Nebraska

# Twig Pruners & Twig Girdlers

Cause Branch Flagging – Leaves that turn brown on branches scattered throughout the canopy of the tree





# Twig Girdler

- Adult stage damages the twig
- Female lays eggs in slits made on twigs
- She makes circular notches on the branch girdling it
- The branch snaps off
- Larvae hatch and feed on interior of the twig on the ground until adults emerge in the fall





# Twig Pruner

- Female emerge in spring -lays eggs in leaf axil
- Larvae damage the twig
- Larvae overwinter as pupae in fallen twigs
- Larvae burrow in twig and feed on live tissue until only bark remains
- Twig breaks off



# Tree Flagging & Cicadas





# Tree Flagging – Oaks & Disease

- Botryosphaeria cankers & other cankers





# 2015 Oak Tree Flagging



Both cicada  
damage and  
canker!

# Alternatives To Pesticides

- Let the insect or disease run its course
- Let beneficial predator populations build
- Sometimes mechanical control works
  - Pruning out infection or infestation
  - Improve tree vigor (mulching, watering etc.)
  - Picking off pests within reach
  - Raking leaves, removing trouble off the property

# Thank You!



“yellow-headed Caracara removing insects from rear end of capybara in Argentina”