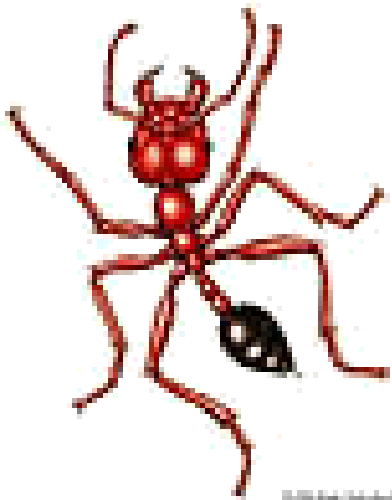




# Things that go **OUCH!!!** in the garden



# OUCH !!!



- Identification of critters
  - insects
  - other arthropods
  - snakes
  - other painful problems
- Questions/Answers



# Insect



- Largest animal group world-wide
- 900,000 species and 1% are harmful
- Fewer are life-threatening
- MGs should never offer medical advice



# Ouch!!

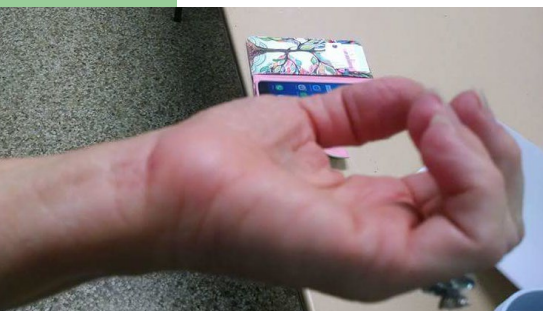
- Caterpillars
  - Puss
  - Saddleback
  - Io
- Ants
  - Including Fire Ants
- Bees & wasps
- Flies
- Mosquitoes



# Puss Caterpillar



- 1" long, many hosts, skeletonizers
- Covered with soft hairs – stinging spines are underneath
- Broadleaf trees and shrubs, often on oaks and citrus
- Can be found on picnic tables and lawn chairs



# Saddleback caterpillar

- ~1 inch in length
- Brown head & tail with spines
- Green sides and back
- Brown oval “saddle” spot
- Found on many plants, including
  - palms
  - hibiscus
- Controls:
  - Shoe or *Bacillus thuringiensis* [ “B.t.” ]



# Io Caterpillar

- Pale green with yellow and red stripes
- 2+ inches long
- Attractive adult moth with eye spots
- Many hosts – esp. ixora and rose





# Non-stinging caterpillars

- Tussock and Oleander Caterpillars - common in the area
- Tussock descend from trees in spring
- Some react – in shirt



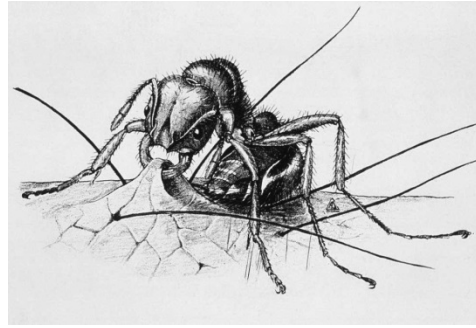


# Ants

- Ants nest below ground, at ground level, and several feet above ground
  - Fire ants
  - Twig ants
- Watch your step and your reach!



# Fire Ants



- Upon disturbing the mound, many workers attack at once
- Bite and painful sting
- Burning itch
- Pustule within 24 hours, may last for week or longer
- Secondary infection from scratching



# Twig Ants



Nest in hollowed out tree limbs and twigs

Long, slender, orange and black

Not aggressive but “neck-biters” when working nearby

Some humans are hypersensitive to the sting

# Bees



- **Honeybees**
  - hollow trees or man-made
  - remove stinger, disinfect the site, apply ice
  - if severe reactions present, seek medical attention
- **Bumblebees**
  - rarely sting, nest in ground (mouse nests, grass clippings)
  - watch for severe reactions – seek medical attention if needed

# Africanized bees



- Can't id by looking at them
- Rather by where they are
- Often items left undisturbed
- Aggressive
- Follow long distances
- Find a protected location



# Wasps



- Yellow Jackets
- Ground wasps
- Paper wasps – usually not aggressive
- Velvet ant
- Cicada killer



# Velvet “ant”

- Not an ant
- Wingless wasp
- Not aggressive
- Female - stingers
- Males - wings/no stingers
- Common name “cow killer”



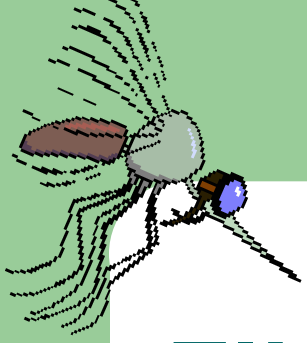
# Cicada Killer



- **Curious**
- **Docile**
- **Solitary**







# Flies & Mosquitoes

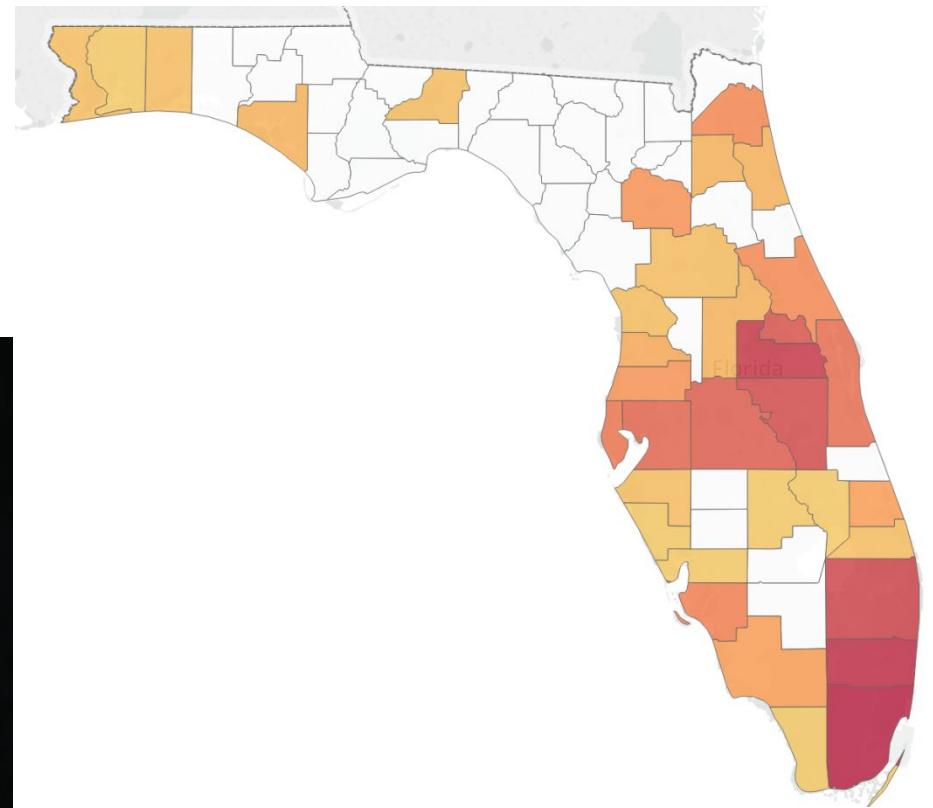
- Adults rest in shaded and vegetated areas during the day
- Attracted to CO<sub>2</sub> and skin secretions
- Bites can cause irritations and some infections
- Best remedy remove breeding source - any standing water



# Prevention pays off

## Remove any standing water

*Aedes aegypti* and  
*A. albopictus* can reproduce  
in very small amounts of  
standing water



Map showing cases of Zika  
spread by mosquitoes in 2016

# For many mosquitos, citizen has the upper hand

- Poor flyers (about 300' territory)
- Females need that blood meal
  - Although not entirely
- Breeding site management
  - Wheel barrows
  - Plant pots
  - Toys .....
  - Can you think of others?
- Scout your property





# ELIMINATE

standing water on your property



ponds



debris



buckets



birdbaths



faucets



old tires



tree stumps



puddles



# No need to eliminate Bromeliads

- 2 native mosquitoes breed here
- Regular “washing” of cup
- *B.t.* products  
i.e. Mosquito Bits



# Flies & Mosquitoes

- Wear DEET repellents
- If sensitive to DEET, experiment with other “natural” products
- Wear protective clothing: long pants, long sleeve shirts
- Avoid being outdoor @ dusk/dawn for traditional mosquitoes – Asian Tiger is active during the day
- [http://mosquito.ifas.ufl.edu/Mosquito\\_Repellents.htm](http://mosquito.ifas.ufl.edu/Mosquito_Repellents.htm)



**Stable Fly**



**Asian Tiger**

# Other Stinging & Biting Arthropods



**Ticks**

**Scorpions**

**Venomous spiders**

**Snakes**

“Bug bites ... are no more unpleasant than a homework assignment - kind of annoying but basically harmless” - CT Children’s Medical Center



# Ticks

- Climb on vegetation, ~3 feet or less, and passively wait for hosts
- Respond to vibrations and CO<sub>2</sub>
- Crawl on host, look for feeding site
- Lyme disease (not a *major* problem in our area but secondary infection)



# Ticks



- Wear repellent containing DEET in vegetated areas
- “Tick checks” upon leaving vegetated areas
- Tuck pants legs into socks and button clothes
- Found more frequently in non-manicured areas

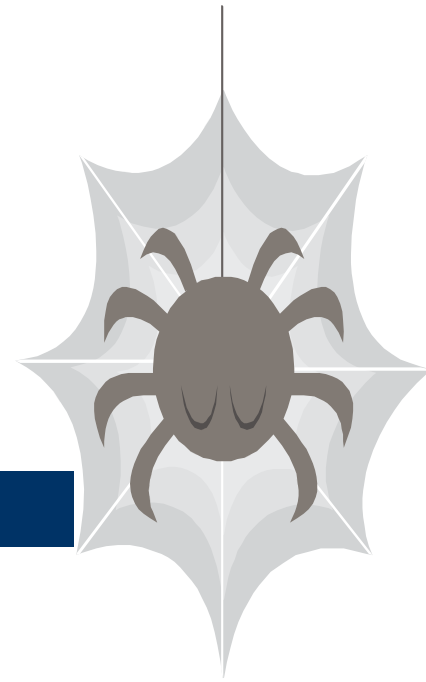
# Scorpions



- No poisonous ones in Florida
- But they do hurt!
- Segmented tail with stinger
- Nocturnal
- Under stones, in burrows
- Work boots



# Preventing Spider Bites



- Approach enclosed areas cautiously
- Remove trash and hiding places
- Sweep out webs, **cautiously**
- Caulk crevasses and use screens
- Reduce or redirect lighting away from doors and windows
- Gloves
- Use pesticides only if necessary

# Venomous Spiders



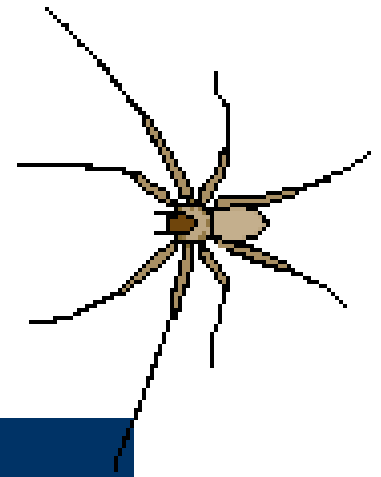
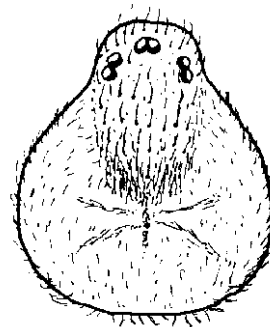
- Widows are native to this area
- Five types found in Florida
- Brown recluse is *not* native to FL
- If possible, save spider in rubbing alcohol for positive ID
- A lot of “bites” attributed to spiders

“ 'Step into my parlor,' " said the spider to the fly."

# Brown Recluse

Closest range Pensacola to Atlanta - not peninsular FL

- Hourglass marking, six eyes, only  $\frac{1}{4}$  to  $\frac{1}{2}$  inch long
- Prefer to hide in underused clothes or bedding
- Bite is becomes painful later; heals slowly



# Red Widow

- Found only in southern FL
- More docile than black widow
- Found in natural areas, esp. palmettos, scrub pines
- Brightly colored spots
- Lacks complete hourglass
- Webs 3-4 feet above ground



# Southern Black Widow



- More common in North Florida
- Distinctive red hourglass
- Found outdoors in protected areas close to ground – prefer tunnel/tube
- Irregular web structure
- Smooth egg sacs
- Bite feels like pinprick





# Brown Widow



- More common but DOCILE
- Usually bite only when space is invaded.
- Orange or yellow hourglass underside of the abdomen
- 2" body is gray or brownish
- Egg case is spiked
- Look under patio furniture, in irrigation boxes, under doors / windows/mailboxes



# Avoiding Snake Bites



- Only a few are venomous!
- Avoid snake habitat without appropriate gear
- Make “noise” when entering potential snake area
- Keep hands and feet out of areas you can't see
- Be cautious when disturbing hiding places
- Cell phone is best medical aide

Key: Visual Guide to FL Snakes

<https://www.floridamuseum.ufl.edu/herpetology/fl-snakes/visual-id/>

# If a bite occurs ...

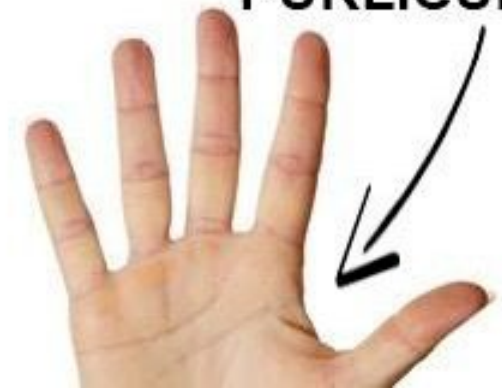


- Don't try to “catch” or kill snake
- Remain calm
- Don't cut or suction wound
- Great publication from FWC
  
- What demographic gets bitten the most? (use chat box)





PURLICUE



## Demographic

- 90% of victims are males
  - Ages: 20-25
- 80% are bitten on hand
  - Second most common spot is your fanny
- 90% of bites in the summer
- US - about 5/year die from snake bite

# Bufo or Cane Toad (*Bufo marinus*)

- Not native
- Not immediately harmful to touch
- Oral toxin secreted from glands
- Most danger to pets biting and children under 50 lbs.
- First aid: wash hands

Pets: flush with water, seek help if necessary



# First Aid for stings and bites

*In a biting / stinging emergency:*

- Monitor/assist with vital signs
- Make victim comfortable
- Identify the critter causing injury
- Seek medical attention if necessary
- NEVER prescribe medical treatment
- Report situation to supervisors

# Take the quiz for CEU's

- [https://ufl.qualtrics.com/jfe/form/SV\\_5pdxjtWJfV88ULj](https://ufl.qualtrics.com/jfe/form/SV_5pdxjtWJfV88ULj)

# Questions / Answers?



**Thanks for joining today!**

