

# 4-H Day Entomology Judging Contest

2023 Study Guide

# Cicada

## Types-

- Bush Cicada
- Dog Days Cicada
- Periodical Cicada
- Prairie Cicada

- Measures- .8 to 2"
- Certain cicada species called periodical cicadas spend most of their lives underground and only emerge once every decade or two



# Spotted Cucumber Beetle



- Measures  $\frac{3}{16}$  to  $\frac{1}{4}$ "
- Cucumber beetles feed mainly on cucumber, cantaloupe, squash, pumpkin, gourd, and watermelon but may also feed on beans, corn, potatoes and other crops.



# Green Lacewings

- 13 species in Kansas
- Around ¼" in length
- Adults feed on nectar, pollen, and honeydew, while the larvae are active predators of soft-bodied insect pests: aphids, thrips, whiteflies, leafhoppers, spider mites and mealybugs



# Dobsonfly

- Measures 2-4"
- The larvae are aquatic, living in streams, and the adults are often found along streams as well.



Larva

# Painted Lady Butterfly

Wing Span is 1 and 3/4"

Butterflies pass through the 4 stages-  
egg, larva, pupa, and adult. This  
process is complete metamorphosis.



# Tomato Hornworm Moth

- Wingspan is 4-5"
- Large numbers of caterpillars can occur in home gardens and can quickly defoliate plants.



# Whitelined Sphinx

Wingspan is 2.5 to 3.5"



# Scorpion

- Scorpions in Kansas are not deadly. Their sting is much like a bee.
- 1/8"



# Grasshopper

## Types-

- Lubber Grasshopper
  - Obscure Grasshopper
  - Boopedon Grasshopper
  - Snakeweed Grasshopper
- 
- Measure 2-5"



# Monarch Butterfly

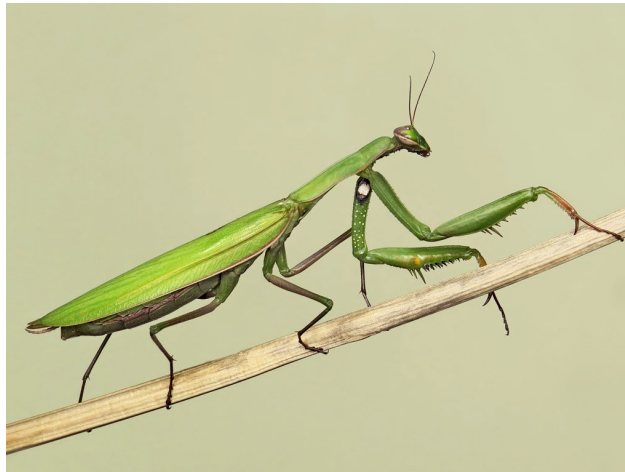
- Wingspan is 3.5-4"
- Butterflies form chrysalises



# Praying Mantis

## Types:

- Robust Prairie Mantid
  - Slender Prairie Mantid
  - Carolina Mantid
  - Chinese Mantid
- 
- Measure 2-5"
  - Praying Mantids are consider friends to farmers and work well as a natural form of pest control, by eating other insects.

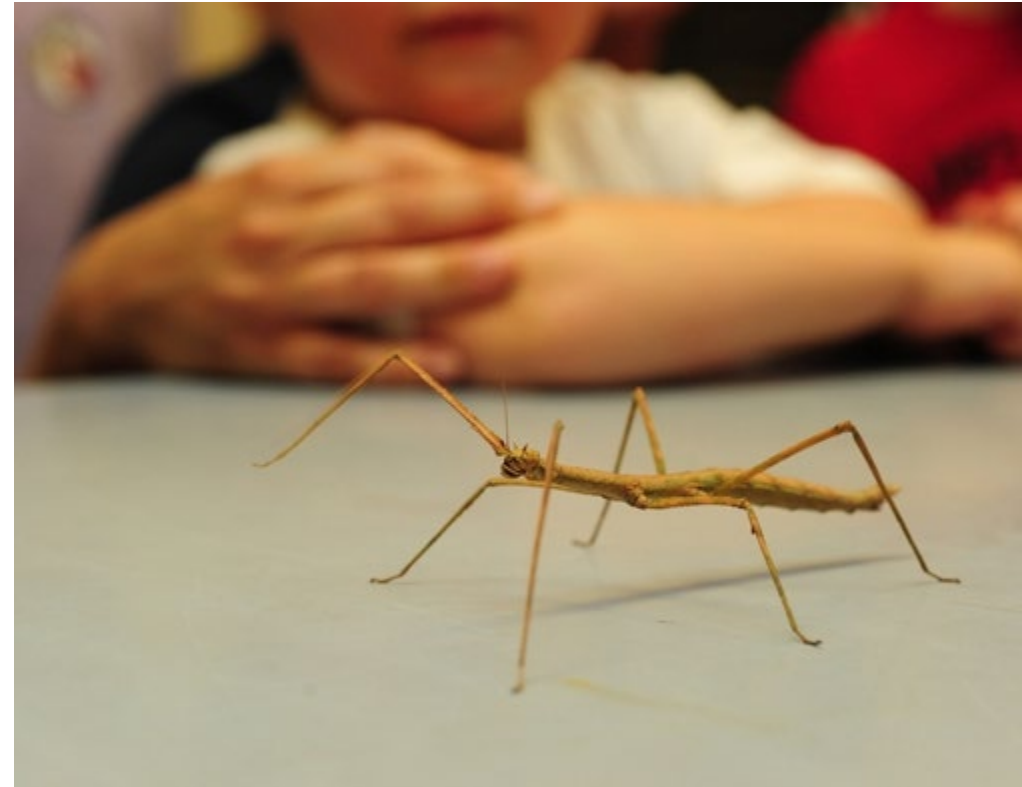


Egg Case  
(Carolina  
Mantid)

# Walking Stick



Measures 1-12"



# Cicada Killer



- Measures 2"



M. J. Raupp

# Cricket

Types-

- Field Cricket
- House Cricket
- Crickets and all true insect have 6 legs.





# Stonefly

- .25 to 2.5 inches
- Larvae are aquatic insects



Stonefly Nymph



# Asparagus Beetle



- Measures  $\frac{1}{4}$ " long
- Insects use their antennae to- hear and smell, find and taste food, and feel surfaces

# Katydid



- .5 to 2.5 inches
- Also called bush crickets



# Bagworm



- $\frac{3}{4}$  to 1" when mature
- Highly destructive to evergreen trees



# Green June Beetle

$\frac{3}{4}$  to 1" long



The green June beetle on a fig leaf.

Photo by J. R. Baker



# Blister Beetle



- 3/8 to 1" long
- Most adults feed only on flower parts, but some eat leaves as well.



cirrusimage.com

# Ailanthus Webworm



Moth measures ½" long



# Bed Bug

4-7mm in length



# Bumble Bee

- 10-20mm in length
- Honeybees and bumblebees are social insects that live in colonies



# Elm Leaf Beetle

About ¼" long



**The elm leaf beetle.**

Photo by Joseph Berger, Bugwood.org



# Mud Dauber

Types-

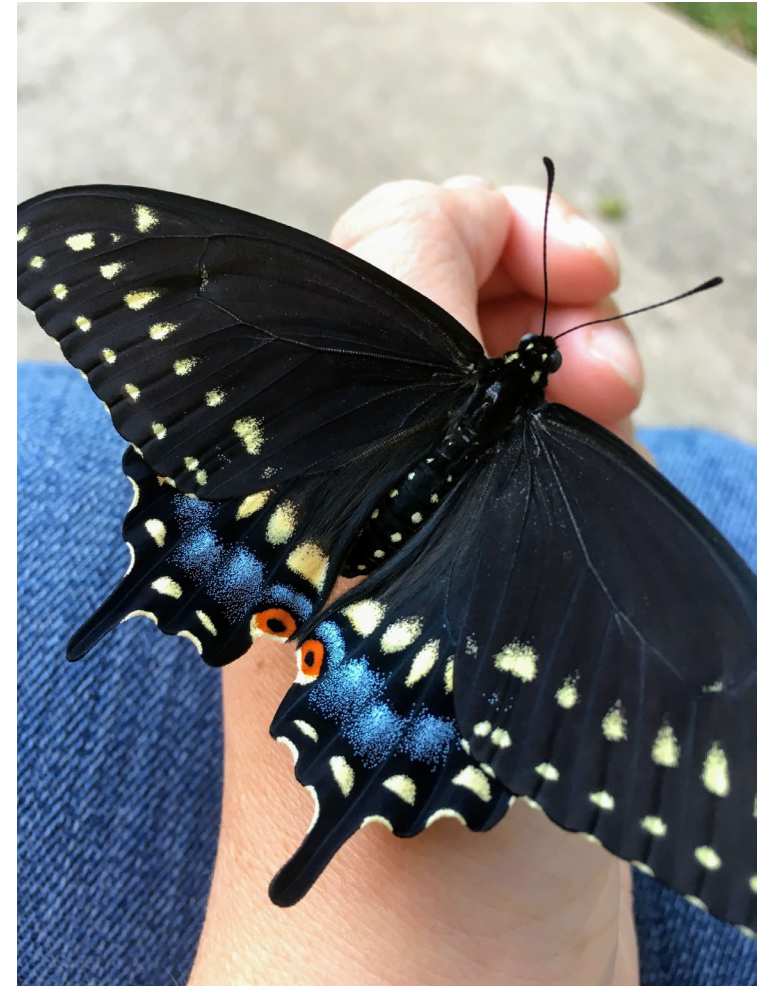
- Blue Mud Dauber
- Black and Yellow Mud Dauber

Measures- 7/8- 1" long



# Black Swallowtail

- Wing span is 3"



# Alfalfa Caterpillar Moth

- Wing span is 2-2 1/2"
- Moths form cocoons



# Painted Hickory Borer

- 7/8- 1" long
- Females lay their eggs in severely weakened hickory trees. They do little damage to the tree



# Goldenrod Soldier Beetle

- Size is about ½"
- They spend their time in the soil, where they are predators of other insects, eating grasshopper eggs, small caterpillars and other soft-bodied insects.



**The goldenrod soldier beetle on goldenrod.**

Photo by David Cappaert, Bugwood.org

# Asian Lady Beetle

- ¼" long
- Usually 9 spots on wing covers

