

# Lookalike Insects

(and how to properly identify them)

By Isaac Fox



# Wasp & Fly



## **Fly**

- **Antennae typically inconspicuous**
- **One pair of wings**



## **Wasp**

- **Antennae typically conspicuous**
- **Two pairs of wings**



# Hemiptera & Coleoptera



## **True Bug**

- **Piercing/sucking mouthparts**
- **Forewings subdivided and overlap at the tip**



## **Beetle**

- **Chewing mouthparts**
- **Forewings leathery and typically meet in a straight line down the back**



# Butterfly & Moth



## **Moth**

- **More robust body**
- **Feathered antennae**



## **Butterfly**

- **Narrower body**
- **Clubbed antennae**



# Ground & Stag Beetles



### **Ground Beetle**

- **Filiform (threadlike) antennae**



### **Stag Beetle**

- **Elbowed and clubbed antennae**



# Antlion & Damselfly



## Damselfly

- **Inconspicuous antennae**



## Antlion

- **Antennae conspicuous**



# Damselfly & Dragonfly



## **Dragonfly**

- **Usually larger and more robust**
- **Rests with wings spread**



## **Damselfly**

- **Usually smaller and more slender**
- **Rests with wings above the body**



# Mimicry complexes



**Mimic**

**Viceroy (*Limenitis archippus*)**

**Black crossband on the hindwings**



**Real**

**Monarch (*Danaus plexippus*)**

**No crossband**



# Water Scavenger & Predacious Diving Beetles



### **Predacious Diving Beetle**

- **Filiform antennae**
- **Inconspicuous mouthparts**
- **Underside not flat**



### **Water Scavenger Beetle**

- **Clubbed antennae**
- **Conspicuous maxillary palps**
- **Underside flat (sometimes with a spinelike keel)**



# Earth-boring & Scarab Beetles



**Splendid Earth-boring Beetle**  
**(*Geotrupes splendidus*)**

- **11 antennae segments**



**Splendid Dung Beetle**  
**(*Phanaeus vindex*)**

- **9 antennae segments**



# True Weevil & Fungus Weevil



### **Fungus Weevil**

- **Antennae not elbowed**



### **True Weevil**

- **Antennae elbowed**



# Firefly & Soldier Beetle



## **Firefly**

- **Head usually hidden under the pronotum**
- **Most with a light-producing organ at the tip of the abdomen**



## **Soldier Beetle**

- **Head not hidden by the pronotum**
- **Never with a light-producing organ on the abdomen**



# Bostrichid & Bark Beetles



### **Bostrichid Beetle**

- **Antenna club loose**

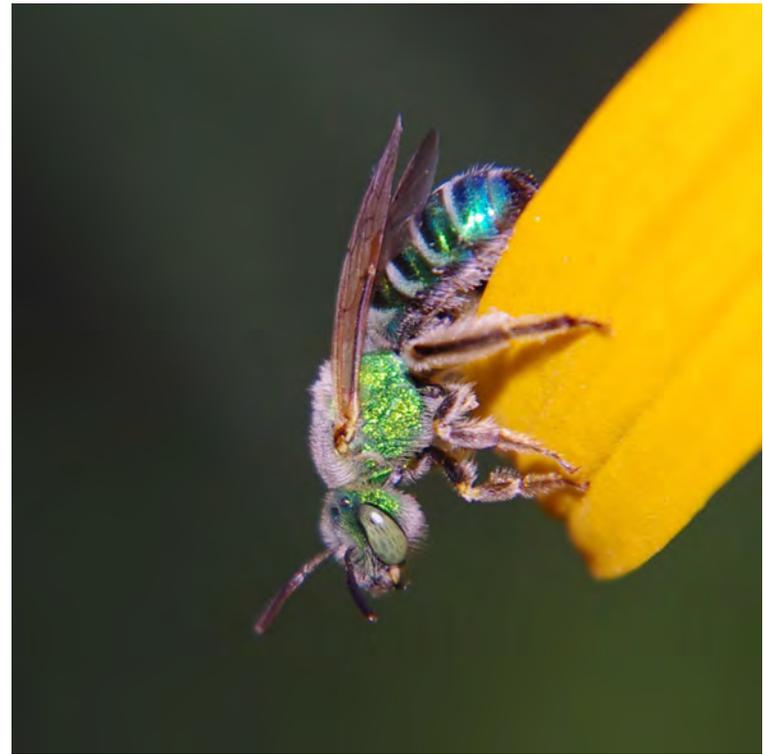


### **Bark or Ambrosia Beetle**

- **Antenna club compact**



# Cuckoo Wasp & Sweat Bee



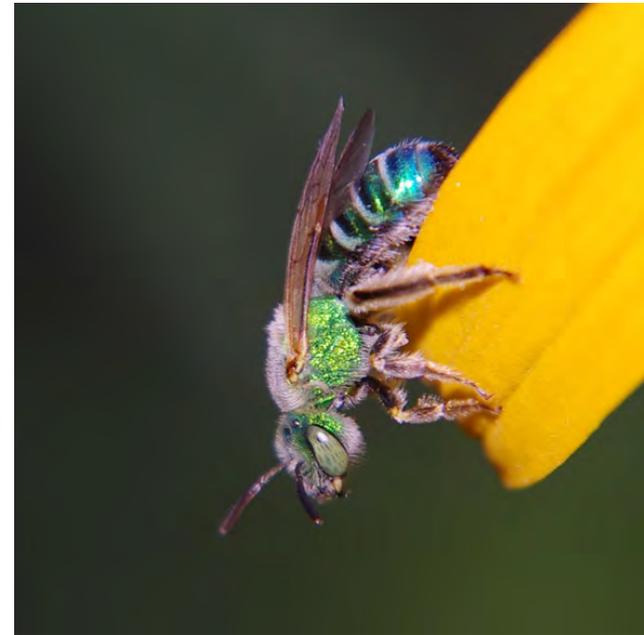
### **Cuckoo Wasp**

- **Heavily punctured**
- **Setae usually inconspicuous**



### **Sweat Bee**

- **Typically not as heavily punctured**
- **Setae usually obvious**



# References

- [Bugguide.net](http://bugguide.net)
- Beetles of Eastern North America -- Arthur V. Evans