

# *Anopheles* mosquitoes of Virginia Tidewater Region



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# Biological Classification

- \* Kingdom: Animalia
- \* Phylum: Arthropoda
- \* Class: Insecta
- \* Order: Diptera
- \* Family: Culicidae
- \* Genus: *Anopheles*



# Common Characteristics

- \* **Palpi approximately equal to length of Proboscis**
- \* Evenly rounded scutellum
- \* Rounded Abdomen
- \* Rest/Feed with head, thorax, and abdomen at an angle to surface
- \* Potential malaria vectors (*Plasmodium* spp.) and dog heart



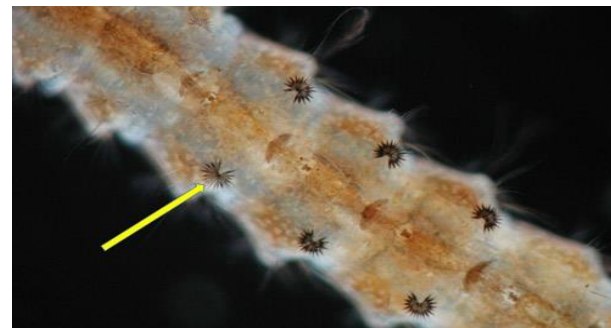
# Anopheles Immature Stages



*Anopheles Quadrimaculatus* eggs



An. *Quadrimaculatus* Larva and pupa



# Anopheles Crucians Complex (Common)

- \* *An. crucians* (A, B, C, D, E), *bradleyi*, *georgianus*
- \* FW swamp – *crucians* & *georgianus*
- \* Salt marsh, brackish – *bradleyi*
- \* Banded palpi
- \* Wing has solid black costa with pale scales at outer tip
- \* Wing vein 1A has 3 dark spots



# An. Punctipennis (Common) “Punks”

- \* Palpi unbanded
- \* Wings have patches of pale scales on costa and tip
- \* Wing vein 1A has 2 dark spots



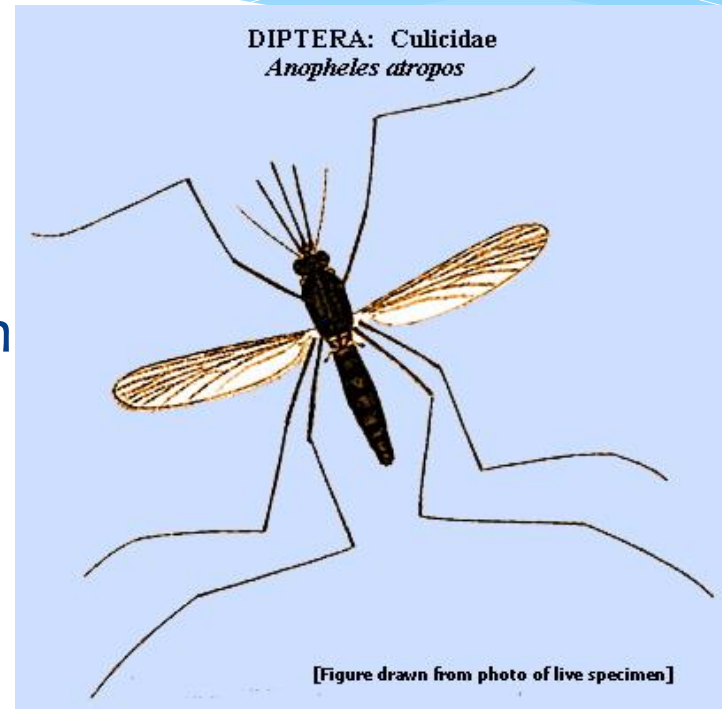
# An. Quadrimaculatus (Common) “Quads”

- \* most important species in the eastern United States regarding malaria transmission
- \* FW swamp and pond
- \* Wings with four distinct dark spots, no pale white patches
- \* Body more brown than black
- \* Palpi mostly dark



# An. Atropos (Uncommon)

- \* Salt Marsh
- \* Dark halteres
- \* Unbanded palpi
- \* Wings entirely brown scaled





# Uncommon *Anopheles* Sp.

## ❖ *An. barberi*

- tree holes
- wings dark but without dark spots
- pale scales behind eyes, longer scutal setae

## ❖ *An. perplexens*

- limestone spring, FW swamp
- frontal light patch on wing very small
- palpi unbanded

## ❖ *An. walkeri*

- FW swamp
- pale halteres, banded palpi

# Thank you! Questions?

