

GIANT WATER BUG

Class	Order	Family	Genus	Species
Insecta	Hemiptera	Belostomatidae	<i>Lethocerus</i>	<i>americanus</i>

Range:	Northern U.S. and Canada, all continents except Antarctica
Habitat:	Clear, freshwater streams and ponds, preferring those with aquatic vegetation.
Niche:	Aquatic, carnivorous
Diet:	Wild: larvae - small aquatic invertebrates, adults – insects and other aquatic invertebrates, vertebrates such as tadpoles, salamanders and small fish. Zoo: crickets



Special Adaptations: Giant water bugs are ambush hunters, they grasp and hold prey with their powerful forelegs, then thrust their piercing, sucking mouthparts into their prey. Females lay the eggs on emergent vegetation high enough above the waterline that the eggs will not be permanently submerged. The male will then guard the eggs from predators and periodically bring water to the eggs to prevent their desiccation. They have raptorial forelegs that are used to grasp and hold prey as they thrust their sucking mouthparts into the prey. They swim with their flattened hind legs. Incomplete metamorphosis.

Other: Largest of the true bugs, their alternate names include “toe biter” because they can deliver a nasty bite, and electric light bug because they are attracted to lights. They spend most of the lives under water and are capable of flight. They are fierce predators and will often lie motionless at the bottom of a body of water where they wait for prey. Their bite is considered one of the most painful that can be inflicted by any insect.



WHITE-EYED ASSASSIN BUG

Class	Order	Family	Genus	Species
Insecta	Hemiptera	Reduviidae	<i>Platyeris</i>	<i>biguttata</i>

Range:	Drier regions of south Africa, west Africa
Habitat:	Field and scrubland, grasslands & savannas
Niche:	Carnivorous, nocturnal
Diet:	Wild: cockroaches, crickets, flies, darkling beetles and caterpillars and occasional vertebrate blood Zoo:



Special Adaptations: Assassin bugs have piercing-sucking mouthparts used to impale prey or enemies and inject venom. The white eye-like spots on this insect’s wings serve to warn enemies of its painful bite. They also have the ability to spray blinding saliva into the eyes of animals that threaten them. Like all true bugs, it has incomplete metamorphosis. Assassin bugs are ambush predators. They stalk prey, deliberately raise a dagger-like beak into striking position and stab victim, injecting paralyzing saliva. Femurs of forelegs are enlarged to hold struggling prey until subdued.

Other: White-eyed Assassin Bugs hide in groups under peeling bark, logs, and rocks. They emerge at night to feed.

OLEANDER or MILKWEED APHID

Class	Order	Family	Genus	Species
Insecta	Hemiptera	Aphididae	<i>Aphis</i>	<i>nerii</i>

Range:	Mediterranean region origins; the origin of its principal host plant, oleander. Now worldwide where host plants found.
Habitat:	Tropical and warm temperate regions
Niche:	Arboreal, herbivorous
Diet:	Wild: oleander and milkweed plants Zoo:



Special Adaptations: Oleander aphid is an obligate parthenogenetic species; the adult aphids are all female and males do not occur in the wild. Adult females may be winged or wingless. Females are viviparous and parthenogenetic, meaning that they deposit nymphs rather than eggs and that the progeny are clones of the adult female. The parthenogenetic mode of reproduction, high fecundity, and short generation time allow large colonies of oleander aphids to build quickly on infested plants.

Other: Bright yellow aphid with black appendages a pest of ornamental plants in families Apocynaceae and Asclepiadaceae. The oleander aphid ingests sap from the phloem of its host plant. The damage caused by aphid colonies is mainly aesthetic due to the large amounts of sticky honeydew produced by the colony members and the resulting black sooty mold that grows on the honeydew. Like the Monarch and related butterflies, these aphids pick up deadly cardiac glucosides from the host plant and deposit them in their bodies. The noxious chemicals also become part of their cornicle secretions (exuded from the tubes on the rear end). Their bright orange color serves as a warning to predators- at best they taste awful, at worst they can kill.

http://entnemdept.ufl.edu/creatures/orn/shrubs/oleander_aphid.htm
<http://nathistoc.bio.uci.edu/hemipt/OleanderAphid.htm>



MILKWEED BUG

Class	Order	Family	Genus	Species
Insecta	Hemiptera	Lygaeidae	<i>Oncopeltus</i>	<i>fasciatus</i>

Range:	Distributed throughout North America especially California and Arizona
Habitat:	Fields and along roadways
Niche:	
Diet:	Wild: milkweed plants Zoo:



Special Adaptations: coloring acts as an aposomatic warning to predators of its distastefulness

Other: Acts as a parasite to milkweed plants. Often found in small clusters on the leaves of milkweeds. This colonial behavior may serve to amplify the effect of warning coloration.