



**SCIENCE OLYMPIAD**  
— AT THE —  
**UNIVERSITY OF FLORIDA**

Northern Regional: January 19<sup>th</sup>, 2019

# Herpetology C Answer Key

**Name(s):** \_\_\_\_\_

**Team Name:** \_\_\_\_\_

**School Name:** \_\_\_\_\_

**Team Number:** \_\_\_\_\_

**Rank:** \_\_\_\_\_

**Score:** \_\_\_\_\_

## UF Regionals Herpetology C Key

### Station 1

1. Storeria (1)
2. To pull snails out of their shells (1)
3. Large frogs and toads, large snakes, crows, hawks, shrews, weasels, certain bird species, and domestic cats and dogs (1)
4. False (1)
5. Flatten their bodies to appear larger, Assume an aggressive stance, Release a musky smelling fluid from the cloaca (1)

### Station 2

1. Nerodia (1)
2. 3-5 months (1)
3. When extremely agitated they will also regurgitate their last meal (1)
4. Usually remain submerged for about 5 minutes but are capable of remaining below water for an hour and a half (1)
5. 20 snakes; up to 100 snakes (1)

### Station 3

1. Cryptobranchidae (1)
2. False (1)
3. Bundles of elastic tissue called cartilage allow each side of the lower jaw bone to move by itself, so these salamanders can open their mouths very wide to suck in large prey (1)
4. Under large "nest" rocks (1)
5. 100-500 eggs (1)
6. Double stranded (1)

### Station 4

1. Plethodontidae (1)
2. 18 (1)
3. Internally (1)
4. 12-17 cm (1)
5. At night; wet weather (2)

### Station 5

1. Agkistrodon (1)
2. 6 (1)
3. Comes from Greek word “agkistron”, which means “fish hook”, referring to its fangs (1)
4. Hemotoxins (1)
5. ACTX-6 (1)

### **Station 6**

1. Scaphiopodidae (1)
2. Spade; for digging (2)
3. True (1)
4. Nocturnal (1)
5. 2,000-5,000 eggs (1)

### **Station 7**

1. Garter snake
2. Females
3. Neurotoxin
4. Lower abdomen
5. Newts/Salamandridae; Tetrodotoxin

### **Station 8**

1. Batrachoseps
2. Worm salamanders
3. True
4. When disturbed, it winds itself up into a watch-spring-like coil
5. From Oregon and California (USA) to northern Baja California (Mexico)

### **Station 9**

1. Ranidae
2. The name is derived from *litho-* (stone) and the Greek *bates* (βάτης, one that treads), meaning one that treads on rock, or rock climber.
3. Late spring or May/July
4. A satellite male is described as a smaller male, unable to acquire and defend territories, and it is often found in areas protected by a larger male; The satellite male will wait for the opportunity to mate with a female that is responding to the larger more dominant male frog's vocalizations.

5. "Sit-and-wait" predators

#### **Station 10**

1. Ambystomatidae
2. Mole salamanders; They are called mole salamanders because they are nocturnal and spend the day in leaf litter or in burrows on the forest floor
3. A method of reproduction whereby a female 'steals' sperm from a sympatric sexual male. The sperm is required to stimulate an egg to divide (gynogenesis) but does not fertilize the egg and may or may not contribute chromosomes to the offspring.
4. Populations with all-female hybrids
5. Ichthyophonus

#### **Station 11:**

1. Alligatoridae
2. No
3. Osteoderms
4. 34 degrees c
5. Paleocene (57-65 MYA)

#### **Station 12:**

1. Emydidae; Trachemys
2. Trachemys scripta elegans
3. AR, CA, FL, GA, etc
4. 30 years (20 in the wild, 40 in captivity)
5. males

#### **Station 13:**

1. cophosaurus and holbrookia
2. Active all day long
3. 7000 ft
4. No external ears
5. Greek, means "deaf lizard"

#### **Station 14:**

1. Cheloniidae

2. 2
3. Offshore in shallow waters
4. 80 years
5. The front limbs are stronger than the back limbs

**Station 15:**

1. Helodermatidae
2. Neurotoxin
3. Diabetes
4. coyotes and humans, some birds of prey will eat the eggs
5. Heloderma

**Station 16:**

1. Actinemys
2. 200 days
3. Bullfrogs (*Rana Catesbeiana*)
4. Fall or spring
5. West Coast of US and Mexico

**Station 17:**

1. Deirochelys
2. Emydoidea
3. Carnivores
4. 1.5 times as larger
5. American snake necks

**Station 18:**

1. Gekkonidae
2. 60%
3. Snakes
4. When the tail falls off in defense to distract predators as it continues to move so the animal can escape
5. Birds chirping

**Station 19:**

1. Terrapene
2. April
3. Adults are mainly herbivorous while juveniles are most carnivorous
4. North Carolina, Tennessee, Missouri, Kansas
5. 1-7 eggs

**Station 20:**

1. Dipsosaurus
2. Pinkish pigment on the sides of their ventral surfaces
3. Once but possibly twice if conditions are optimal
4. Absorb ultraviolet wavelengths and then produce fluorescent chemicals used as territory markers
5. True

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