

## **True/False**

### **Chapter 1**

- 1. There are more species of insects than there are species of all other plants and animals combined.**
- 2. Relative to humans, insects can generally better tolerate higher temperatures than they can lower temperatures. Many insects can withstand freezing temperatures.**
- 3. The correct method of writing a genus and species is to always capitalize the genus and not the species names and underline each or print them in italics.**

### **Chapter 2**

- 4. If disturbed, millipedes will typically coil up with their head (most vulnerable part of the body) in the center.**
- 5. Millipedes possess 2 pair of legs per section of the body, while centipedes possess one pair of legs per section of the body.**
- 6. One of the most notorious of the centipedes is a giant that live in caves in Venezuela and can reach a length of 18 inches**
- 7. Sowbugs and pillbugs are crustaceans and lack the waxy layer around their body, thus are more susceptible to water loss than insects.**

### **Chapter 3**

- 8. Juddering is a phenomenon exhibited by male scorpions to attract the female and consists of a series of jerky movements. This is needed since scorpions have limited vision and are mainly active at night.**
- 9. Scorpions are hardy and can survive in extreme conditions, including temperatures as high as 115 F, being frozen solid for weeks, total submersion in water for up to 48 hours, irradiation levels many times the lethal limit to humans and lack of food for up to one year.**
- 10. The sting of most species of scorpions is not considered very dangerous to humans.**
- 11. The bite of a true daddy longleg is considered dangerous to humans and should be treated medically.**

### **Chapter 4**

- 12. The black widow spider is found in every state of the country and there are similar species throughout much of the world**
- 13. The venom of a black widow is a neurotoxin and ounce for ounce is more toxic than that in a rattle snake.**
- 14. Male black widows are several times smaller than the females and brownish in color with pearly markings on the top of the abdomen.**
- 15. The most common situation in California where black widow bites occur is when someone sits on an outdoor (e.g. camping) toilet seat, especially in the springtime when the female guards her egg sac.**
- 16. Even though small, the male black widow bite should be considered dangerous to humans.**

17. A black widow spider web is characterized as being asymmetrical, strong and typically occurs in dark, humid locations where there is an abundance of food.
18. Most spider experts feel that the brown recluse or violin spider for all intent and purposes does not occur in California any more.

#### Chapter 5

19. House dust mites are not visible to the naked eye and can be found in peoples' beds.
20. Delusory parasitosis is a paranoia, or irrational fear, of small creepy non-existent creatures.
21. Scabies is nearly always acquired by skin-to-skin contact with an infested individual.
22. House dust mites feed on dander and can cause allergic reactions in humans.
23. The main biological control agent of phytophagous mites is a predatory mite. These can easily be distinguished from the plant feeding mites by the fact that they move much slower than their prey.
24. The recommended methods of removing a feeding tick from your body are to apply a hot match head to its abdomen or the use of gasoline.
25. Lyme disease is quite difficult to cure once it reaches advanced stages. It can be cured in its early stages of development with antibiotics. Typical symptoms include donut shaped blotches, heart ailments, and malfunction of limb

#### Chapter 6

26. Symptoms of head lice include the nits glued to head hairs and itching of the scalp.
27. Body lice mainly lay their eggs on body hairs and can cause a condition referred to as Vagabonds' disease.
28. One symptom of crab lice is blue spots on the skin.
29. Crab lice, *Pthirus pubis*, also known as pubic lice, attack humans and a few species of gorillas.
30. Crab lice are primarily spread by sexual contact and are rarely found off the host.

#### Chapter 7

31. Silverfish feed primarily on starchy material such as paper, glue and similar materials.
32. The springtails are among the most abundant of all soil-dwelling arthropods.
33. The European earwig is the main species of earwig found in California yards and feeds mainly on plant material.
34. Most springtails mainly feed on decaying vegetation, are found in the soil and require high moisture for survival.

#### Chapter 8

35. Mayfly adults lack mouthparts and usually only live a day or two.
36. Mayfly naiads feed on algae and are very susceptible to water pollution.

37. Adult dragonflies are one of the few types of insects that show a degree of territoriality.
38. Adult dragonflies are predatory feeding on flying insects such as mosquitoes.

#### **Chapter 9**

39. The alates of subterranean termites are typically black in color.
40. A species of an African queen may lay up to 10,000 eggs a day for 30 years.
41. The alates of drywood termites are red in color.
42. Symptoms of drywood termites include wings, expelled fecal pellets and mud tubes.
43. Tent fumigation and heat treatment are effective control measure for subterranean termites.

### **Part 3**

#### **Chapter 11**

44. ULV spraying (ultra low volume) is used for locust control and consists of applying very small amounts of malathion over large areas by WWII bombers.
45. In the United States it is illegal to own a living walking stick from another country unless you have a USDA permit to do so.
46. After mating, it is not uncommon for male praying mantids to consume the females.
47. Because praying mantids eat many insects in their lives, they are considered to be very beneficial from the standpoint of biological control.
48. In Viet Nam, praying mantids are considered good luck, while in Guatemala children fear that they will eat their tongues.
49. The Jerusalem cricket is erroneously considered to be a dangerous animal, especially in the Mexican culture.
50. Crickets overwinter as egg pods in the soil.

#### **Chapter 10**

51. Positively thigmotactic refers to a cockroach's tendency to avoid light.
52. Effective cockroach control is partially based on roaches' tendency to hide in cracks and crevices.
53. The larger species or domestic roaches typically require a year or more to complete their life cycles, while the smaller species, such as the German roach, requires as little as a few months are less.
54. One American roach female can produce as many as 800 offspring.
55. The distribution of the German cockroach in the home has changed in the past decades mainly due to changes in human behavior, more small appliances and home construction.

#### **Chapter 12**

56. Some assassin bugs are predatory while others are blood feeders and are capable of vectoring Chagas' disease.
57. Bedbugs feed on blood mainly during the daylight hours and vector several diseases in humans.

### Chapter 13

58. Parthenogenesis development is common in aphids and refers to the ability to produce young without mating.
59. Ovoviviparous refers to aphid's ability to secrete large amounts of honeydew.
60. Honeydew is produced by aphids and other homopterous insects and basically amounts to partially digested plant sap, which appears as a clear sticky substance.
61. One bad side effect of honeydew on plant leaves is the formation of sooty mold which blocks normal photosynthesis.

## **Part 4**

### Chapter 14

62. The sacred scarab is also known as the Khepera and the process of mummification was once thought to mimic part of the life cycle of this insect.
63. Over one-third of agricultural insecticides used in the United States are used to control the Japanese beetle.
64. The release of convergent ladybird beetles is a very effective means of controlling aphids.
65. The convergent ladybird beetle overwinters in mountainous areas in the larval stage.

### Chapter 15

66. Urticating hairs are found on some caterpillars and function in detection of movement and vibrations.
67. The painted lady butterfly is a migratory species that passes through Southern California during the spring months. Some years this movement occurs with large numbers and other it is not noticeable. How many butterflies migrate in any particular year is dependent on rains in Northern Mexico

### Chapter 16

68. All neuroptera are considered beneficial, as they are predatory in the adult and/or larval stages.
69. The green lacewings deposit their eggs on the end of thin stalks.

### Chapter 17

70. The term, organic honey refers to honey that has been filtered the minimum amount required by law.
71. Propolis is bee glue that typically is composed of wax and tree sap, or other resinous materials.
72. Royal jelly is produced by the honey bee to feed to larvae and comes from glands located on the abdomen.
73. The main reason the honey bee is so important in pollinating our crops, as opposed to wild bees, is that a single honey bee is more efficient in doing so when compared to its relatives.

### Chapter 18

74. Harvester ants are mainly predatory and feed on other insects.

- 75. Paper wasps, hornets and yellow jackets have similar a biology and overwinter as a queen in protected locations.**
- 76. Honey ants store excess honeydew in adult ants called repletes. These individuals swell up to many times their normal size when doing so.**
- 77. Paper wasp nests are multilayered.**

#### **Chapter 19**

- 78. The larval or maggot stage of blowflies mainly feeds on meat.**
- 79. Maggot therapy consists of the intentional introduction of live, disinfected maggots (fly larvae) into the non-healing skin and soft tissue wound(s) of a human or animal for the purposes of selectively cleaning out only the necrotic tissue within a wound (debridement), disinfection, and promotion of wound healing.**
- 80. Screwworms are first attracted to decaying tissue, but then move quickly into healthy tissue—sometimes resulting in the death of animals.**
- 81. Housefly maggots chiefly feed in decaying carcasses.**
- 82. Mosquito larvae are referred to as tumbler and are filter feeders feeding on small organisms in the water.**

#### **Chapter 20**

- 83. One of the main components of flea larvae diet is the feces of the adult fleas.**
- 84. Adult fleas are triggered to emerge from a loose cocoon by the vibration of a passing host.**
- 85. Advantage works by Killing fleas in the egg stage.**
- 86. Flea combs and flea collars are a very effective tools for control of fleas on a pet.**
- 87. Plague in rodents is referred to as pneumonic plague.**

#### **Chapter 21**

- 88. The male confusion technique refers to the use of sterile male to eradicate a pest species.**
- 89. The round dance refers to a honey bee dance to indicate that there is a nearby source of nectar.**

**Chapter 22. No questions.**