

## Crime Scene Creatures Video

## ANSWER KEY

1. Every crime leaves **clues** to identify the guilty party.
2. What type of animal is a good substitute for a human corpse? **Pig**
3. Where are the two corpses "placed"? **One is in a wooded area and the other is thrown into the water**
4. What did they do to the murder weapon? **Pour gasoline on it and burn it**
5. What does an infrared camera detect? **Body heat**
6. What does the German Sheppard use to track the suspect? **Trampled vegetation and gas bubbles from sediment**
7. What animal is the first to visit the corpse in the woods? **Crow**
8. Why are flies good to use as evidence? **Their life cycle has a set timetable.**
9. How far away can a fly smell a dead corpse? **1 mile**
10. What are the four stages in a fly's life cycle? **Egg → Larva → Pupa → Adult**
11. What do you have to know to use flies as evidence? **Fly species, temperature , humidity, & the way someone dies**
12. How does each factor affect the development of a fly? NOTE: Need at least 2 examples + explanations!
  - Corpse covered in vegetation - **Delays development up to 24 hours**
  - Carbon Monoxide /Automobile - **Acts as greenhouse and speeds up process**
  - Buried corpse - **Buried below 40 cm will not show insect activity**
  - Two Fly Species Together - **Predator can cause prey fly species to leave corpse early**
  - Corpse wrapped in blankets - **Delays development up to 2 ½ to 3 days**

13. Forensic **entomology** involves the use of insects to help solve crimes and was first used in China in **1235**.

**Pause video at 18:18 – Discuss the answers to #1-13.**

14. What damage did these animals do to the pig corpse in the woods? NOTE: Need at least 2 examples + explanations!
  - Crows - **Gouge out eyes and make it look like they were injured before death**
  - Buzzards - **Can leave marks that look like stab wounds or other damage**
  - Fox - **Can crush bones**
  - Hedgehogs - **Eat the maggots**
  - Rats - **Leave gnaw marks on bones**

15. What is facility in Tennessee that studies human remains and decompositions called? **The Body Farm**

Who created it? **Dr. Bill Bass**

What type of damage does each animal do to a corpse?

- Raccoons - **Leave entry holes in the corpse and then come back to eat the maggots**
- Rats - **Chew into the bones to get to the fat**
- Coyotes/Dogs - **Chew on body and leave marks that can be interpreted the wrong way**

16. What types of animals can be found on a corpse that is in the water? **Sea stars, crabs, shrimp, octopus, fish**

**Pause video at 27:02 – Discuss the answers to #14-16.**

**More on back ...**

17. What is pollen? **Reproductive structures from a plant**

18. How can plant DNA be used in a crime investigation? **The DNA from some fruits or seeds can be linked back to a specific plant that they came from.**

19. How can diatoms be used in a crime investigation? **Since they grow in specific places, diatoms on a victim or suspect can be linked to a specific body of water.**

20. Why are dogs able to smell accelerants when we cannot? **They have more smell receptors to sniff out chemicals.**

21. How did a pool cue help to solve a murder? **The wood from the pool cue matched the wood in a splinter that was found in a murder victim.**

22. How can maggots be used to find bullet wounds? **As they eat the flesh around the bullet wound, the metals from the bullet become concentrated in their bodies and then tested to determine what kind of metals are present.**

**Pause video at 44:30 – Discuss the answers to #17-22.**

23. What kind of insect can be found on old corpses? **Woolly bears, the larvae of domestic beetles**

24. What animals help to "hide" evidence in a safe place? **Voles, mice, birds, and squirrels**

25. Answer these questions about the evidence in the toolbox found in Hawaii.

- A. What was found in the toolbox in Hawaii? **Corpse, an ant nest, and a pupa case of a soldier fly**
- B. How long is the life cycle of the long-legged ant? **Approximately 12 months**
- C. How long is the life cycle of the soldier fly? **Approximately 3 months**
- D. How long had the corpse been in the toolbox? **Approximately 15 months**

26. What "evidence" did the scientist leave behind? Complete each statement.

**Flies** could have been used to determine the time of the killing.

**Fruit** could have tied his car to the location and **pollen** could have backed it up.

**Diatoms** could link him to the river.

A **dog** could have found the murder weapon and the **wood** could be matched to other evidence.

**End of video – Discuss the answers to #23-26.**