



## Zoo Murder Mystery

In reviewing my notes for the spring of '05, I came upon a most remarkable case involving murder at the local zoo. A school teacher had taken her biology class to the zoo on a field trip. Later that afternoon, the body of the teacher was pulled from the tall reeds next to the flamingoes. Holmes and I were called in to investigate.

“Most interesting, Watson,” said Holmes as he puffed on his pipe.

“Why is that, Holmes?”

“Look at the claw marks on the victim’s back—shallow, hardly more than a scratch. Death was actually caused by a tight grip on the neck. And notice the strong, pungent odor.”

I breathed deeply. Holmes was right; the odor reminded me vaguely of a skunk.

“Do you have any ideas?”

“Well, “ said Holmes. “It was obviously something of an animal nature.”

“Obviously,” I said, although it was not at all obvious to me.

“Come, Watson,” said the detective, bounding down the steps to the zoo. “We have work to do!”

“What is it, Holmes?”

“The animals—we have to interview the animals.”

“Quite, “ I said, not knowing quite how to interview an animal.

“Somewhere out there,” said Holmes, pointing to the zoo with a sweeping motion of his arm, “is our beast.”

**PERFORM YOUR INTERVIEWS NOW!**

*Your team should split up and interview the ALLIGATOR, ELEPHANT, GAZELLE, MANED WOLF, BISON, FISHING CAT and the BALD EAGLE (the fishing cats are located in the Predator Building and the bald eagles are located in the Alabama Wilds). Also check the rest rooms at the Primate Building.*

*Use the interview form provided at the end of the mystery.*

After the interviews, Holmes settled down at the picnic pavilion to smoke his pipe.

“Well, Watson, a most inspirational day.”

“Have you solved the mystery, Holmes?”

“Of course, Watson. It was simply a case of looking at animal adaptations.”

“Adaptations?”

“Yes, Watson—adaptations. Defined simply as

(define adaptation)\_\_\_\_\_

\_\_\_\_\_

“All organisms have adaptations, Watson. What makes the concept so powerful, though, is that animals with similar niches tend to have similar adaptations. For example, all predators tend to have

(adaptation for predation) \_\_\_\_\_

(adaptation for predation) \_\_\_\_\_,  
while all herbivores tend to have different adaptations, such as

(adaptation to avoid predation)\_\_\_\_\_

(adaptation to avoid predation)\_\_\_\_\_.

Right away, I realized the murder had to be a

(niche of the murderer)\_\_\_\_\_

because of the claw marks on the back and arms of the victim.”

“Astonishing, Holmes.”

“Elementary, my dear Watson. That instantly ruled out the herbivores at the zoo, such as a(n)

(example of an herbivore) \_\_\_\_\_, a(n)

(example of an herbivore) \_\_\_\_\_, or a(n)

(example of an herbivore) \_\_\_\_\_.

But I still wondered about those claw marks. Predators such as the tiger have huge jaws and claws—obviously an adaptation because these animals eat large prey such as

(prey item for a tiger) \_\_\_\_\_.

In comparison, the murderer had small claws, suggesting the murderer ate

(relative size of prey) \_\_\_\_\_.”

“Very perceptive of you, Holmes.”

“But what kept gnawing at me was the strong odor on the body of the victim.”

“Of course, Holmes—most remarkable, that.”

“And obviously an important clue. Many mammals use odors to

(use of odors) \_\_\_\_\_.

My suspicions, therefore, were drawn to a mammal.”

“But Holmes—what about a large predatory bird like the bald eagle?”

“Most birds have no sense of smell, Watson. The eagle was clearly not involved.”

“Most impressive, Holmes.”

“No, Watson—what we are dealing with is a predatory mammal that fed on small animals and used its scent to mark its territory. Then there was the fact that the body was pulled from tall reeds. Most suggestive, Watson.”

“What makes you say that, Holmes?”

“That instantly eliminates the

(predator in rainforests) \_\_\_\_\_,

which hunts only in tropical rainforests.”

“Brilliant, Holmes.”

“That leaves us only the

(the murderer) \_\_\_\_\_,

predatory mammals found—“

“Holmes!”

“Quite, Watson. Found on the

(habitat of the murderer) \_\_\_\_\_.

An animal superbly adapted to its habitat due to

(adaptation) \_\_\_\_\_ and

(adaptation) \_\_\_\_\_.

“Extraordinary, Holmes. I never would have guessed,” I said, walking towards the exit. “A most remarkable case.”

“Not at all, Watson. Simply a case of a predator performing its role in nature. What is remarkable is the diversity of adaptations in nature. Animals, plants, even microorganisms—all superbly adapted to survive in their natural habitats. Every trip I make to the zoo, I am always fascinated by new adaptations I had never previously suspected.”

“If they are so superbly adapted to their natural environments, why would an animal kill a zoo visitor?”

“Can you blame them Watson? Everyday there is less and less of their natural habitat as mankind destroys more and more. The two leading causes of extinction are

(cause of extinction) \_\_\_\_\_ and

(cause of extinction) \_\_\_\_\_.

Soon it may be all gone, and we will be alone on our planet.”

“A dreadful thought, “ Holmes.

“Precisely, Watson.”

# Zoo Murder Mystery: ANIMAL INTERVIEW

Your Names:

Animal Name:

Class [circle one]

Mammal

Bird

Reptile

Niche [circle one]

Predator/Carnivore

Prey/Herbivore

Habitat [circle one]

Grassland

Temperate Forest

Tropical Forest

Aquatic

Other [specify]:

Adaptations:

Position of eyes:

Type and size of feet:

Type and size of teeth:

Antlers/horns/tusks?

Antlers

Horns

Tusks

Additional Adaptations [specify and state why they are adaptations]

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Zoo Murder Mystery  
(Answer Key)

After the interviews, Holmes settled down at the picnic pavilion to smoke his pipe.

“Well, Watson, a most inspirational day.”

“Have you solved the mystery, Holmes?”

“Of course, Watson. It was simply a case of looking at animal adaptations.”

“Adaptations?”

“Yes, Watson—adaptations. Defined simply as

(define adaptation) *an inherited biological or behavioral trait that*

*increases a population’s chances for survival in a specific environment*

“All organisms have adaptations, Watson. What makes the concept so powerful, though, is that animals with similar niches tend to have similar adaptations. For example, all predators tend to have

(adaptation for predation) *claws, fangs, excellent muscle development,*

(adaptation for predation) *camouflage, forward-facing eyes, etc.,*

while all herbivores tend to have different adaptations, such as

(adaptation to avoid predation) *speed, camouflage, living in a herd,*

(adaptation to avoid predation) *cryptic coloration, mimicry, etc.*

Right away, I realized the murder had to be a

(niche of the murderer) *predator*

because of the claw marks on the back and arms of the victim.”

“Astonishing, Holmes.”

“Elementary, my dear Watson. That instantly ruled out the herbivores at the zoo, such as a(n)

(example of an herbivore) *elephant,* a(n)

(example of an herbivore) hippopotamus, or a(n)

(example of an herbivore) bison.

But I still wondered about those claw marks. Predators such as the tiger have huge jaws and claws—obviously an adaptation because these animals eat large prey such as

(prey item for a tiger) wild pigs, cattle, or deer.

In comparison, the murderer had small claws, suggesting the murderer ate

(relative size of prey) smaller prey.”

“Very perceptive of you, Holmes.”

“But what kept gnawing at me was the strong odor on the body of the victim.”

“Of course, Holmes—most remarkable, that.”

“And obviously an important clue. Many mammals use odors to

(use of odors) mark territory, attract mate, mark a food item.

My suspicions, therefore, were drawn to a mammal.”

“But Holmes—what about a large predatory bird like the bald eagle?”

“Most birds have no sense of smell, Watson. The eagle was clearly not involved.”

“Most impressive, Holmes.”

“No, Watson—what we are dealing with is a predatory mammal that fed on small animals and used its scent to mark its territory. Then there was the fact that the body was pulled from tall reeds. Most suggestive, Watson.”

“What makes you say that, Holmes?”

“That instantly eliminates the

(predator in rainforests) fishing cats,

which hunts only in tropical rainforests.”

“Brilliant, Holmes.”

“That leaves us only the

(the murderer) maned wolves, predatory mammals found—“

“Holmes!”

“Quite, Watson. Found on the

(habitat of the murderer) *grasslands of South America*.

An animal superbly adapted to its habitat due to

(adaptation) *long, stilt-like legs* and

(adaptation) *large ears*.

“Extraordinary, Holmes. I never would have guessed,” I said, walking towards the exit. “A most remarkable case.”

“Not at all, Watson. Simply a case of a predator performing its role in nature. What is remarkable is the diversity of adaptations in nature. Animals, plants, even microorganisms—all superbly adapted to survive in their natural habitats. Every trip I make to the zoo, I am always fascinated by new adaptations I had never previously suspected.”

“If they are so superbly adapted to their natural environments, why would an animal kill a zoo visitor?”

“Can you blame them Watson? Everyday there is less and less of their natural habitat as mankind destroys more and more. The two leading causes of extinction are

(cause of extinction) *habitat destruction* and

(cause of extinction) *illegal hunting (poaching)*.

Soon it may be all gone, and we will be alone on our planet.”

“A dreadful thought, “ Holmes.

“Precisely, Watson.”