

Question 1-11 are based on the following passage.

The Battle Against White-Nose Syndrome

Bats play a vital role in ecosystems, providing billions of dollars worth of insect-suppression and pollination services to farmers around the United States. But now, bats face a serious threat: white-nose syndrome (WNS), a fungal disease that causes a loss of body fat, unusual winter behavior, and even death. Since the first documentation of the disease in 2006, between 5.7 and 6.7 million North American bats have perished **1** from a disease referred to as WNS, with some bat habitats experiencing population declines of more than 90 percent. As of 2014, twenty-five states and five Canadian provinces have confirmed cases of **2** WNS: the affected region now reaches as far west as the Missouri-Kansas border.

1

- A) NO CHANGE
- B) due to WNS,
- C) as a result of a fungal disease, known as WNS,
- D) because of WNS, or white-nose syndrome,

2

- A) NO CHANGE
- B) WNS, the affected region now reaches,
- C) WNS: the affected region now reaches,
- D) WNS, the affected region, now reaches

Scientists have determined that the cause of white-nose syndrome is a fungus— *Pseudogymnoascus destructans*— that flourishes in cold, wet environments and reproduces by generating spores that can lodge in the floors and walls of caves as well as on **3** their muzzles, ears, wing membranes, and hairless body parts. **4** For reasons currently unknown, infected bats also demonstrate atypical behavior at hibernation sites: they awaken, fly outside during the day, and hover around cave mouths. This excessive activity results in the depletion of vital fat **5** stores leading to life-threatening emaciation.

3

- A) NO CHANGE
- B) its
- C) bats'
- D) scientists'

4

At this point, the writer is considering adding the following sentence.

The annual temperature ranges of affected hibernacula fall between 35°F and 57°C.

Should the writer make this addition here?

- A) Yes, because it provides another example of how the WNS fungus affects the hibernation sites of bats.
- B) Yes, because it introduces information to support the paragraph's claim that the fungus flourishes in cold, wet environments.
- C) No, because it does not explain why bats demonstrate atypical behavior at affected hibernacula.
- D) No, because it introduces information outside the paragraph's focus on how the fungus affects bat populations.

5

- A) NO CHANGE
- B) stores;
- C) stores—
- D) stores,

6 There is federal funding available to support research on WNS. With grants already in excess of \$17.4 million, scientists are conducting epidemiological research in order to determine the most effective agents to combat the disease. Interestingly, the research is beginning to suggest that humans may play a prominent role in the spread of the fungus, as the distance between infected caves often 7 exceed the typical migratory patterns of bat populations. 8 In contrast, the USDA Forest Service has mandated a five-year closure of caves and mines in thirteen states and has ceased all spelunking activity. Through these measures, possible only through collaboration with various organizations and help from the public, scientists hope to avoid a further decline of the bat population in the United States.

6 Which choice most effectively establishes the main topic of the paragraph?

- A) NO CHANGE
- B) In order to prevent the further spread of WNS, bat hibernation sites have been closed off to human activity other than scientific research.
- C) Work by numerous government and nonprofit agencies and the cooperation of ordinary citizens have been critical in efforts to prevent further decimation of bat populations by WNS.
- D) Scientists are searching for genetic commonalities between various bat species to determine what causes WNS susceptibility or resistance.

- 7
- A) NO CHANGE
 - B) exceeds
 - C) have exceeded
 - D) are exceeding

- 8
- A) NO CHANGE
 - B) As a result,
 - C) Moreover,
 - D) For instance,

While it is unlikely that affected species will recover quickly (due to their slow reproductive rates bats have one offspring, or pup, **9** annually). Several species of bats have exhibited resistance to the destructive powers of WNS. The Virginia big-eared bat population, for example, has not been significantly affected, which led scientists to an exciting discovery: a naturally occurring yeast on the bats' fur inhibits the growth of the fungus. This **10** disclosure offers a glimmer of hope in the battle against WNS. **11**

9

- A) NO CHANGE
- B) annually); and several
- C) annually), several
- D) annually) and several

10

- A) NO CHANGE
- B) development
- C) ramification
- D) repercussion

11

The writer wants an optimistic conclusion that emphasizes the importance of bats' recovery by referencing an idea included in the passage's opening paragraph. Which best accomplishes this goal?

- A) This devastating fungal disease could continue to spread, sickening bat populations in states west of Missouri.
- B) North American bat populations will continue to exhibit unusual winter behavior and perish due to WNS if scientists cannot find a way to curb its spread.
- C) With some bat populations already experiencing 90 percent declines, recovery from this disease will prevent them from extinction.
- D) The sooner the bat population can recover from this disease, the greater the ecological and agricultural benefit to all.