

Renewable Energy and the Natural World

Renewable Energy · Answer Key · 8 Questions

1. Which bird species is most frequently monitored for collision risks at modern wind farm sites?

- A) Golden Eagle**
- B) House Sparrow
- C) Peregrine Falcon
- D) Mallard Duck

2. How do underwater noise levels from offshore wind turbine foundations typically affect marine mammals like dolphins?

- A) They attract prey species
- B) They can mask communication sounds**
- C) They increase migration speed
- D) They have no measurable effect

3. What is a primary environmental benefit of using floating solar panels on irrigation reservoirs compared to land-based systems?

- A) They increase soil salinity
- B) They reduce water evaporation**
- C) They prevent fish spawning
- D) They emit methane gas

4. How does the construction of large-scale solar farms typically impact local ground-dwelling reptile populations?

- A) It increases their thermal range
- B) It causes habitat fragmentation**
- C) It forces them to hibernate longer
- D) It has no impact on their territory

5. Which type of renewable energy facility is known to sometimes interfere with the migratory paths of bats due to pressure changes near blades?

- A) Solar thermal plants
- B) Geothermal stations
- C) Wind turbines**
- D) Hydroelectric dams

6. What negative impact can traditional large-scale hydroelectric dams have on salmon populations?

A) Increase in water salinity

B) Blocking of upstream spawning migration

C) Excessive cooling of river water

D) Reduction in underwater oxygen

7. How can solar panels in deserts affect the local microclimate for flora?

A) They permanently freeze the sand

B) They increase ground humidity by providing shade

C) They prevent all plant growth

D) They reflect radiation onto plants causing fires

8. What is a common strategy used to make wind turbines safer for avian wildlife?

A) Painting blades bright red

B) Installing ultrasonic noise emitters

C) Painting one blade black to increase visibility

D) Reducing blade speed during daylight