Text A

A stronger-than-normal El Niño alarms scientists over Galápagos wildlife



The prediction that this season's El Niño phenomenon will be stronger than normal has alarmed the Ecuadorian scientific community, which has warned of its impact on the flora and fauna of the Galápagos Islands, home to the highest concentration of species not found elsewhere on Earth. The archipelago of more than 230 islands — of which only four are inhabited — is in the Pacific Ocean, 620 miles off Ecuador. The climatic phenomenon occurs periodically and is characterized by an increase in sea temperature and intense rainfall. Its strength is determined by comparing water temperature to the normal average. If it is 2 degrees Celsius above normal, it is considered "very strong." The sea temperature will be about 2.2 degrees Celsius above normal, according to the latest projection from the U.S. National Oceanic and Atmospheric Administration, which means that "the impact will be significant," said Franklin Ormaza, a professor and researcher at ESPOL.

Wildlife at risk

Animals and fish will be at risk because as the water temperature rises, "plankton, algae and smaller fish species, which are food for larger marine animals, practically disappear," Washington Tapia, director of Biodiversa Ecuador, a conservation organization, told The Associated Press. He specified that the species most at risk are the iconic Galápagos penguins, blue-footed boobies, petrels, flightless cormorants, albatrosses and even sea lions. Coral colonies could also be seriously affected, as could tuna fishing.

In the absence of food, "animal colonies stop reproducing," disperse in search of food and die of starvation in the process, said scientist Gustavo Jiménez of the Charles Darwin Foundation. If the phenomenon occurs with the expected magnitude, the archipelago's vertebrate population could decrease by at least 20% this year, Jiménez added. One of the most closely monitored species, the Galápagos penguin, serves as a marker of the impact of this climate phenomenon on the archipelago's fauna. According to data from the Charles Darwin Foundation, after the 1998 El Niño — one of the most powerful and destructive cycles — only 400 of the 1,300 existing Galápagos penguins remained.

Effects on the flora

If El Niño strikes with the expected force, the last three remaining Scalesia forests could be at risk of disappearing, scientist Heinke Jager of the Charles Darwin Foundation said. Opuntia cacti, which grow along the seashore, would also be threatened. These plants, found only in the Galápagos Islands, support various ecosystems of insects, birds and other smaller plants that are part of the archipelago's unique biodiversity.

Jager explained that "these species need human support" because the heavy rains brought by El Niño will cause the territory they occupy to be overrun by invasive plants, such as blackberries, which have shorter reproductive cycles. Therefore, they have organized a plan that includes the eradication of invasive plants, the collection of seeds and the creation of nurseries to conserve threatened species. The Ecuadorian government, foundations and nongovernmental organizations working in the archipelago are participating in the program.

The Galápagos Islands were declared a Natural World Heritage Site in 1978 for their unique animal and plant species, which served as the basis for the English scientist Charles Darwin to develop his theory of evolution.

Answer the following questions.

1. What makes the wildlife of the Galápagos Islands particularly unique?

2. Where are the Galápagos Islands located in relation to Ecuador?

3. How is the strength of El Niño determined?

4. What will happen to food sources of larger marine animals as sea temperatures increase?

5. What economic activity could be negatively affected by El Niño?

6. What role does the Galápagos penguin play in assessing the effects of El Niño on wildlife?

7. What could happen to the Scalesia forests if El Niño is as strong as predicted?

LIVEWORKSHEETS

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8. Where do the Opuntia cacti grow?

9. What measures have been planned to protect species threatened by invasive plants? (write only one)

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