

Freshwater Ecology

Description:

Introduction to the ecology of aquatic ecosystems of the Amazon river basin of Ecuador. Aquatic life: Amazon fish and reptiles, aquatic mammals (river otters, river dolphins, Amazon manatees).

The Amazon basin is the world's largest water shed with different types of ecosystems: black water rivers, white water rivers, Igapo and Varzea provide habitat for a high diversity of aquatic species, including the largest fish, the Paiche (*Arapaima gigas*), 4 different species of caimans, Anakondas, turtles, otters, the Amazon manatee (*Trichechus inunguis*) and the Amazon river dolphin (*Inia geoffrensis*).

In the course freshwater ecology in the Amazon, we will examine key physical, chemical and biological factors that influence inland waters such as lakes, streams and wetlands. we will learn about the different riversystems, understand environmental conditions of varzea and Igapo forests and their fauna. We will also address interactions between humans and water and discuss these challenges and opportunities in conservation and management.

With fieldtrips to the Tiputini river and we will have the opportunity to observe and study different riversystems and an amazon lake, understand the conservation issues, these systems face in the Antropocene.

Contents of the course:

- * Concepts of freshwater ecology
- * freshwater ecosystems of the Ecuadorian Amazon
- * Biodiversity of Amazon riversystems and lakes.
- * research techniques
- * Biology of amazon fish, aquatic reptiles and aquatic mammals,
- * Freshwater conservation and management.