

## Establishing causal links between aquatic biodiversity and ecosystem functioning: Status and research needs

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### Description

Aquatic ecosystems are ecosystems in and around water bodies, as opposed to terrestrial ecosystems. Aquatic ecosystems are made up of interdependent communities of organisms and their environments. The two main types of aquatic ecosystems are marine and freshwater ecosystems. An ecosystem is defined as a functional unit in which all living things interact with and maintain themselves within the environment. In the broadest sense, ecosystems can be classified as land/land ecosystems or aquatic/aquatic ecosystems. Many lives are undoubtedly supported by water. In addition, aquatic organisms can reproduce in the water. They also rely on water for food, shelter, reproduction and various other important functions. This particular article briefly describes the types of aquatic ecosystems and their importance. The definition of an aquatic ecosystem is that an organism is a water-based environment that interacts with both the physical and chemical characteristics of the environment. These creatures, which rely on a water-based environment for food, shelter, breeding, and other important activities, are called aquatic organisms. Water manages global ecosystem processes in water systems and plays an important role in connecting substances by moving substances between the atmosphere, lithosphere, and biosphere and causing chemical reactions. Water has unique physicochemical properties that reflect the quality of the body of water. The physicochemical properties of aquatic ecosystems determine how well they work and how long they can support life. Just as terrestrial ecosystem sediments provide homes for substrates, nutrients, and living aquatic resources, aquatic ecosystem sediments correspond to terrestrial ecosystem soils. Sediments are important catalysts in the environmental food cycle and the dynamics of both water qualities. Sediment quality has a direct or indirect effect on the functioning of aquatic ecosystems. Many physicochemical properties of sediments determine

its quality. Similarly, the biological mixture of the aquatic environment determines how well it works. In an aquatic environment, they serve as a trophic stage and an energy source. Fish play an important ecological role throughout the food web during the trophic stage. Aquatic ecosystems are defined as water-based habitats of ecosystems in which all species interact with the physical and chemical properties of the environment. Aquatic ecosystems play an important role in establishing a balance between the atmosphere, lithosphere and biosphere. Seas, lakes and rivers are examples of aquatic ecosystems. Environmental habitats are also an important part of such ecosystems. Water plays an important role in the lives of many organisms that depend on water to support food, shelter, reproduction, and a variety of other important functions. Marine ecosystem is the name given to a community of marine organisms. However, you can also define different types of marine ecosystems. For example, very deep on the ocean floor is a living community of flora and fauna that never sees light and draws energy from the sulphuric acid geysers that spring from the centre of the globe. Near the surface of the sun, there is a diverse ecosystem of whales, lizards, fish and algae that live in communities other than the deep-sea communities just described. Various seabirds can be found on the surface of the sea itself and in the air around it. Some of these birds dive below sea level, while others prefer to fly above sea level. Aquatic ecosystems play an important role in establishing a balance between the atmosphere, lithosphere and biosphere. Seas, lakes and rivers are examples of aquatic ecosystems. Environmental habitats are also an important part of such ecosystems. Water plays an important role in the lives of many organisms that depend on water to support food, shelter, reproduction, and a variety of other important functions. Marine ecosystem is the name given to a community of marine organisms. However, you can also define different types of marine ecosystems. For example, very deep on the ocean floor is a living community

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### **Conflict of Interest**

The author declares there is no conflict of interest in publishing this article.

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