

Freshwater Ecosystem

Ecosystems are of two main types such as terrestrial ecosystems and aquatic ecosystems. terrestrial ecosystems constitute the land masses which cover about 29% of the surface of the Earth. Some examples of terrestrial ecosystems are tundra, desert, alpine regions, rainforest etc., while the aquatic ecosystems are found in water environment that covers more than 71% of Earth's surface.

The notable aquatic ecosystems are ponds, lakes, rivers, bogs, canals, streams, wetlands, swamp, estuaries, and ocean, etc. The aquatic ecosystem provides the habitat for various animals, plants, and microbes that are water dependents.

Types of Freshwater Aquatic Ecosystem

There are different types of Freshwater aquatic ecosystems:

Freshwater Ecosystem

Freshwater ecosystems include lakes, ponds, wetlands, streams, swamp, rivers, bog, and temporary pools. Freshwater ecosystems cover about 0.8% of the earth surface area. These provide habitat for 41% of the world's fish species.

The freshwater ecosystems are of the following three basic types:

1. Lentic
2. Lotic and
3. Wetlands

Lentic Ecosystems

Lentic ecosystem has standing water body. They are ponds, lakes, basin marshes etc. Among them, lakes have deep waters influenced by light while ponds support a wide range of water plants due to the abundance of more light. Besides plants,

algae, shrimps, crabs, and amphibians are some of the important biotic factors of this ecosystem.

Lotic Ecosystems

These are rapidly flowing water bodies with unidirectional water movements. They have high concentrations of DO (dissolved oxygen). These support wide range of biodiversity. These ecosystems include rivers, streams, spring, etc.

numerous species such as mayflies, beetles, stoneflies and different species of fishes such as eel, trout, minnow, and different anadromous fish, etc. find their habitat here. Presently, these ecosystems are degraded by means of various environmental threats such as over extraction of water, dams, pollution and various exotic species.

Wetlands

Wetlands are the water bodies containing large varieties of organisms. It is the most well productive natural water bodies and is dominated by vascular plant species due to its high productivity. In this ecosystem, animal living in this ecosystem include invertebrates - damselflies, dragonflies, various birds' species and lots of fishes, mammals, etc. Wetlands are of main four types:

- I. Marsh
- II. Swamps
- III. Bog And
- IV. Fen

Wet land provides benefit to human being by filtering water, and helps in protecting from storm and controlling flood.