

Ecosystems

Consider the Coral Reefs of Ras Mohamed. They grow only on the beach or shallow bottoms and nowhere else (corals don't float offshore and won't grow on beach sand out of water). Loads of species of fish and crustaceans (common name for lobsters, shrimps, etc)



live on the corals and call it their habitat. They just cannot leave it because there's where all the fun and life and food for them. But ecosystems don't have to be marine only (ie, underwater) Ras Mohamed boasts other ecosystems as well: desert ones.

The amazing Zabargad island in the Egyptian Red Sea has its own coral reef ecosystem on its beach. Brothers islands have another ecosystem of coral reefs too. All Coral Reefs ecosystems are almost identical but those of Florida Keys (USA) might differ in some species from those of ours in Egypt.

Ecosystems could be as small as elGalt elAzraq permanent pool of water (approx. 20x15m and 9m deep) high up the desert mountains of Sinai with its own plants, butterflies, algae, etc that can't live outside this tiny pool in this vast highland desert. They could be also as large as the forest that is covering a large piece of a continent (like Latin American rainforests). Ecosystems make the basic ecological unit of Nature.

Ecosystem provides habitat for a community of plants and animals and offering food and water and other raw materials for their livelihood. Their borders are drawn by climate, altitude, water and soil characteristics, in addition to other conditions of the environment.

Back to the example of the Coral Reef. The thousands of creatures living on the Coral Reefs (including the Corals themselves who've been classified as part of the animal kingdom) live in a complex food chain. Those organisms (scientific word for creatures) share the same area and feed on each other or share same food (that what the diagrams of food chains usually show as we'll see later in this glossary). In this specific ecosystem of Coral Reefs, the health of the Corals population is

important. If damaged, the complex balance might be permanently altered and some species might not live there anymore (local extinction) affecting the richness of the ecosystem (number of species living in one ecosystem is called sometimes biodiversity).

Similar ecosystems should have same species living in them. But that doesn't always happen. Species of some fish living in Coral Reefs ecosystems of Marsa Alam might not be able to travel all the way in the open sea to Zabargad island's ecosystems. This 'immigration' of species to new ecosystems is called Dispersion and is controlled by many aspects. It will be discussed as another term in the SaharaSafaris glossary.

Ecosystems also might change from one ecosystem to another like a forest after a fire turns into sort of Savanna. This is controlled by many factors related to the process of Succession that will be discussed in yet another place in SaharaSafaris glossary.

Other related ecological terms are Biomes, Community, and Habitat

http://www.encyclopedia.com/html/section/ecology_theecosystem.asp

http://touregypt.net/parks/coral_reef.htm

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DSICLAIMER: this is not the proper academic definition, just my interpretation to my friends and Safarists of SaharaSafaris. Please email me any corrections or comments.