**Chapter D - Ecology**

Chapter 2 Interactions with Ecosystems

* 2.1 Groups of living things interact within ecosystems,
	+ Members of the same spices form a population with in a habitat.
	+ Each species has a distinct role with in a habitat. This is its niche.
	+ Species -
		- A group of living things that are so closely related that they can breed with one another and produce offspring that can breed as well.
	+ Population –
		- A group of organisms of the same species that live in the same area; for example, a desert will have populations of different species of lizards and cactus plants.
	+ Habitat –
		- The natural environment in which a living thing gets all that it needs to live; examples include a desert, a coral reef, and a freshwater lake
	+ Niche –
		- The role a living thing plays in its habitat; a plant is a food producer, whereas an insect both consumes food as well as provides food for other consumers.
	+ Community –
		- All the populations that live and interact with each other in a particular place; the community can live in a place as small as a pond or a park, or it can live in a place as large as a rain forest or the ocean.
* 2.2 – Organisms can interact in different ways.
	+ Predator –
		- An animal that feeds on other animals; an owl is a predator that feeds on small animals such as mice.
	+ Prey –
		- An animal that is eaten by another animal; a mouse is prey that is eaten by other animals, such has owls and snakes.
	+ Competition –
		- The struggle between two or more living things that depend on the same limited resource
	+ Cooperation –
		- A term used to describe an interaction between two or more living things in which they are said to work together.
	+ Symbiosis –
		- A relationship between individuals from two different species that live closely together.
	+ Mutualism –
		- A relationship between two species in which both benefit; a type of symbiosis.
	+ Commensalism –
		- A relationship between two species in which one species benefits without harming the other; a type of symbiosis.
	+ Parasitism –
		- A relationship between two species in which one species is harmed while the other benefits; a type of symbiosis.
* 2.3 Ecosystems are always changing
	+ Primary Succession -
		- In a barren area, a new community is established with pioneer species, like mosses, that do well with little or no soil. Mosses eventually give way to coniferous trees.
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	+ Secondary Succession –
		- When a disturbance damages a community but soil remains, the community gets reestablished from seeds and roots left behind. Grasses grow, then small shrubs, and eventually trees.
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	+ Limiting Factor –
		- A factor or condition that prevents the continuing growth of a population in an ecosystem.
	+ Carrying Capacity –
		- The maximum size that a population can reach in an ecosystem.
	+ Succession –
		- A natural process that involves a gradual change in the plant and animal communities that live in an area.
	+ Pioneer Species –
		- The first species to move into a lifeless environment; plants like mosses are typical pioneer species on land.