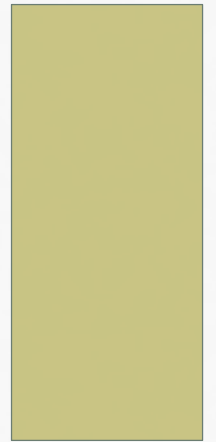# NOTES: CHAPTER 14

INTERACTIONS IN ECOSYSTEMS

14.1 HABITAT AND NICHE

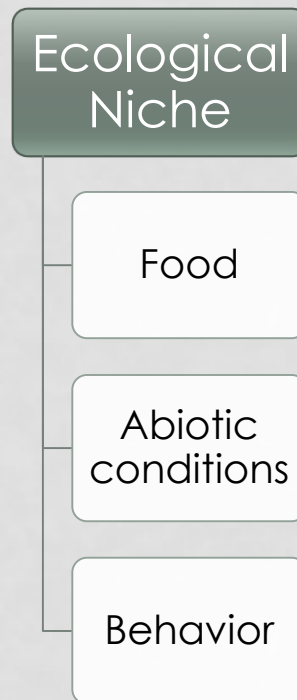- How does a habitat differ from a niche?

HABITAT

- *Where* a species lives. All of the biotic and abiotic factors in the area where an organism lives.

ECOLOGICAL NICHE

- *How* a species lives within a habitat. All of the physical, chemical, and biological factors that a species needs to survive, stay healthy, and reproduce.

ECOLOGICAL NICHE

- *How* a species lives within a habitat. All of the physical, chemical, and biological factors that a species needs to survive, stay healthy, and reproduce.

Ecological Niche

Food

Abiotic conditions

Behavior

COMPETITIVE EXCLUSION

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- When two species are competing for the same resource, one species will be better suited to the niche, and the other will be pushed into a new niche or become extinct.

ECOLOGICAL EQUIVALENTS

ECOLOGICAL EQUIVALENTS

- Species that occupy similar niches but live in different geographical regions.

14.2 COMMUNITY INTERACTIONS

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- What are two important ways in which organisms interact?

COMPETITION

- When two organisms fight for the same limited resources.

Intraspecies competition

Interspecies competition

PREDATION

- When one organism captures and feeds on another organism.

SYMBIOSIS IS A CLOSE RELATIONSHIP BETWEEN SPECIES

- Symbiosis- A close ecological relationship between two or more organisms of different species that live in direct contact with one another.

MUTUALISM (++)

- An interspecies relationship in which both organisms benefit from one another.

COMMENSALISM (+Ø)

- A relationship in which one organism receives an ecological benefit from another, while the other neither benefits nor is harmed.

PARASITISM (+-)

- A relationship similar to predation in that one organism benefits while the other is harmed. Unlike a predator who quickly kills and consumes its prey, a parasite benefits by keeping its host alive for days or even yea