ANIMAL ECOLOGY

CONTENTS

- History Background
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- Hesse R. from Germany in 1924 published a reference in animal ecology called Ecological Animal Geography.

- Charles Elton from England published a reference in animal ecology called Elton's Animal Ecology (1927).

- Few Attempted before the above trials had been done in USA by Charles Adams and Victor Shelford in 1913 who published a the first textbook in animal ecology which called A Guide to the Study the Animal Ecology.

IN EUROP

- Karl Mobius in 1877 has developed the concept of the community in his assay An Oyster Bank is a Biocenose. He described the the community which dominated by one species, however, it was real complex community of many independent organisms and he offered the word Biocenose (Life Have something in common)
- The animal ecological behaviour have been given a great attention started with Darwin Wallace and other such as Romanes who described animal activities.
- After 1900s the
- Behavioural approach has developed in four perspectives:
- 1- study the mechanisms, perceptual and physiology of animal behaviour.
- 2- Study the function and evolution of behaviour (comparative physiology and Psychology)
- 3- Behavioural ecology: after the world war. (interaction between the living organisms and between the living and non-living environmental factors. And the natural Selection
- 4- Socio-biology which concentrating on field observation of social group of animals.

IMPORTANT DEFINITIONS

- Ecosystem is a community of living organisms in conjunction with the nonliving components of their environment (things like air, water and mineral soil), interacting as a system.[2] These biotic and abiotic components are regarded as linked together through nutrient cycles and energy flows.
- Habitat: Habitats are the resources and conditions present in an area that produce occupancy, including survival and reproduction, by a given organism.
- Habitat use is the way an animal uses the physical and biological resources in a habitat.
- Habitat selection is a hierarchical process involving a series of innate and learned behavioral decisions made by an animal about what habitat it would use at different scales of the environment…….. (proximate factors for site suitability vegetation covers , while the Ultimate factors is the cues for the reproductive and survival as well as the persistence such foraging ability and shelter.)

- Habitat preference is the consequence of habitat selection, resulting in the disproportional use of some resources over others.
- Habitat availability is the accessibility and procurability of physical and biological components of a habitat by animals.
- Habitat quality refers to the ability of the environment to provide conditions appropriate for individual and population persistence
- Critical habitat is primarily used as a legal term describing the physical or biological features essential to the conservation of a species, which may require special management consideration or protection.
- Biosphere is known as the ecosphere, is the worldwide sum of all ecosystems.

ECOSYSTEM COMPONENTS

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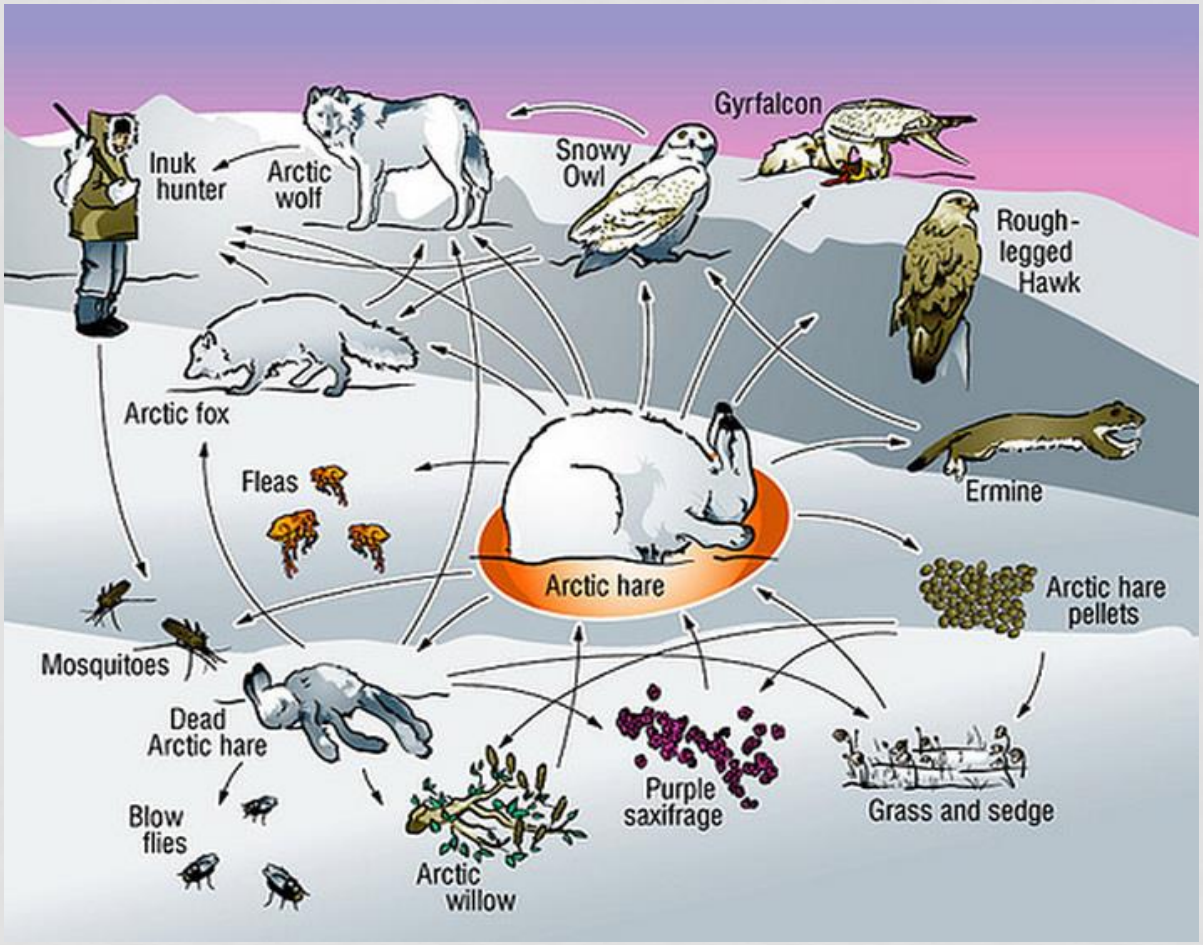
- 1- Biotic



ECOSYSTEM COMPONENTS

- 2- Abiotic