

Course- WL- 707 Terrestrial Wildlife
Management
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Management

4th Lecture

Wildlife and Rangeland

Wildlife:

Wildlife traditionally refers to undomesticated animal species, but has come to include all organisms that grow or live wild in an area without being introduced by humans. Wildlife can be found in all ecosystems. This includes such animals as domesticated cats, dogs, mice, and gerbils.

Rangeland:

Also called Range, any extensive area of land that is occupied by native herbaceous or shrubby vegetation which is grazed by domestic or wild herbivores. The vegetation of ranges may include tallgrass prairies, steppes (shortgrass prairies), desert shrub lands, shrub woodlands, savannas, chaparrals, and tundra's.

Rangelands are distinguished from pastureland by the presence on them of native vegetation, rather than of plants established by human societies, and by their management principally through the control of the number of animals grazing on them, as opposed to the more intensive agricultural practices of seeding, irrigation, and the use of fertilizers.

Grazing:

It is a method of animal husbandry whereby domestic livestock are used to convert grass and other forage into meat, milk, wool and other products, often on land unsuitable for arable farming.

While these lands may appear barren and useless at first glance, there are a number of valuable uses of rangeland. Rangeland is largely used for grazing livestock. The grasses and forage plants that grow in these climates are well-suited for grazing, and the majority of cattle ranching that occurs in the United States and world-wide takes place on rangeland. Therefore, these lands are economically important to many regions of the world. Because vegetation can be sparse and an area can be overgrazed if it is too small, cattle ranches are often very large and may consist of hundreds, if not thousands of acres.

Rangelands also provide habitats for wildlife. Well-established habitats boost the biodiversity of a region and bring stability to the ecosystem; and the wildlife supported by the rangeland ecosystem can be hunted for food.

Causes of Overgrazing

1. Lack of proper animal/wildlife management

The lack of proper animal and wildlife feeding management on the available pasture is the leading cause of overgrazing. From the definition, overgrazing arises as a result of having too many animals grazing on a piece of land without proper control of the grazing activity of the animals. The failure to rotate animals in harmony with pasture growth is what constitutes overgrazing.

2. Loss of valuable species

The natural composition of plant population and their regeneration capacity is significantly affected by overgrazing. The original pasture crops are composed of high quality pastures and herbs with great nutritional value. When animals intensively graze on such pastures, even the root stocks which contain the reserve food or regeneration capacity get ruined.

3. Death of people and livestock

The long term effects of overgrazing are food shortage which can make people and cattle die of starvation. Without sufficient pasture for livestock grazing, cattle lack the necessary nutrients for survival. The nutrient deficiencies make the animals unable to gain weight appropriate to their productive stage and life which lowers their chances of survival.

4. Improper land use

Land use significantly determines the productive condition of the land and soil fertility. Hence, improper land use such as logging activities, slash and burn farming techniques, mining, excessive and unplanned urban sprawl, and land pollution lessen the overall land available for pasture.

5. Production from the wild

It comprises protected stocks in reserved lands and stocks in unprotected areas. Depending on the population densities and prevailing ecological and political conditions; stocks in protected areas may be culled for consumptive use, while stocks in lands outside protected areas are basically communal property, where there may be little or no control on exploitation, or control may be exercised at the local level either under governmental authority or traditional institutions.

6. Game ranching:

It comprises the maintenance of wild animals in defined areas delineated by fences. It is a form of husbandry similar to cattle ranching, the animals are managed on natural vegetation although the habitat may be manipulated to improve production efficiency. The animals on the ranch are the property of the ranch owner for as long as they remain on his ranch. Animals on ranches may be exploited for meat but most ranches aim for the added value of sport/trophy hunting, live animal sales and ecotourism.

7. Game farming

It involves the confinement of wild animal species in a semi-domestic state where they are fed and grown to required weights and exploited for consumptive use.. According to Eltrigham (1984), wild animal species that are farmed are no longer truly wild and represent an intermediate stage between wild and domesticated species. Common animals currently farmed include the ostrich, crocodile and various duiker species.

8. Wild animal domestication

Domestication refers to the process which results in genetic adaptation of wild animals to the extent that the animal breeds readily in captivity and its owner has some control over its reproduction. The process results in detectable differences between the domestic species and their wild progenitors. By this definition, the fact that a wild animal species is tamed or is raised

like conventional livestock does not make the animal domesticated although the process might eventually lead to domestication.