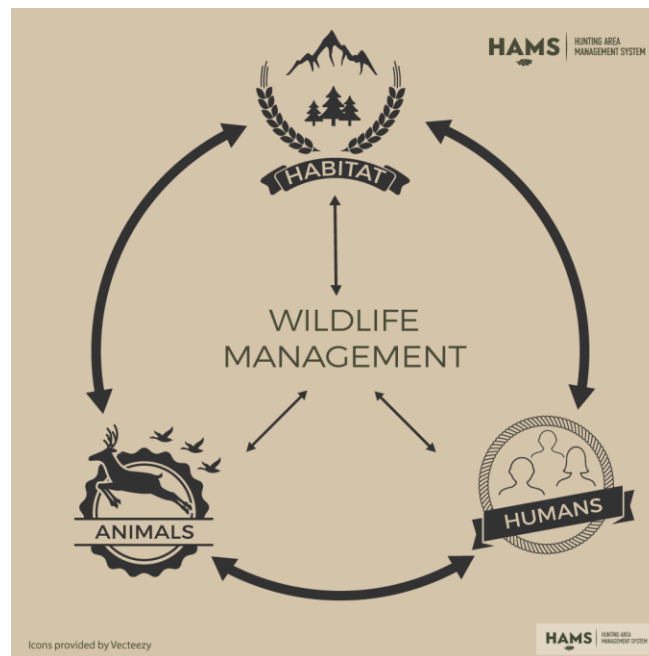


Wildlife Management

Wildlife management is the art and science of reaching goals by manipulating and/or maintaining wildlife habitats and populations. Wildlife management aims to halt the loss in the Earth's biodiversity by taking into consideration ecological principles such as carrying capacity, disturbance and succession, and environmental conditions such as physical geography, pedology and hydrology. Most wildlife biologists are concerned with the conservation and improvement of habitats; although re-wilding is increasingly being undertaken. Techniques can include reforestation, pest control, nitrification and de-nitrification, irrigation, coppicing and hedge laying.



"Wildlife management triad"

There are two general types of wildlife management:

Manipulative management acts on a population, either changing its numbers by direct means or influencing numbers by the indirect means of altering food supply, habitat, density of predators, or prevalence of disease. This is

appropriate when a population is to be harvested, or when it slides to an unacceptably low density or increases to an unacceptably high level. Such densities are inevitably the subjective view of the land owner, and may be disputed by animal welfare interests.

Custodial management is preventive or protective. The aim is to minimize external influences on the population and its habitat. It is appropriate in a national park where one of the stated goals is to protect ecological processes. It is also appropriate for conservation of a threatened species where the threat is of external origin rather than being intrinsic to the system. Feeding of animals by visitors is generally discouraged.

Fisheries Management

Fisheries management is 'the integrated process of information gathering, analysis, planning, consultation, decision-making, allocation of resources and formulation and implementation, with enforcement as necessary, of regulation or rules which govern fisheries activities in order to ensure the continued productivity of the resources and accomplishment of other fisheries objectives'. FAO, 1997)

Goals

- to maintain the target species at or above the levels necessary to ensure their continued productivity (biological);
- to minimize the impacts of fishing on the physical environment and on non-target (bycatch), associated and dependent species (ecological);
- to maximize the net incomes of the participating fishers (economic); and
- to maximize employment opportunities for those dependent on the fishery for their livelihoods (social).

Technical means may include: (Technical goals)

- prohibiting devices such as bows and arrows, and spears, or firearms
- prohibiting nets
- setting minimum mesh sizes

- limiting the average potential catch of a vessel in the fleet (vessel and crew - size, gear, electronic gear and other physical "inputs").
- prohibiting bait
- snagging
- limits on fish traps
- limiting the number of poles or lines per fisherman
- restricting the number of simultaneous fishing vessels
- limiting a vessel's average operational intensity per unit time at sea
- Catch quotas
- Elderly maternal fish



Forest Management

Forest management is the process of planning and implementing practices for the stewardship and use of forests to meet specific environmental, economic, social and cultural objectives. It deals with the administrative, economic, legal, social, technical and scientific aspects of managing natural and planted forests.

Strategies of Forest Management

Timber Harvesting

This practice enhances the health of the woodland and wildlife and for industrial and economic purposes, such as paper production or the organization of tourist routes. A forest manager harvests wood from a forest responsibly, ensuring that the

act of cutting down trees avoids negatively impacting the surrounding area. For example, they may only cut down mature trees that are nearing death.

Thinning trees

Thinning is when a forest manager removes trees or other plant life to promote the growth of naturally occurring species in an ecosystem, instead of invasive species.

Prescribed Burning

This forest management practice is essential as it prevents fire hazards. Moreover, the prescribed burning enables the growth of plants that animals feed on and decreases the disease and insect infestation danger. Also, this method encourages the growth of some trees, such as longleaf pine.

Reforestation

Woodland is a renewable resource, so the process of growing, cutting down, and reforesting can be an endless cycle.

Managing wildlife

When conducting forest management practices, foresters also consider the existing wildlife population in an ecosystem. They avoid taking actions that harm existing wildlife and may establish strategies that help promote the health of an endangered species. For example, thinning a section of trees creates available resources and spaces for deer and birds to live and feed.

