

LEARNING OUTCOMES: WILDLIFE (1/2)

Birds, Mammals, Amphibians and Reptiles

Identify wildlife species common to Nova Scotia and the Maritimes using field guides, mounted specimens, skins/pelts, skulls, silhouettes, decoys, wings, scats, tracks, sounds or other common signs.

Define habitat and know the habitat requirements for wildlife and the factors that affect wildlife sustainability. Explain major causes of habitat loss in Nova Scotia.

Wildlife Ecology

Identify basic needs required by wildlife.

Describe wildlife adaptations and their significance (hibernation, migration, colouration, etc.). Identify general food habits (herbivore, omnivore, carnivore), habitats (terrestrial, aquatic) and habits (diurnal, nocturnal) using skull morphology and/or teeth. Identify and explain the advantages of physiological and/or behavioural adaptation of wildlife to their environment.

Know the difference between an ecosystem, community and population. Understand population dynamics such as birth, mortality, age-structure, sex ratio and mating systems. Understand the impact of limiting and decimating factors of common wildlife species on wildlife management. Understand the relationship between predator and prey.

Define succession and explain how a change in climate, topography or land use might modify the process of succession.

Define biodiversity and terminology (limited factor, territory, home range, forest fragmentation, etc.). Explain why biodiversity is important to people and wildlife. Understand the importance of the three levels of biodiversity (genetic, species and ecosystem/community) and the implications of loss at each level. Explain the major causes of biodiversity loss in NS.

Describe food chains, food webs and trophic levels with examples from NS.



LEARNING OUTCOMES: WILDLIFE (2/2)

Conservation and Wildlife Management

Understand the concept of carrying capacity and why it is the main factor affecting population size. Relate the concept of carrying capacity to a wildlife species native to NS. Understand the difference between biological carrying capacity and cultural carrying capacity.

Explain common wildlife management practices and methods that are being used to manage and improve wildlife habitat in NS. Understand the role hunters and trappers play in wildlife management. How can you help in the protection, conservation, management and enhancing of NS wildlife populations?

Issues Involving Wildlife and Society

Understand how non-native, invasive species threaten our environment and the biodiversity of many wildlife species. Understand the impact that non-native, invasive plants can have on wildlife habitat and native wildlife species. Be familiar with species that are non-native, invasive species to Nova Scotia.

Understand the impact that land-use decisions can have on wildlife populations. Understand that wildlife resources are under constant pressure caused by human population growth, environmental degradation and habitat reduction.

Understand the various status of 'at risk' species (vulnerable, threatened, endangered, extirpated, extinct) and the factors that are affecting these species. Understand species reintroduction. Explain common causes that lead to depleted populations and describe measures being taken to help their recovery. Know the organization and agencies responsible for listing species as 'at risk' on global, national and provincial levels.

Understand the impacts, both positive and negative, of people on biodiversity. Negative impacts could be fragmentation of habitat due to development (roads, buildings, etc.), disturbance of wildlife nesting seasons, destruction of habitat due to vehicles, motor vehicle collisions, trash interfering with wildlife health (food intake), pesticides in the environment. Positive impacts could be enhancement of wildlife habitat in order to attract wildlife viewing, increased knowledge through visiting wildlife and natural areas, funding for wildlife management.

Describe white nose syndrome and how is it affecting bats. What measures are being taken to discover outbreaks and prevent spread? Describe brainworm and how is it affecting the mainland moose population.

