

# LEARNING OUTCOMES: FORESTRY (1/2)

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## Tree Physiology & Identification

Identify common tree species without a key, know how to use a key for unusual & less common species in the Acadian Forest Region.

Know the characteristics (shade tolerance, longevity, site, common uses) of the tree species native to Nova Scotia.

Know the parts and tissues of a tree and be able to explain the growth processes as they relate to the life cycle, including photosynthesis and respiration.

## Forest Ecology

Understand the structure of a forest (canopy, understory, ground layer and crown classes).

Understand forest ecology concepts and abiotic and biotic factors affecting them including the relationship between soil and forest types, tree communities, forest succession and biodiversity.

## Sustainably Managed Forests

Understand what silviculture is and the various treatments used, both in even-aged and uneven-aged management (thinning, clear cutting, shelter wood, selection cutting, pre-commercial thinning, site preparation and planting).

Know how to use forestry tools and equipment in order to measure tree diameter, height and basal area. Be able to examine growth rings to determine tree age and tree history (periods of drought, growth, scarring from fire).

Be able to interpret macro-features from an aerial photograph.

Understand how social, economic and environmental factors influence forest management decisions and be able to address current forestry issues from different perspectives (ie. Clear cutting vs old growth, prescribed burns in protected areas), and know the provincial regulations pertaining to wildlife habitat and watercourse protection.



# LEARNING OUTCOMES: FORESTRY (2/2)

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## Value of the Forests

Understand the importance and value of trees in an urban and community setting and what factors affect their health and survival.

Understand the economic value of forests and their importance to society including biodiversity, biomass, carbon sequestration, economic benefits, non-timber forests products, and why trees and forests are important to human health, recreation, wildlife and watershed quality.

Understand the economic importance of the forest industry to the provincial, national and international economies, and identify the main types of forest Products produced in the Maritimes.

