

NWT LAND COVER TYPES

WHAT IS FOREST?

Forests are complex ecosystems comprised of many land cover types including trees, shrubs and wetlands. Forested land cover is defined as having > 10% tree crown closure.

WHAT IS TREELINE?

The limit beyond which trees cannot grow, often determined by altitude in mountainous areas or high latitude in the subarctic. Permafrost in the soil can prevent trees from growing their roots deep enough for the necessary structural support and cold temperatures can result in internal freezing of the trees, killing them. The treeline is not a distinct line because unique micro-sites, such as gullies and south facing slopes offer conditions on which trees can establish and grow beyond the normal northern limit.

Map Elements

- Community
- All-Weather Road
- Winter Road
- Territory/Province Boundary
- Treeline
- EOSD Land Cover Classes
- Water
- Snow/Ice
- Rock/Rubble
- Exposed/Barren Land
- Bryoids
- Shrub Tall
- Shrub Low
- Wetland - Treed
- Wetland - Shrub
- Wetland - Herb
- Herbs
- Coniferous - Dense
- Coniferous - Open
- Coniferous - Sparse
- Broadleaf - Dense
- Broadleaf - Open
- Broadleaf - Sparse
- Mixedwood - Dense
- Mixedwood - Open
- Mixedwood - Sparse

1995 Canada Land Cover Classes

- High Density Evergreen Needleleaf Forest
- Medium Density Southern Evergreen Needleleaf Forest
- Medium Density Northern Evergreen Needleleaf Forest
- Low Density Southern Evergreen Needleleaf Forest
- Low Density Northern Evergreen Needleleaf Forest
- Deciduous Broadleaf Forest
- Mixed Needleleaf Forest
- Mixed Intermediate Uniform Forest
- Mixed Intermediate Heterogenous Forest
- Mixed Broadleaved Forest
- Burns with Low Green Vegetation Cover
- Burns with Green Vegetation Cover
- Transition Treed Shrubland
- High Density Wetland/Shrubland
- Medium Density Wetland/Shrubland
- Grassland
- Lichen Dominated Barren Land
- Shrub/Lichen Dominated Barren Land
- Heather and Herb Dominated Treeless Barren Land
- Low Vegetation Cover Treeless Barren Land
- Very Low Vegetation Cover Treeless Barren Land
- Bare Soil and Rock Dominated Treeless Barren Land
- High Biomass Cropland
- Medium Biomass Cropland
- Low Biomass Cropland
- Cropland-Woodland Mosaic
- Woodland-Cropland Mosaic
- Snow/Ice

General Land Areas

NWT Including Arctic Islands: land/water = 135Mha; land only = 114Mha

NWT Mainland: land/water = 114Mha; land only = 94Mha

NWT Mainland Below Treeline = land/water = 97Mha; land only = 80Mha

EOSD Code Description	Area (ha)	Area (Mha)	% Total Area
No Data	824.625	0.00	0.00
Cloud	2243164.813	2.24	2.30
Shadow	821735.8125	0.82	0.84
Water	17052363.38	17.05	17.52
Snow/Ice	1530079.875	1.53	1.57
Rock/Rubble	2223709.063	2.22	2.28
Exposed/Barren Land	7485270.125	7.49	7.69
Bryoids	4078627.5	4.08	4.19
Shrub Tall	1542993.5	1.54	1.59
Shrub Low	12804516.38	12.80	13.16
Wetland - Treed	3908987.375	3.91	4.02
Wetland - Shrub	3460950.25	3.46	3.56
Wetland - Herb	2877636.875	2.88	2.96
Herbs	1525647.188	1.53	1.57
Coniferous - Dense	4879592.875	4.88	5.01
Coniferous - Open	16196239.69	16.20	16.64
Coniferous - Sparse	8218090.125	8.22	8.44
Broadleaf - Dense	1149360.25	1.15	1.18
Broadleaf - Open	1551682.563	1.55	1.59
Broadleaf - Sparse	493158.1875	0.49	0.51
Mixedwood - Dense	697959.375	0.70	0.72
Mixedwood - Open	2371850.5	2.37	2.44
Mixedwood - Sparse	206767	0.21	0.21
Summary Statistics	(Mha)	97.32	
Non-Vegetated	31.36		
Vegetated Non-Forested	26.29		
Vegetated Forested	39.67		



Forest Resources, GNWT/ENR, Hay River, (867-874-2089)
March 23, 2011
Projection: Lambert Conformal Conic
Projection Parameters: 62° 70' 112.0
Data Sources: Earth Observation for Sustainable Development (EOSD)
Land Cover Classification (100m resolution - Landsat TM2 & TM3)
CFS/CORS Land Cover of Canada (100m resolution - NOAA AVHRR 1995)
GNWT, NRCAN, Water Survey of Canada
Magnitude Declaration calculated for Yellowknife NT
Treeline represents the northern boundaries of the NWT Ecological Land Classification
Level 2 Ecoregions: Taiga Plains, Taiga Shield, Tundra Cordillera