

ASF Planting Standards (January 1, 2026)

Technical Standards

Acceptable planting stock:

1. At least 10cm in height
2. One tree per plug
3. Shows no mechanical damage to stem or root plug
4. Free of diseases
5. Root plugs are well watered (squeezing plug wrings water out)

Acceptably planted trees:

1. Tree must be planted near vertical (no more than 15 degrees from the vertical position)
2. >50% of root plug in direct contact with mineral soil (not shallow or duff only)
3. Plug must be tight (not loose – no air pockets, lack of soil contact)
4. Plug must be covered (not shallow/exposed to the air above)
5. The stem of the seedling must not be buried in mineral soil (too deep)
6. No mechanical damage to the stem or root plug from planting technique
7. Each planted tree must be a minimum of 50% the prescribed spacing from the next planted tree (i.e., if the prescribed spacing is 2.4m x 2.4m, a planted tree that is 1.2m or less from another planted tree will be tallied as improperly planted).

Acceptable microsites (disc trencher prepared areas):

1. Hinge is preferred location.
2. Not in a depression (bottom of trench)
3. Top of flipped portion is 2nd choice
4. Undisturbed areas can (and should) be used to ensure stocking and density if other microsites are unavailable if the tree can be planted to 'Acceptable Planted Trees' standard.

Acceptable microsites (other site preparation methods and non-site prepared sites):

1. Not in a depression
2. Not in bare mineral soil
3. Undisturbed areas can (and should) be planted to ensure stocking and density if other microsites are unavailable if the tree can be planted to 'Acceptable Planted Trees' standard.

Preferred Reforestation Species Recommendations by Ecosite (Refer to Nova Scotia Forest Ecosystem Classification Field Guide and Technical Guide for assistance in identifying ecosites).

Acadian zonal ecosites (AC9+, AC10, AC11, AC13, AC14) – These are nutrient medium to rich upland Acadian sites. The preferred species are RS, WS, and NS.

Acadian azonal (edaphic) ecosites (AC9-, AC6, AC7) – These are nutrient poorer upland Acadian sites. The preferred species are BS, WP, JP, RP, and TL.

Maritime Boreal zonal ecosites (MB5, MB6, MB8, MB9) – These are nutrient medium to rich upland Maritime Boreal sites, generally located in Ecoregion 800 (Atlantic Coastal) and Ecodistrict 210 (Cape Breton Highlands). The preferred species WS.

Maritime Boreal azonal (edaphic) ecosites (MB2+, MB3+) – These are nutrient poorer upland Maritime Boreal sites, generally located in Ecoregion 800 (Atlantic Coastal) and Ecodistrict 210 (Cape Breton Highlands). The preferred species is BS.

Poor to very poorly drained sites and sites with poor to very poor nutrient availability are not eligible for planting.

Spacing and stocking requirements by site type and treatment

≥LC5(SWD) (5m³/ha/year) – Nutrient medium to rich: Site prepared areas

1. Planting stock density: 1801-2000 trees/ha
2. Total Stocking ≥ 85% with no more than 10% acceptable natural softwood replacements

≥LC5(SWD) (5m³/ha/year) - Nutrient medium to rich: Non-site prepared areas

1. Planting stock density: 901-2000 trees/ha, depending on stocking of acceptable natural regeneration
2. Total Stocking ≥ 85% (planted + acceptable natural softwood)

LC4(SWD) (4.0-4.9m³/ha/year) - Nutrient poor to medium: Non-site prepared areas only

1. Sites are not eligible for site preparation.
2. Planting stock density: 901-1800 trees/ha, depending on stocking of acceptable natural regeneration
3. Total Stocking ≥ 85% (planted + acceptable natural softwood).

<LC4(SWD) - Nutrient very poor : Not eligible for full-planting or fill-planting.

Density vs. stocking

Density is an absolute number, based on the number of seedlings planted with a defined area (usually expressed as trees / hectare (i.e., 1736 trees/ha)).

Stocking is a relative number, based on how uniformly the seedlings are distributed over a defined area (usually expressed as a percentage of area occupied to a prescribed density or spacing standard (i.e., 85% stocking at 2.4m x 2.4m spacing (1736 trees/ha)).

Note: These are very different measurements. For example, it is possible to plant 1736 trees/ha and be 100% stocked, or 50% stocked, or any other percent stocking depending on how evenly distributed the seedlings have been planted. To simply say that 1736 trees/ha were properly planted does not automatically imply that it is 100% stocked. Obstacles such as brush piles or other issues creating non-plantable microsites, or missed areas have potentially significant impacts on overall stocking.

Pre-planting stock maintenance requirements and contractors' responsibilities

Contractor responsibilities:

1. Arrange for timely tree delivery per nursery requirements for lead-time, required labour to help unload truck, expectations of daily stock usage, etc.
2. Ensure proper species for sites per ASF Preferred Reforestation Species Recommendations.
3. Maintain adequate tree condition on site prior to planting. This may include adequate watering and/or using shade tarps to prevent seedling dehydration and are protected from frost prior to planting.
Notes: a) Placing trees in water-filled ditches is not an acceptable means of watering trees.
b) A well-watered tree will show water dripping out of your hand when the root plug is squeezed.
4. Seedlings must not be left unplanted in planter tree bags for more than overnight.
5. Unplanted seedlings in trays, boxes, or other containers may not be left unattended within the planting area for more than overnight. They must remain roadside or a location where they can be watered and maintained for extended periods prior to planting.
6. Empty trays, boxes or other seedling containers must be removed from the site and landing.