INTERFOR

Adams Lake Division – 2021 SPRING Planting Program

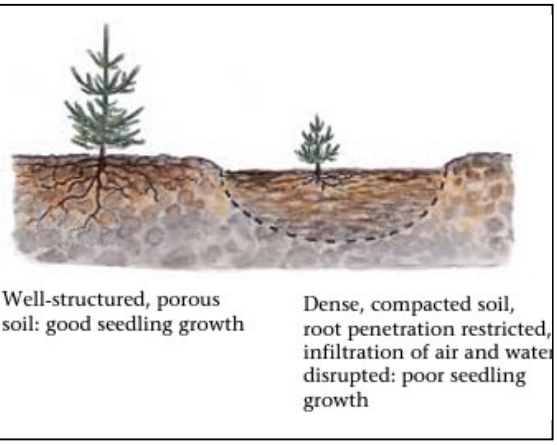
Planting Objectives:
To maximize seedling performance and survival.

Strategies to achieve this objective:
Select the best microsites for the seedling based on the best balance of:
1. Protection (from cows, snow creep,…)
2. Soil Moisture (available water)
   -reduced grass comp
3. Nutrients (food)
4. Oxygen (aeration)

This balance is different for different spp.

Fertilizer:
- Make sure you wear **gloves**! (nitrile is best)
- Can be in same hole, needs to be ~1cm from plug, **close but not touching!**
- Make sure fert pak is covered with soil, ~ middle of plug for depth

Unacceptable planting location/medium
- Within 1m of road cut or fill slope
- **On a cut or fill slope**
- **Within 1m of a fence, cattle, wildlife or recreational trail**
- In cubicle red rot (not greasy)
- In standing water or subject to flooding
- Gravel/dry soil which does not retain water
- Roads and landings that are greyed out on your map
- **Highly compacted areas** (old roads/trails, bladed trails, ruts of skid trails)
- **Ash/duff within burn piles**



Well-structured, porous soil: good seedling growth

Dense, compacted soil, root penetration restricted, infiltration of air and water disrupted: poor seedling growth

General Stock Handling/House-keeping Standards:
Reduce stress on the seedlings and focus their available energy on establishment and growth by:
- **Secure boxes** in the back of your truck with ratchet straps along each row to ensure they don't fall over
- **Level out boxes** once some are removed
- Always keep **block caches well tarped** and secure
- **Reduce Ribbon Use:** ribbon length is 15cm target, 30cm max
- **Clean-up** all your garbage including food garbage and damaged fert paks, wrappers, etc
- **Reduce** the **transport time** for seedlings in pick-ups by leaving them on the block at the end of the day but always in the shade**?**
- **No boxes left on the block on a day off**, take extras back to the reefer
- **Never leave seedlings in planters bags at end of the day**, plant them out or put bundles back in proper box
- **Silva cool liners** in all bags with trees
- **SPRING:** Keep **box tops closed** and **plastic liners closed** at all times, this will keep the seedlings moist and cool, **keep bags closed** if not drawing from, **keep truck flaps/doors closed** if not pulling boxes
- **On blocks where roads are rough/deactivated**, boxes must be **shade cached on site in the AM** rather than driven around the block and subjected to jarring/bouncing/tipping over.
- **Unwrap only two** bundles of each species at a time
- Crack your other bundles but don't unwrap them
- **Do not over stuff** your bags

The temperature in the root zone can be increased.

Available oxygen in the soil can be increased.

The risk of frost damage can be decreased (in some cases).

Moisture problems, such as drying out or waterlogging, can be overcome.

Revised March 16/21

Planting Quality Specs:

Depth:
- Cover the plug but don't bury any laterals (exception may be lodgepole pine)
- Laterals buried is too deep - plug exposed is too shallow, in IDF 2 fingers soil on top of plug

Leaners/Roots not straight:
- >30 degrees from vertical, consistent but smaller leaners need to be addressed

Spacing - Too Close:
- <MITD from another planted tree or acceptable natural/residual, watch out on fill plants!

Excess:
- The tally of plantable spots will include WS naturals first, ensure seedlings are spaced off of WS naturals

Obstacle Planting:
- Target 8cm away from obstacle, maximum 15cm from the obstacle, but not plastered against it, obstacles are >15cm in height and relatively immovable (stumps, rocks, logs)

Screefing:
- 15x15cm cleared of grass/herbaceous and roots (down to mineral soil) – make sure to center your tree in the middle of the screef

F-Layer Planting:
- Remove litter/slash/moss/debris to create platform of F material
- Top of plug must be in good F-layer and must be able to properly close the hole

Air Flow/Terracing:
- Ensure seedlings are not pressed against side of prep/stump/slope, need airflow around seedlings, terrace your spot before planting the tree

Microsite Specs for untreated ground - by BGC (no site prep):

*dripline on woody brush (underneath is a fault)
*lower side of stumps/obstacles on steep slopes (>40%)

IDF/MS (incl SBS, SBPS):
1. Stump plant **North side (NE-NW)**
2. Obstacle plant **North side (NE-NW)**
3. Open areas

Always screef to mineral soil

ICH:
1. Stump plant
2. Open areas or other obstacles
   - Always F-layer plant
   - Lower side of any obstacle on steep slopes

ESSF:
1. Stump plant
2. Natural Raised Microsites
   - Always Raised microsites
   - F-layer plant, well decomposed organic soil (black/greasy)

****BURN PILES IN ANY BLOCK: Target obstacles always!**

Microsite Specs for Site Prepped ground:

Raised Screefs/Flat Screefs:
- Target just BELOW hinge in center, just below forest floor. On flat screefs, 15cm from edge on shade side

Trenches:
- Target just BELOW hinge on flip side, never above hinge, with flat trenches target center & furthest spot away from grass

Deep Ripping:
- Bottom of deep rip if plantable, otherwise move up side until plug can be fully accommodated.

Stumping-IDF:
- Plant in shade on South side of hole, between bottom of the hole and hinge

Stumping-ICH:
- Plant just below forest floor inside the stump hole

Mounds on wet sites (darker soils and organics, with or without standing water):
- Target the highest, middle spot on top of mound
- Still needs to be in proper rooting medium

Mounds on dry/mesic sites (lighter soil cap, well drained):
- Target the hinge in the centre of the mound, not on the sides (this will keep it free from brush longer)
- Never plant below the hinge