

Licensee

Division

XXX Office

Microsite Selection

Goal

To establish excellent forests

How

Plant seedlings where they get best balance of: (1) Oxygen (2) Water (3) Nutrients (3) Temperature (4) Light & (5) Good rooting medium for support. Planting in a good microsite will help meet these requirements!

Acceptable Seedling Placement

- Planting spots will often be on raised microsites with straight mineral soil, or a mixture of mineral soil and well decomposed organic material (no twigs, moss, needles, bark, leaves etc).
- Adjustments need to be made when planting very wet or very dry locations.

Unacceptable Seedling Placement

- Bottoms of depressions, especially site prep, or in wet areas (ie. swamps, receiving sites).
- Open areas without an acceptable obstacle and no stumps
- Under overhead obstacles (i.e. logs, brush).
- Downhill side of debris or obstacles that might roll onto the seedling.
- Compacted areas (i.e. unprepped skid trails, landings, and roads).
- Under the drip line or crown of mature trees.
- Within 2m of unburned slash piles
- Within 2m either side of a fence.
- Within 2m of the edge (either side) of roads.
- Within 2m of steep cut banks.

General Planting Guidelines

- Plant seedlings up to 1 finger deep as long as it does not bury any needles or laterals.
- Plant rehabilitated landings and roads with Pli or Lw ONLY.
- Avoid planting Fd or Sx at the bottom of a gully (frost damage)
- Acceptable microsites in burned piles are ideal for ALL species.
- Seedlings are to be drawn out 1 at a time, JUST IN TIME for placement in the hole.
- Seedlings MUST be in bags with SILVACOOOL liners as well as a moist foam.
- Planters shall unwrap only 1 bundle of each species at a time.
- Smoking is ONLY permitted on main roads.
- NO garbage, including food waste, bundle wrappers/tickets, etc. is to be left on the block overnight.
- Place fertilizer a fist-width from the seedling, at least 3-5 cm under the soil surface and on the uphill side of the seedling.

Planting Specifications

- Hole deep enough & wide enough for root (plug) to be fully accommodated in natural position.
- Root or plug is not damaged or distorted (i.e. bent, twisted, jammed).
- Seedling stem and root are aligned and have less than 10° lean.
- No needles or laterals buried.
- Seedling plug just below the surface of acceptable planting medium.
- No medium or large sub-surface air pockets or channels.
- Obstacles include stumps, logs, branches, shrubs, and raised sites (>10cm above the ground level).
- Do not plant under or immediately adjacent to overhead obstacles.

Supervisor: xxx

General Planting Guidelines:

- Smoking is only permitted on the main roads.
- No garbage is to be left on site.
- Handle all seedling boxes with care. Do not drop or throw them.
- All planting bags must have SILVACOL liners and wet sponges in them at all times.
- Only 1 bundle of each species may be unwrapped at a time.
- Seedlings are to be drawn out 1 at a time, just in time for placement into the hole.
- Plant seedlings up to 1 finger deep as long as it does not bury any needles or laterals.
- Acceptable microsites in burned piles are ideal for all species.
- Place fertilizer teabags in a separate hole 3-5 cm on the upslope side of the seedling 3-5 cm under the soil surface.

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4. No needles or laterals buried.
5. Seedling plug just below surface of acceptable planting medium.
6. No medium or large sub-surface air pockets.

Seedling Growth Requirements:

Seedlings require the following in order to survive and grow well:

- (1) Oxygen (2) Water (3) Nutrients (4) Temperature (5) Light & (6) Good rooting medium for support.

Planting in a good microsite will help meet these requirements!

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Acceptable Microsites (Plant in these areas!)

- All planting spots must be on raised microsites with straight mineral soil, or a mixture of mineral soil and well decomposed organic material (no twigs, moss, needles, bark, leaves etc).
- (1) On **Mounded** or **Trenched** ground
 - Plant on the shoulder of the mound or trench on moderate moisture sites, and on top on wetter, colder sites. Make sure that there is no litter debris, or air pockets in the bottom of the hole when you open it.
 - (2) On **Stumped** ground
 - Plant the outer ring of the uprooted stump on the soil shoulder making sure that there is no litter debris, or air pockets in the bottom of the hole when you open it. Do not plant under overhead roots, or where dirt from the root ball may fall onto the seedling and bury it.
 - (3) On **Raw** ground (Non site prepared ground)
 - Plant a shovel's width (10cm) off objects such as stumps, logs, and large rocks. In hummocky wet ground plant as high as possible in acceptable mineral and or organic soil medium.

Unacceptable Microsites (Do not plant in these areas!)

- Within **2m** of timber edges, unburned slash piles, steep cutbanks, fences (either side), or road cut edges (either side).
- Within **1m** of a cattle trail (either side)
- Bottoms of depressions or gullies subject to flooding, such as in site prepared ground, or swamps, receiving sites, etc.
- Open areas without an acceptable obstacle and no stumps
- Under overhead obstacles (i.e. logs, brush).
- Downhill of debris or obstacles that might roll onto seedling (slopes).
- Compacted areas (i.e. unprepared skid trails, landings, and roads).
- Under the drip line or crown of mature trees.
- In rotten logs or stumps (A.K.A. "Red Rot"), squirrel caches, loose litter, or heavy ash.

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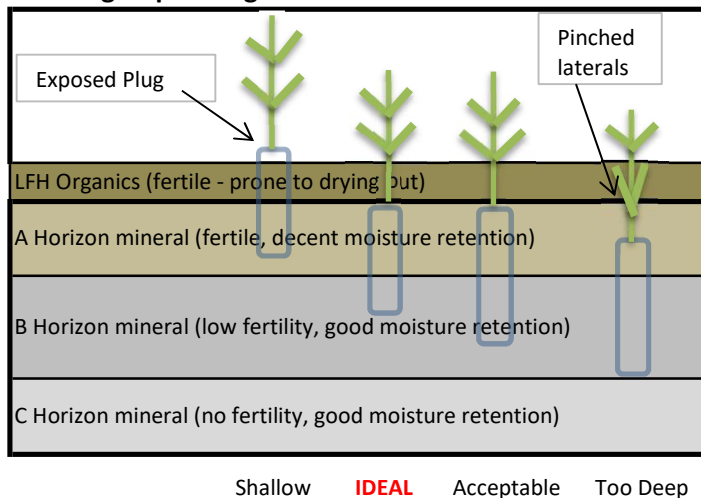
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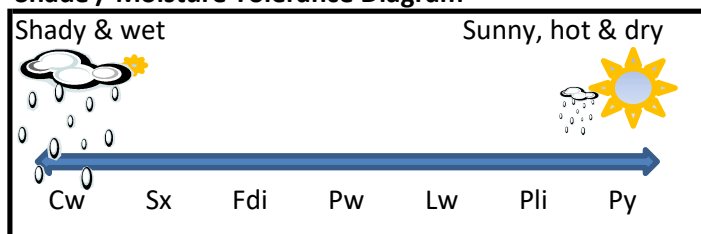
Species Chart

ID	Species	Avoid sites with:	Prefers sites with:
Pli	Lodgepole Pine	*Vegetation competition *Overtopping shade	*Moist - Drier soils *Full sun exposure
Fdi	Interior Douglas Fir	*Vegetation competition *Excessive moisture	*Moist - Drier soils *Full or part sun exposure *A good mineral/organic mix
Sx	Hybrid Spruce	*Saturated soils * Quite dry soils	*Higher moisture levels *Organic and dark mineral soil mixes
Lw	Western Larch	*Vegetation competition *Overtopping shade	*A good mineral/organic mix *Full sun exposure
Cw	Western Red Cedar	*Excessively dry soils	*Higher moisture levels *Organic and dark mineral soil mixes
Pw	White Pine	*High overtopping shade	*Dry to moist sites *A good mineral/organic mix *Full or part sun exposure
Py	Ponderosa Pine	*Overtopping shade *Excessive moisture	*Sun exposure *High temperatures *Drier soils *Plant on shady (N-E) sides of stumps & logs

Planting Depth Diagram



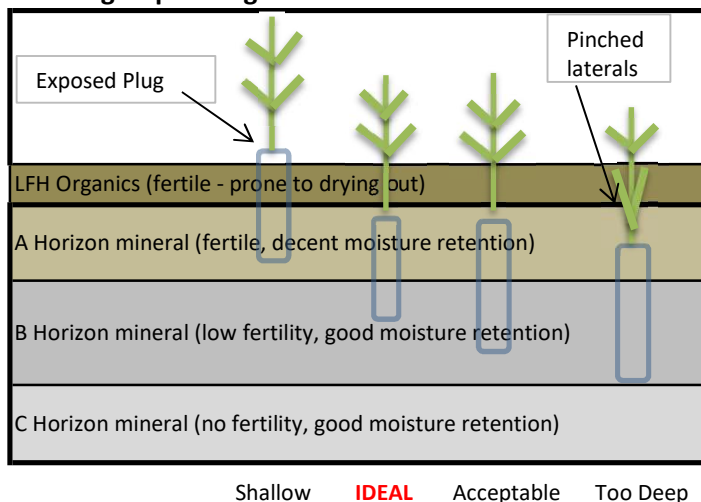
Shade / Moisture Tolerance Diagram



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