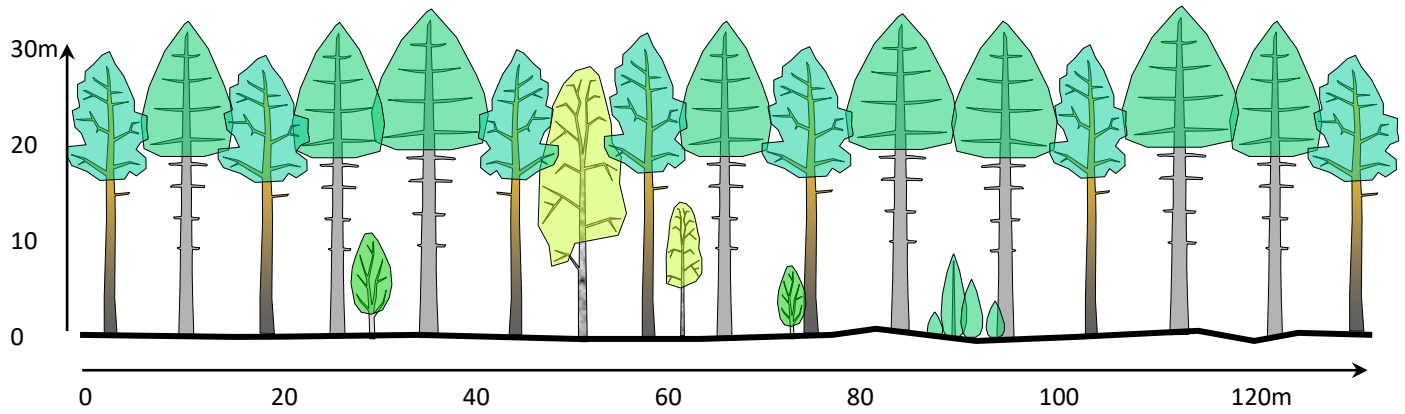
FDT 2.2.2 CP and light demanding conifers (XCLD)

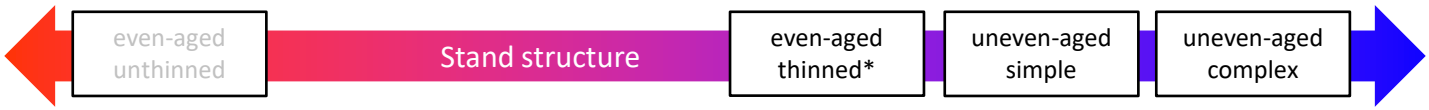


1. Structure and dynamics:

Mixed even-aged stands of CP and XCLD (SP or larches) where CP is likely to be phased out by the end of the current rotation. Minor species of category B. The species could be mixed intimately, in rows, small or large groups, or in patches. Supplemented by category B minor species.

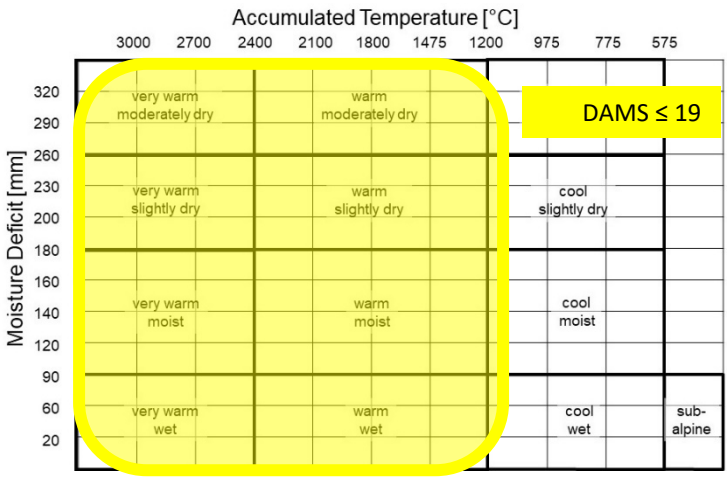
Species distribution: CP 30 – 90% XCLD 10 – 70% minor species: < 20%

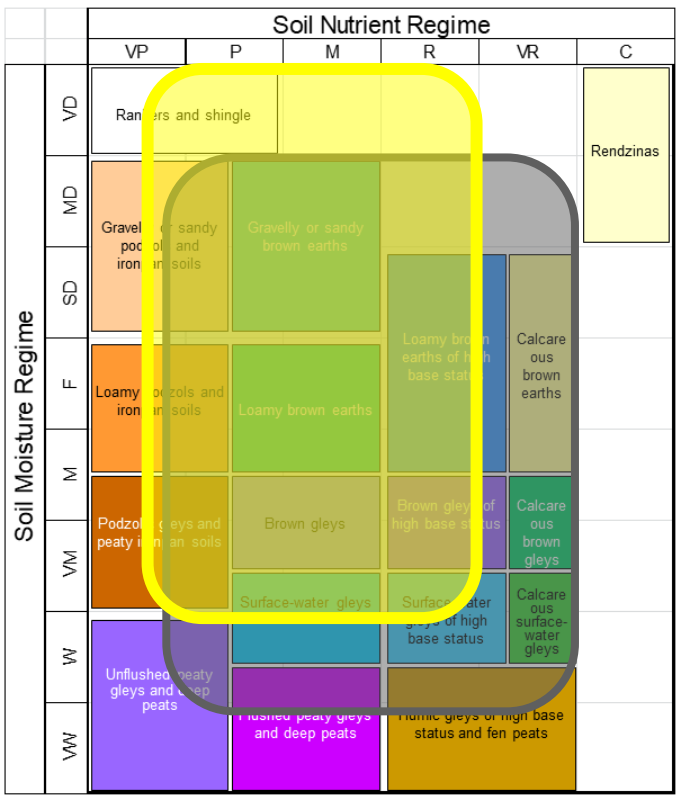
Management options include clearfell-and-restock as well as CCF / LIMA regimes and will lead towards a different FDT. Regeneration may happen naturally or by planting.



2. Ecological suitability:

Represents no NVC type but may contain elements of W18 and provide niches for minor species belonging into W17, W16 and W15. Appropriate for mixed CP stands that are at risk of becoming infected with DNB, mostly on poorer sites with sandy soil texture.





3. Management objectives:

Economic:	CP – sawlogs, target DBH > 40cm in 60 – 100yrs XCLD – sawlogs
Environmental and social:	Transition from CP to other FDTs. The XCLD component may provide an opportunity to do this without the negative impacts of clearfelling, thus better maintaining the environmental and social forest functions.

FDT 2.2.2 CP and light demanding conifers (XCLD)

4. General management principles for the FDT

This FDT is designed to facilitate the transition from mixed CP stands affected by DNB to XCLD species. CP and XCLD are normally compatible to grow in mixtures (CS = 1 for other pines, CS = 2 for larches) but the health status of CP may negatively affect its competitiveness. Management must seek to phase out CP whilst developing the XCLD component into a viable stand. Depending on the proportion of CP and time available this may be possible by a relatively smooth process, or else require a more drastic approach. In any case thinning must aim to maintain CP tree health and steady growth as well as possible, whilst reducing its proportion in favour of XCLD species. If both objectives cannot be achieved simultaneously then the promotion of XCLD should take priority. Whilst LIMA / CCF methods are the preferable choice for final harvesting / restocking, a clearfell-and-restock scenario may provide a straightforward solution in cases where the potential for developing the existing XCLD component is too low. In any case the FDT must be reviewed once CP is phased out.

5. Timeline

Please note that interventions up to Thicket stage are usually not applicable to this FDT and have therefore been greyed out.

stage	H_{100} [m]	intervention
Establishment		• Underplanting of 2000 – 3000 trees/ha or natural regeneration.
Young stand	< 3	• Protection against animals / plants as necessary.
Thicket stage	3 – 10	• Generally no interventions, except for: • Systematic respacing if improved airflow is required by presence of DNB.
Pole stage	10 – 12	• First selective thinning. Sanitary thinning of CP, mainly removing trees with poor health status and opening canopy to increase air flow. Selective crown thinning of XCLD, mainly removing dominant / codominant trees with visible defects, coarse branching or poor shape. • Selection of 100 – 200 XCLD FC trees/ha. Healthy appearance of FC trees takes priority over all other criteria.
Pole to small timber stage	12 – 20	• Monitor health status of CP and continue thinning accordingly, at height growth intervals of 2 – 3m. • Generally promote XCLD over CP in tree selection for thinning. • Focus on competition status and healthy appearance of FC trees.
Timber stage		• Monitor health status of CP, stand density, species composition and stability in general, and thin accordingly. • Review FDT and plan for final harvesting / restocking when FC trees approach target DBH or CP expire.
Final harvesting and transition stage		• Carry out harvesting / restocking operations according to agreed method. • For LIMA / CCF options follow species specific guidance.