

Project #2: MATURE TREE TOPPING- High-girdling live/snag

End Result: The end result will create old growth habitat for the marbeled murrelet and spotted owl, and other old growth dependent species.

Measure of accomplishment: Individual Trees

Quantity: 44 Trees

Three areas, 8a, 8b and 10a, have been designated on the Contract Area Map as the locations to perform the mature tree topping work. The Table below indicates which area, to top mature trees for each.

Contract Area	Mature Treatment Area ID	Operating season	1.2a and 1.4b distribution grouped: combined trees per group	1.2 High girdle Snag Treatmnet DBH	1.2a Subitem: Trees to High-Girdle-Snag	1.2a Subitem: Trees to High-Girdle-Live
Morris Thin	8a	Sept. 15 – Feb.28	2-9	20-45"	8	8
Morris Thin	8b	Sept. 15 – Feb.28	2-9	20-45"	8	7
Morris Thin	10a	Sept. 15 – March 31	2-9	20-45"	6	7
TOTALS					22	22

All trees selected will be live Douglas-fir or hemlock trees. Hemlock will not be treated where this species is less than 50% of the appropriate size class in the treatment area.

- 1) The intent is to promote development of a stove-pipe cavity with over-head cover in a live tree. Girdling to the specified standards will provide good conditions for fungi that cause heart-rot, and retaining live limbs below girdle site should keep the tree alive and allow upper most limbs to grow vertically and eventually provide cover over the developing cavity. Create snags and live trees in equal proportion within groups containing 2-9 girdled trees. However, a ten percent tolerance is acceptable; e.g., 40% snags and 60% live or vice versa.
- 2) **Distribution shall be clumped and at least 250' from any road.**
 - a) Group is defined as an area containing 3-5 trees that are within 50' of another treated tree of the same group.
 - b) Distance between groups shall be greater than 200 feet.

- c) Locate groups around big-leaf maple trees where possible.

3) Critical specifications

- a) **Girdle trees.**
 - b) **Girdle trees with limbs less than 6" diameter and not within 100' of a tree with limbs greater than 6" diameter to avoid risk to potential murrelet nesting habitat.**
 - c) **Girdled trees will generally be greater than 30" dbh but less than 50" dbh; dbh range of girdled trees should be 35-45" dbh.**
 - d) **Diameter at girdling height shall be greater than 15 inches outside bark.**
 - e) **Girdled trees for live trees shall retain 15-25 live limbs below the girdle site that are at least eight feet in length.**
 - f) **Girdled trees for snags shall retain 0-4 live limbs below the girdle site that are at least eight feet in length. Girdled height of snag trees shall be above 80'.**
 - g) **Girdled trees will have a minimum of 1-foot of bole area above the last whorl of green limbs after girdling. This will facilitate rot development above last live whorl.**
- 4) Girdling live height is between 150-200 feet.
 - 5) Contractor will mark treated trees with a orange and white stripped flagging around the bole and orange tree number near dbh level.
 - 6) Two pieces of orange and white striped flagging shall be tied on a branch or around the bole directly below the girdle and shall extend a minimum of four feet, ensuring that it can be seen from the ground.
 - 7) The Contractor will furnish paint, flagging and aluminum nails. Government will furnish "Wildlife Tree" signs and numbered tags. Attach one "Wildlife Tree" sign on each girdled tree. Attach the sign using two aluminum nails at breast height facing the uphill side.
 - 8) Contractor will map location of each clump in each with GPS. GPS location of individual trees is not required. Coordinates are NAD 83, UTM's. Contractor must provide an electronic and written file of coordinates. Electronic transfer can be accomplished by one of three methods. All of these methods shall include coordinates and corresponding name, number, and clump number for each clump. These methods are:
 - a) **Preferred method** : Provide government with a GDB file with locations of clumps from Mapsource
 - b) Contractor bring in their GPS and have coordinates with corresponding data downloaded directly to the government computer
 - c) Contractor submit a CD with spreadsheet containing X column and Y column coordinates, and a column identifying corresponding data
 - 9) Contractor will map location of each individual tree within 300 feet accuracy.
 - 10) Contractor will label a Reference Tree at each treated that is live and easily visible from a main, drivable road. Mark with a band of orange and white stripped flagging and "R" painted above the band. Two pieces of orange and white striped flagging shall be tied on a branch or around the bole and shall extend a minimum of two feet, and point of tie facing the road. The contractor shall record the project name, project area number, bearing and approximate distance to the treated tree closest to the road, and the treated tree number on the flagging with a permanent marker. If the reference tree is over 200 feet from the closest treated tree, flag the route to the tree with orange and white striped flagging.

- 11) The Contractor is REQUIRED to submit a weekly plan of work at least two days before implementing each weekly plan. This plan shall be submitted to the project Contract Administrator (CA).
- 12) The Contractor is REQUIRED to inform the project CA within 7 days of when a /project area has been accomplished and provide a completed tree register form with signature and a map showing accurate location of clumps of treated trees and their corresponding tree-numbers.

When: Work is restricted to September 16 through March 31

Inspected by a CA or other qualified inspector coordinating with wildlife biologist.

