Cooperative Alaska Forest Inventory CAFI

December 2014

The site description database, tree database, vegetation database, and regeneration database are associated by plot number.

Tree Database comments:

1. The tree database is setup by inventory years. INV 1 is data of plot establishment, INV 2 is tree data from 5 years after establishment, INV 3 is 10 years after establishment, etc.

= INV 1 contains tree data from plots 10001 – 10609 (excluding: 234).

= INV 2 contains tree data from plots 10001 – 10570 (excluding 10076-10078, 10118-10120, 10234).

= INV 3 contains tree data from plots 10001 – 10516 (excluding 10076-10078, 10118-10120, 10234, 10403-10447, 10466-10471)

= INV 4 contains tree data from plot 10001 – 10189 (excluding 10076 – 10078, 10088-10090, 10127 - 10129)

2. Every effort has been made to remove errors from this tree database but the database is not error free. Analysis will show extreme measurements either negative or positive. There are 3 categories of extreme measurements in the database. First are errors that were found in subsequent inventories. Errors on diameter measurements are recorded as 12 in the status cell (column L); errors in height measurement are recorded as 13 in the status cell (column L). The measurement is correct in the subsequent inventory. The second category of extreme measurements are trees that have decreased in diameter or height for a legitimate reason. See # 3 for list of tree damage codes that would cause legitimate negative measurements. The third category of extreme measurements that occur are ones that have not been identified at this time. Some of these will be found and corrected in subsequent inventories or will be found through analysis.

3. Tree damage codes are listed in cells H through W. Tree damage codes that cause negative measurements:

Diameter codes that decrease diameter

3221, 3321 foliage has very unhealthy appearance (tree probably dying).

Height measurements that decrease total height of tree:

8125, 8225, 8325 tree is leaning from slight to severe (no height measurement is taken on 8325 because tree leans too much for accurate ht measurement but the tree is still standing).

2134, 2234, 2334 tree has a crocked top

2335, 5335 tree has broken top or broken on the bole.

9331, 9325 tree is down on the ground but still alive.

3261,3361,2261,2361 moose browse tops of small tree tops.

4. From 1994 – 2001 a stem was considered a tree if it reached the 2’ diameter class (1.51” at dbh). Since 2002 a stem is considered a tree when it reaches the 1” diameter class (0.51” at dbh). It was believed that the stem exclusion stage was being missed. After plot establishment, stems that reach the 1’ diameter class are considered ingrowth, status 3. Plots that were remeasured the first time after the tree size was changed present a problem. We had ingrowth and trees that should have been included in the previous inventory. Those trees that should have been included were given a status 8. Analysts will have to determine how to treat the trees with a status of 8 (all status 8s are in tree INV 2 and INV 3).

5. The tree height and length of live crown data is missing from inventory 1, plot 10338 trees 775 – 892. All tree data is missing from inventory 2 plot 10151 trees 106 – 123 and 688 – 721.

6. Lost plots after establishment: 10076, 10077, 10078, 10118, 10119, 10120, 10127, 10128, 10129,

7. Plots cut after establishment. Part of plot 10138 cut (2008). Plots harvested in 2008 in State timber sale 391 and 393. All trees/vegetation removed on plots 10409 – 10411 (2009).

8. Plots burned after establishment:

2004 burned 10045, 10415 – 10417, 10421 – 10423

2010 burned 10316 – 10318, 10319 – 10321

9. Plots burned the year before the first inventory

10496 – 10498

10. Plots 10232 and 10233 are orphan plots. They are not associated with each other and not associated with any cluster of other plots. These 2 plots were established as teaching aids at Pearl Creek Elementary School and on the University campus.

11. Plot 20170 is associated with Plots 10170 – 10172. At establishment, plot 10170 and 10172 were on a near flat surface and 10171 was on a slope. Five years later in 2003 20170 was established on a near flat surface to better match the characteristics of 10170 and 10172.

12. Site 1179 containing plots 10532-10534 were established on the 6th of July 2004. However, no tree data was collected when the site was established only the site data was collected. During the next 5 year cycle after the site was initially established (July 9th, 2009) tree data was collected for the first time. On the 21st of August 2014 the site was remeasured for the first time in inventory 2 even though the time span shows that the site should be included in inventory 3. Site data will be included in the inventory 3.

13. The last TREE-ID Numbers for each inventory are as follows:

INV 1 150042

INV 2 209106

INV 3 303836

INV 4 400815

INV 5 500187