

TREE REGENERATION INVENTORY INSTRUCTIONS

Introduction

Five permanent circular regeneration plots, one 200m² (radius = 7.98m) and four 4m² (radius = 1.13m), are located in each quadrat. They are inventoried periodically to evaluate the status of regeneration from seedling to sapling size over a large portion of the study area. The 4m² plots measure seedlings and saplings < 1.5cm DBH, and the 200m² plot measures saplings between 1.5 and 9.49cm DBH.

Set-up

To lay out the plots, first locate the center pin of the quadrat. This point will be the center of the 200m² plot and the 4m² plots are spaced around it (Figure 3-5).

The boundaries of the 200m² plot are ns0 Tc(2) TjETEMC4r0.014 T Tj1.5c

Tiny seedlings are very difficult to spot, so look carefully. As seedlings are found, their species and size class are called out to the recorder who repeats the information back to

corroborate it. They are recorded by species and class with a dot and dash tally. The number is then tallied as (number

of trees, decimal point, height class). For example, 12 trees in the first size class would be recorded "12.1" (See Example

3-6.)

3. *Ground layer coverage.* This is an estimate of what portion of the ground different components cover. Ground layer cover codes are listed here and in Table 3-2.

0 = dry litter

1 = wet litter (litter that has been in standing water for extended periods, usually dark and compact)

2 = log (>10cm diameter)

3 = tree bole

4 = tree root

6. **Ceptometer readings.** These are taken by the recorder while the others set up the next plot. A reading is taken in each of the four cardinal directions at a height of 1m. These four readings are averaged to a single reading for each station. See "Light Measurements with a Ceptometer" for more detail on the use of the ceptometer.

200m² Plot Procedure

The 200m² plot is inventoried after the 4m² plots are completed. All trees within a 7.98m radius of the plot center, and between 1.5 and 9.49cm DBH, are measured with a tree fork and recorded by species, condition, and DBH class. The DBH class for DBH $x = [(x-1)+.5]$ to $[x+.49]$.

1. Record date, observers, recorder, weather, and quadrat number (see Figure 3-7).
2. To have a consistent starting place, the observers start by the north 4m² flag and move clockwise, calling out the species, DBH class, and condition (live or dead) of each tree 1.5-9.49cm DBH. After a tree is counted, it is marked

Table 3-2. Ground layer components and height class codes for 4m² regeneration plots.

Ground Layer Components Codes	
Ground Layer Components	Number Code
Dry Litter	0
Wet Litter	1
Log	2
Tree Bole	3
Tree Root	4
Moss	5
Lichens	6
Soil	7
Bare Rock	8
Water	9
Slash	10

Height Classes for 4m² Regeneration Plot

1	<0.1m tall
2	0.1-0.499m tall
3	0.5-2m tall
4	>2m tall and <1.5cm DBH

Low Stratum—<0.5m tall

Mid-Stratum—0.5-2m tall

Figure 3-6. 4m² regeneration plots data sheet.

HOLT FOREST 4m² REGENERATION PLOTS

Date 15 JUN 84 Observer JJS DCK Recorder SMC

