



Figure 5. Steps for hand-planting pine seedlings.

1. Insert dibble or bar into soil at angle shown and push forward to upright position.
2. Remove dibble or bar and place seedling in hole with root collar just below ground line.
3. Insert dibble or bar about 1/2 way and pull handle towards you to close hole at the bottom.
4. Push handle to close hole and firm soil at the top of the seedling's roots.
5. Fill in last hole with heel.
6. Firm soil around seedling using hands or feet and being careful not to damage seedling.

Disadvantages

- Initial costs may be higher than for natural regeneration and direct seeding.
- The planting site may be inaccessible to planting machines or crews.
- Distortions of the root system such as "L" or "J" shaped roots may result if care is not taken.
- Close attention to seedling care and handling is critical; poor survival and growth may result if seedlings are mistreated.

Assessing Success of Your Plantation

To assess the success of your regeneration efforts, it is necessary to check survival of the seedlings. One year after planting, seeding, or natural regeneration has occurred, is a good time for assessment. A number of plots should be taken over the entire planting site to get an idea of success over the entire site (Table 2). Establish 1/100th acre circular plots on each acre by randomly selecting a spot within the acre and then anchoring an 11.78-foot rope down at this spot. Next walk in a circle counting the number of live seedlings in the plot. Calculate the average number of seedlings on these plots and then multiply times 100 to determine the number per acre. If there are 300 or more surviving seedlings per acre on the site and these seedlings are well distributed, a replant is not necessary. If



Figure 6. Machine planting of southern pine seedlings.