

# Final Decision: Planting vs. Natural Seeding

*on Mahoney*

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mineral soil. Others are equally or more successful on less disturbed sites. Seedbed requirements must be present when seeds fall from the trees or the ever-present, opportunistic weed seeds or native shrub and herbaceous species will quickly claim the seedbed and thwart tree seeding.

Some genetic improvement is possible with natural seeding by carefully selecting parent trees left on the site. These trees are selected for their visual characteristics. We assume their apparent superiority will be expressed in the next generation.

Forest renewal by natural regeneration requires little initial investment compared to planting; however, there may be hidden costs. Successful natural seeding is rarely well-distributed over the site and will require pre-commercial thinning for good growth and form of potential crop trees.

Natural regeneration imposes severe restrictions on timber harvest because harvest methods and timing activities are used to prepare the seedbed and must coincide with a good seed year. Most northwestern conifer species follow a regular pattern of good seed years at intervals that vary from nearly every year to as long as seven years. With the current emphasis on biodiversity, the problem is complicated when several species are left to re-seed the area and they have varying seed crops.

Natural regeneration is generally favored for multiple-use areas because clearings are small and mature trees are usually left on the site. With the advent of *New*, *Adaptive*, and *New Perspective* forestry, foresters may leave the mature parent trees rather than cut them in the traditional manner after the new seedlings are

established. The low costs of natural seeding are preferred on low productivity sites where regeneration success is not as economically important where non-timber values dominate.

### **Combining Natural and Planted Regeneration.**

Large clearcuts are becoming less socially acceptable. Planting does not require a clearcut, and many plantings that begin with well-spaced trees are complicated by natural seeding anyway. Professional forest managers and woodland owners may want to consider combining natural and artificial methods to gain the advantages of each and mitigate the negative effects. With careful planning, natural regeneration from seed trees selected for form, species, and stability can be supplemented with planting to increase species diversity, introduce genetic improvements, and improve overall regeneration success. Many potential variations could help meet our increasingly complex expectations for forest lands in an economically and environmentally acceptable manner.

Foresters consider the time of timber harvest as a beginning. It provides an opportunity to have a hand in shaping the future forest. Landowners and professional land managers need to have all the information they can and understand the advantages and disadvantages of alternative strategies. Selecting the best regeneration strategy is a silvicultural decision that needs to be made before beginning any other activities that may limit your alternatives.

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