

THE ROLE OF PLANTING IN ECOSYSTEM RESTORATION—PROS AND CONS

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The role of planting in the restoration of southern pine ecosystems that are underrepresented on the landscape is simple to the point of being rudimentary--when a seed source of the desired species is absent from a stand, planting is the only way to re-establish the desired species in the stand being restored. The advantages are obvious, especially when application of planting is done in a manner that draws on existing knowledge of seed sources, nursery practice, site preparation, and planting methodology in a manner that resembles reforestation after clearcutting. Much headway is being made with longleaf pine restoration, for example, using this model. However, there are a number of issues associated with the use of planting that raise questions on public and private lands, including cost, quality of genetic stock, and the speed with which restored habitat can be obtained. As a result, a broader approach to ecological restoration efforts in southern pines will involve the use of planting in stands that are partially to fully stocked. That raises questions about silvicultural prescriptions for planting in stands with residual overstory and midstory stocking, and how those prescriptions might address questions of robustness of seed sources, genetic diversity, and seedling establishment and growth. An overview of these issues will be presented to stimulate discussion and develop innovative applications of planting methodology especially with respect to regional ecological restoration initiatives with longleaf pine and shortleaf pine.

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