

F-0107

Harvesting and Reproduction Methods for Ohio Forests

Table 2. Advantages and disadvantages of forest regeneration methods.

| Clearcutting Advantages | Clearcutting Disadvantages |
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| Provides necessary environmental conditions required for shade-intolerant species. | Usually considered to be aesthetically less desirable. |
| Usually the most economical method. | Greater risk of soil erosion and stream sedimentation if done improperly. |
| Relatively easy to implement. | Regeneration of some desirable species may be uncertain. |
| Allows site preparation for seeding or planting. | May lead to invasion of undesirable vegetation. |
| New species or genetically improved seed or seedlings may be planted. | |
| May create needed habitat for many wildlife species (e.g., grouse, deer, etc.) | |
| Shelterwood Advantages | Shelterwood Disadvantages |
| Reproduction of desirable species may be more certain than with clearcutting. | Requires a market for small and low-quality trees. |
| Slash disposal less of a problem than with clearcutting. | Remaining trees must be wind firm. |
| May be more effective with heavy-seeded species, such as oaks. | Requires more technical skills of forester and logger than clearcutting. |
| Less invasion of undesirable vegetation than with clearcutting. | Removal cutting damages some young trees. |
| Opportunity for genetic improvement in the regenerated stand. | Epicormic branching on trees in final harvest may result in decreased quality. |
| Selection Advantages | Selection Disadvantages |
| Maintains continuous forest cover on land. | Takes more skill to implement than other regeneration methods. |
| Usually perceived as having less visual impact. | More expensive in terms of inventory, marking, and harvesting. |

| Selection Advantages (continued) | Selection Disadvantages (continued) |
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| Forest usually less susceptible to wind, insect, and disease damage. | Trees harvested are variable in size. |
| Reproduction not exposed to heavy competition from herbs and shrubs | Some damage to residual trees may result. |
| Shorter harvest intervals mean more frequent income for landowner. | Some residual trees may develop epicormic branching. |
| Easier to alter harvest intervals in response to market conditions. | Long-term management for intermediate and shade-intolerant species requires group selection. |
| Can combine intermediate and regeneration harvests into one treatment. | May be detrimental to some wildlife species requiring openings and early-successional vegetation. |
| Long-term management favors shade-tolerant species. | |
| Some form of natural reproduction will occur. | |
| Beneficial to some wildlife species. | |