

Caring for Pecan Trees After Transplanting

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Over 5000 acres of pecan trees in New Mexico have been transplanted in the last five years. While one research has been conducted to give recommendations to pecan growers transplanting trees, most information has been developed through growers' experiences.

First Year

Trees should be watered immediately after being transplanted. Whitewash or white latex paint, diluted 50%, should be applied all over the tree trunk or at least on the southwest side. Irrigate an area at least 2 ft larger than the root system in diameter. Water at least every week to 10 days the first two months after growth has started. Growers may want to eliminate suckers below 5 ft if Round-Up® is to be sprayed on the orchard floor; otherwise leave all foliage.

Nitrogen (N) should be applied during mid-season of the first year, when trees are growing vigorously. Trees should deplete their stored carbohydrates and may grow weak the second year. Apply 20–30 N units per ac (100–150 lb of ammonium sulfate) in two applications. Two or three zinc sprays that also include minor elements are also recommended. Some leaf burning may occur with applications of 200 lb of ammonium sulfate (40 units of N).

It is also possible that pecan trees transplanted after a heavy crop may grow weak and could need nitrogen applications even earlier in the season. In any event, nitrogen applications should be made only after vigorous growth has started on transplanted trees.

Water trees often enough to keep soil moist. Weak trees may develop problems with borers below the point where several branches are growing. The best way to control tree borers is to cut excess limbs to avoid crowded branches.

Second Year

Use the same cultural practices as the first year. Some selective pruning may be desirable, especially to choose the central leader. One or two branches should be left from each point of growth unless the tree does not have enough foliage. Head back those branches when growth needs to be encouraged; tip-prune them to keep growth in check. Extend the water area.

Pecan production is expected in most one-year-old branches.

Nitrogen should be increased to 250–300 lb of ammonium sulfate (50–60 units). This should be distributed in 3 applications: March, May, and July.

At least three zinc sprayings are recommended; include minor elements in at least two applications.

Third Year

Oftentimes strong branches take over whenever 5–6 branches come from the same point. If this is not the case, select 1–2 branches from each whorl of branches. Head back those branches when growth needs to be encouraged or tip-prune them to keep growth in check and to increase growth of lateral branches.

Production increases substantially in the third year.

Increase nitrogen to 350–400 lb of ammonium sulfate (70–80 units). Spread this amount evenly over 3 applications: March, May, and July.

Four zinc sprayings are recommended (minor elements should be included in two applications).

Fourth and Fifth Years

Orchard management practices should be similar to those performed in established orchards. Nitrogen applications should be increased to about 600–750 lb of ammonium sulfate (120–150 units); and increase to about 5 zinc sprayings.

Liquid fertilizer may be an excellent choice for transplanted trees, as the root system will have better contact with the nutrients that are applied. In addition, liquid fertilizers make phosphorus and potassium more available to the (limited) root system of transplanted trees. Watering is by far the most important factor in tree-transplanting success.

Some growers have opted for not doing any branch pruning, and they do not eliminate any branches above 4-1/2 ft. These trees look normal from a distance, but after close inspection tree branches are twisted and tangled with each other. It is not known if branches will develop faster in this way, but it is possible that branch breaking will increase.