

Theyâ€™re the largest nut crop native to North America and whether theyâ€™re toasted, baked in a pie, dusted in crunchy cinnamon-sugar coating, enrobed in chocolate or sprinkled atop salads and steaming bowls of oatmeal, pecans can be enjoyed in hundreds of sweet and savory ways. Between 250 to 300 million pounds of the tasty, toasty drupes â€” technically, theyâ€™re not considered nuts â€” are produced annually in the United States, according to the National Pecan Shellersâ€™ Association ([www.ilovepecans.org](http://www.ilovepecans.org)). In Oklahoma, one of 15 states where pecans are grown commercially, pecan producers such as family-owned and operated Knight Pecan Farms in Sapulpa, help produce some 10 to 20 million pounds of nutty goodness for pecan lovers each year. Pecans are a member of the hickory family and are the edible variety most preferred by humans, said Knight Pecan Farms founder Bob Knight. Established in 1986, the Knight familyâ€™s farm has several thousand trees spread across its 320 acres alongside Polecat Creek in Sapulpa, including oil-rich native Oklahoma pecans, as well as Kanza, Mohawk and Pawnee cultivars, which were developed by experts at the United States Department of Agricultureâ€™s research station in Brownwood, Texas. Oklahoma has roughly 500,000 acres of pecan trees, according to Knight, but only about 100,000 of them are harvested. Though pecans can grow wild in Oklahoma, growing them commercially and ensuring a bountiful crop requires several key ingredients and practices. Most commercial producers will plant several cultivars based on whatâ€™s known as the Alternate Bearing Index (ABI), which describes a cultivarâ€™s likeliness to bear nuts on alternating years, as well to ensure good pollination. Knight Pecan Farms works closely with horticultural researchers at Oklahoma State University to employ the best pecan horticulture and environmental management practices and ensure their trees are healthy and good producers. â€œYou need good cultivars and you need plenty of space so the trees are not crowded,â€• Knight said, adding that adequate water, regular thinning and good fertilization also are essential to growing healthy pecan trees and a healthy crop. Factors such as weather also figure into how well a pecan crop does from year to year. During the hot, dry summer months, Knight Pecan Farmsâ€™ trees also

get extra water to ensure they stay healthy. "Pecans require a great deal of water," Knight said, noting that the farm gets an average of 42 inches of rain per year, but supplements that amount with additional irrigation. "We irrigate pretty heavily through the July and August period where you think you're never going to see rain again." The Arctic blast that caught Oklahoma in its icy clutches in February had surprisingly little effect on the 2021 pecan crop, Knight said, but area pecan growers weren't as lucky when a second freeze hit in April. "The February cold spell didn't seem to bother them at all, but the April freeze did some damage in a strip through central Oklahoma," Knight said. "From Tulsa to Ada to Madill, there was some damage, but we still have plenty of pecans." Ordinarily, some of Knight Pecan Farms' crop is reserved for wholesale use, but not this year due to the freeze, Knight said, adding that the farm has crop insurance for such situations. Most of this year's crop has been set aside for the farm's retail operations, which includes its shop at 8408 S. Elwood Ave., where shelled, cracked and in-shell pecans, as well as roasted pecan flour, oil and candied pecans made from the farm's crop are sold. This year's harvest at Knight Pecan Farms also came a bit later than usual due to the delaying effects of the April freeze, he said. "Normally we start in mid-October, but the crop is late this year because we're getting our crop off of the secondary buds," he said. Harvest of the smaller, tougher-shelled native Oklahoma pecans will likely start sometime after Thanksgiving and run into February, Knight said. "The native pecans need a good freeze to knock the leaves off of the trees for the shaker," he said. Currently in the middle of harvest season for its other varieties of pecans, Knight Pecan Farms uses two pieces of equipment known as shakers to harvest ripe pecans from the trees. The shakers can clamp onto individual branches or an entire trunk to shake the pecans loose. After harvesting, the nuts are sold whole, cracked or are taken to

one of several area shelling operations, where the nut meats are extracted by specialized equipment using vacuum technology to pull the shells away from the nut meats. The nut meats are then sorted by optical food sorters, which remove any debris or defective bits before they're sent off for sale or further processing. "All food crops use optical sorters with a row of cameras that can see defects," Knight said, adding that when defects are detected in pecans, a quick blast of air from a jet located behind the waterfall of pecans knocks defective bits on the other side of a divider, separating them from the rest of the nut meats. "The shelled product is very high quality." The harvesting shakers used by Knight Creek Farms are manufactured by Madill-based Savage Equipment, which is one of the largest manufacturers of pecan harvesting equipment and ships its machines all over the world, Knight said. Though around 75 percent of the world's pecan crops are grown in the United States, other countries produce a sizable amount. "There's a burgeoning pecan industry in South Africa and Mexico, and from year to year will outproduce the U.S.," he said. Production at Knight Pecan Farms also is expected to blossom in the next few years after the farm's recent acquisition of an additional 94 acres. The additional acreage, which sits adjacent to the existing farm, is currently undergoing preparation for spring planting, Knight said. After the land has been fully cleared and thoroughly scraped to improve drainage, the Knights plan to add a new cultivar of pecans to their lineup. "We're leaning toward a cultivar called Lakota," Knight said, adding that the variety is supposed to start bearing after about five years, but he believes seven to eight years is a more accurate estimate. "It has some horticultural characteristics that we like."