Tennessee; The Place To Be in '93

Tennessee is 885 km long, but most people on their way to vacations in the "South" traverse its width, only 250 km. Horticulturally speaking, Tennessee is neither north nor south; therefore, we must interpolate horticultural information for our state.

Climate

Our state has four distinct seasons. Summer temperatures commonly reach 32C, and winters are represented by hardiness zones 6b and 7a (1990 U.S. Dept. of Agriculture *Plant Hardiness Zone Map*). However, averages do not mean much to plants. Within the past 30 years, records well below -29C have been set in several locations. The growing season ranges from -240 frost-free days near Memphis to as few as 140 in the mountains of eastern Tennessee, where a little more than 100 years ago the "second sons" of Britain settled in what is now Rugby. They intended to survive by farming, but this location had poor soil and the state's shortest growing season.

Rainfall averages are remarkably consistent for most of the state, ranging from 1060 to 1310 mm. Each month receives close to 100 mm, with more in March and less in September and October. The four driest years in the past 100 occurred in the 1980s, but even then the driest (880 mm) year was one-half of the wettest (1700 mm) for most of the state.

Topography

Tennessee's topography ranges from the 1987-m peak at Clingman's Dome in the east to ≈ 91 m at the Mississippi River in Memphis. In between are 18 major soil types and 1000 different soils, including alluvial, colluvial, and wind-blown deposits. Thousands of years ago, most of what was to become Tennessee was covered by ocean, which accounts for the limestone rock and many fossils. The Cumberland Plateau, covering several counties between Knoxville and Nashville and averaging 200 to 400 m higher than the valleys, is capped with sandstone.

Major cities

The state population is slightly more than 4.5 million. The major cities in Tennessee are Memphis, famous for the "blues"; Nashville, the state capital; Knoxville, home of the Univ. of Tennessee; and Chattanooga, site of a major Civil War battle. Eight states border Tennessee, but due to air pollution, rarely can one "see seven states" from Lookout Mountain in Chat-

tanooga, as advertised. The city of Oak Ridge was formed 50 years ago to process the uranium used in the world's first atomic bomb. Today the city is a major science and research center, with much less emphasis on weapons. While not large cities, Gatlinburg and Pigeon Forge at the base of the Appalachian Mountains swell to four times their normal size during tourist season each year. Both cities serve as gateways to the Great Smoky Mountains National Park, where 6 to 7 million people visit annually.

Horticulture

The history of horticulture in Tennessee has been recorded for only ≈ 100 of the state's nearly 200 years. But Ulysses P. Hedrick wrote that native Americans living in this area were serious farmers for longer than 100 years, growing beans, pumpkins, squash, and corn. A recent study indicates that Indians raised sunflowers in Tennessee as long as 2000 years ago. The pioneers grew fruits and vegetables, but serious commercial horticulture was not established until this century.

In the early 20th century, 4 million apple and peach trees each existed in the state. About 50 years ago, 60 train-car loads of early apples were shipped daily from middle Tennessee, while nearly that many 'Elberta' peaches were shipped from eastern Tennessee to northern markets. This amount of production remains unequaled for any horticultural crop. Today, however, commercial apple and peach trees now number only -100,000 each, and the center of production has dissipated. Even so, orchards are literally in every corner of the state. Apples are grown in the hills of eastern Tennessee, and peach orchards are located near population centers to accommodate fresh-market (often pick-your-own) sales. Few pears are produced in Tennessee, but from 1925 to 1966 the Univ. of Tennessee had a very active pear breeding program.

Grape cultivation has gone from the "Concord" Era" of 100 years ago, when Tennessee ranked high in wine production, to decades of nothing more than backyard vines to a recent return to wine production and commercial vineyards. Strawberry production has gone from third in the nation 30 to 40 years ago, when the berries were sold for freezing, to limited production for fresh-market sales.

Tennessee was once the "okra capital" of the world, but today the leading vegetables are staked tomatoes for the fresh market, followed by mechanically harvested snapbeans. Other important vegetables, totaling $\approx 14,600$ ha, include sweet corn, pumpkins, squash, cabbage, spinach, peppers, greens, lima beans, and southern peas.

Tennessee's important nursery industry is ≈ 100 years old and concentrated in a five-county area in the middle of the state and around metropolitan areas. Warren County,

with its 700 nurseries, is known to most plant buyers across the nation. The area may lead all others in the production and sale of fruit trees and flowering dogwoods.

More than 100 Christmas tree growers are located in the eastern two-thirds of the state, with Fraser fir grown in the cooler, higher elevations and white pine, Scotch pine, and *Picea* sp. in other areas.

Floricultural crop production is spread across the state but is mainly associated with metropolitan areas. Total floricultural sales are about \$25 million. Poinsettias, chrysanthemums, and bedding plants are popular crops. Thirty years ago the state was a leader in cut roses. Today, Holtkamp's Greenhouse, in Nashville is the one of the largest African violet producers in the Western Hemisphere.

Opryland and the 1993 ASHS Annual Meeting

The 1993 ASHS Annual Meeting will be held at the Opryland Hotel in Nashville. The hotel has more than 1900 guest rooms and ample meeting and display space. The two huge conservatories (more than 2 ha) offer an attractive "tropical" setting and the opportunity to dine in a garden filled with plants, water, colored lights, and music. ASHS has reserved 1000 tickets for The Grand Ole Opry performance on Saturday night, 24 July 1993. Members and their families may order tickets through the ASHS registration form to be published in the Apr. 1993 issue of the ASHS Newsletter. Tickets for the Opryland Theme Park, which is adjacent to the hotel, may be purchased at the park.

The Univ. of Tennessee

While Opryland is an excellent place to hold the ASHS Meeting, the host school conducts most of its business 300 km away. The Univ. of Tennessee (UT) was established in Knoxville 198 years ago. The horticultural host team has been assembled from two departments at UT and the other five state universities that have horticultural programs. In 1972 UT reorganized the Depts. of Horticulture and Agronomy in a unique way. Turfgrass science was taken from the Dept. of Agronomy and combined with everything called "amenity horticulture" to create the Dept. of Ornamental Horticulture and Landscape Design. Douglas Crater now heads that department, which includes teaching, research, and extension activities. At the same time, fruit and vegetable teaching and research was combined with agronomy to create the Dept. of Plant and Soil Science currently headed by John Foss. The Extension Plant and Soil Science Section is under the leadership of Elmer Ashburn. Both departments offer undergraduate and MS degrees, but only the Dept. of Plant and Soil Science has a PhD program.

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