

Bursera microphylla in Phoenix, Arizona

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Phoenix, Arizona largely occupies an enormous, perfectly flat valley along the lower reaches of the Rio Salado (Salt River), just before it empties into the Gila River. The Phoenix valley is relatively devoid of plant diversity due to human development and lack of topography. However, within the city of Phoenix are several large and mountainous parks. Along the southernmost edge of Phoenix is South Mountain, which is a relatively undeveloped city park, save for an ever-growing number of telecommunications towers at its summit. South Mountain is approximately 15 km long, running west to east.

The western edge of South Mountain represents the northern limit of the range of the elephant tree, *Bursera microphylla*. This species is cold limited and seems to only occur on south-facing slopes at South Mountain. *Bursera microphylla* is native to the lower elevations of Arizona (under 800 m elevation), as well as southeastern California and Sonora. Although wide ranging, it is treat to see mature specimens within the Phoenix city limits, within a half-hour hike of a parking area. Along the Alta Trail, *Bursera microphylla* can be found from about one-fifth of the way up the ridge (ie, as soon as the average grade of the trail increases to over 5°) until the top of the ridge.

The photographs were taken on 30 May

A group of three *Bursera microphylla*. The sticks in the foreground are a dormant (dead?) brittlebush, *Encelia farinosa*. Behind the leftmost *Bursera* is a 1 meter tall *Ferocactus cylindraceus*.





2004, at the end of a fairly dry spring in the Phoenix area. The plants were just beginning to come into leaf, and one specimen was in flower. The flowers are small, around 3 mm in diameter, with either four or five light-yellow petals. The largest individual plant at this location is approximately 2.5 meters tall. The bark on young stems of *Bursera microphylla* is a lovely chocolate brown color, very similar to the local wolfberry shrubs (*Lycium* spp). Older *Bursera microphylla* stems are somewhat papery and gray in color. There does not appear to have been any recent recruitment of seedlings to this population, judging from lack of any small seedlings. ❖

◀ A different view of the *Bursera microphylla* in the Estrella Mountains are visible in the distant background.

▼ A dichotomously branched *Bursera microphylla* with a small, but flowering sized, *Ferocactus cylindraceus* at its base. Larger specimens of *Ferocactus cylindraceus* and *Cylindropuntia acanthocarpa* can be seen in the background.

