



THESE PLANTS WERE HERE.

Historic Riparian Flora of the Tucson Basin, Arizona

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Mauz, K. 2006. Historic Riparian Flora of the Tucson Basin, Arizona. Ph.D. Dissertation, University of Arizona, Tucson.

ABSTRACT

The former existence of streams and springs, marshes, gallery forest and mesquite bosque in the valleys of the Tucson Basin is well known from the historic literature. Broad floodplains of fine soils, a shallow ground water table, and perennial stream reaches along the length of the Santa Cruz and Rillito valleys were among those features in the study area frequently remarked upon by travelers, settlers, and scientists. This study has documented the plant biodiversity of this historic landscape. Collections-based research at several major herbaria discovered 1137 specimens collected in the Basin's bottomlands from the Mission San Xavier to the stage-era landmark, Point of Mountain, and from Tanque Verde to the Nine-mile water hole. The collections dated from 1855 to 1920, the work of more than forty botanists, ecologists, and students. The specimens represent 385 species in 72 plant families, and include 20 type collections. Wetland-associated plant species constituted more than one-quarter of the assembled taxa and were the sole representatives of more than one-third of the families in the flora. In the flora region, other, recently-compiled local floras that included riparian and wetland vegetation have documented 42-60% of the species in the historic flora. The flora shared elements with both Sonoran Desert and Madrean floristic regions, and contained species characteristic of cienegas and riparian forests of higher-elevation desert grasslands. Species records from the valleys of the Tucson Basin during the historic time frame were, in many cases, geographic outliers in the ranges of their respective species.