

RARE PLANT SURVEY AND GENERAL PLANT INVENTORY
OF HIPPIE HOLLOW COUNTY PARK, TRAVIS COUNTY, TEXAS,
SUMMER 1996

21 September 1996 Draft

During the summer of 1996, botanical surveys were conducted on all Travis County parks west of the Balcones Escarpment. The goals of these surveys were to locate populations of rare, unusual, or management sensitive plant species and, at each park, to conduct a general inventory resulting in an annotated checklist of all plant species observed. Hippi Hollow Park was visited for approximately two hours on 12 July 1996 and one hour on 30 August 1996.

Location/Physical Setting

Hippi Hollow, Travis County's only R-rated park, stretches for slightly more than half a mile along the northern shoreline of Lake Travis just east of the mouth of the Cypress Creek arm. Access is via Comanche Trail, which forms the northern boundary. About half of the park's 109 acres lie on steep south-facing slopes, but a considerable percent of the western part is dedicated to a paved parking lot large enough to accommodate the cars of at least some of the people who enjoy spending part of the weekend exposing their entire bodies to the central Texas summer sun.

Like most county parks on the shoreline of Lake Travis, Hippi Hollow Park is underlain by alternating layers of Cretaceous limestone and marl of the Glen Rose Formation (Garner et al., 1980; Proctor et al., 1981). Elevation ranges from about 860 feet in the northeast corner down to 681 feet, the normal pool level of Lake Travis.

On sheet 22 of the Travis County soil survey (Werchan et al., 1974), only one soil unit is mapped within the park: Brackett soils and Rock outcrop, steep. Brackett soils are shallow, well drained soils of limestone uplands. The surface layer is light brownish-gray gravelly clay loam or gravelly loam about 4 inches thick; the next layer, about 10 inches thick, is pale-brown clay loam. These soils are calcareous, moderately alkaline Typic Ustochrepts and are assigned to the Steep Adobe range site. These soils are severely eroded on steep slopes in much of the eastern half of the park.

Vegetation

The plant communities of Hippi Hollow Park have undoubtedly already been described in detail during the course of surveys of resident endangered bird species. At our level of concern, the vegetation of the park could be described as consisting of two components: a mostly evergreen woodland, which occupies the steep rocky slopes in the eastern part of the park, and an evergreen/deciduous shrubland, which occupies the undeveloped portions of the western third of the park.

The slope woodland is clearly dominated by Ashe juniper (*Juniperus ashei*), some of which are of fairly large size. Interspersed are smaller numbers of various hardwoods, of which Texas oak (*Quercus buckleyi*) is probably the most important. Where canopy coverage is high, both the shrub and ground layers are poorly developed, but any number of shrubs and herbaceous species can be found in small openings, along the paved service road that winds along the lower slope, or anywhere canopy coverage is minimal (see attached plant list).

A description of the structure and composition of the shrubland in the western part of the part should be obtained from studies of its population of Black-capped Vireo (*Vireo atricapillus*).

Target Rare Plant Species

Six rare plant species were sought in appropriate habitat at all of the sixteen parks included for survey during this project: Texas amorphia (*Amorpha roemerana*), Texabama croton (*Croton alabamensis* var. *texensis*), Glass Mountains coral-root (*Hexalectris nitida*), Heller marbledseed (*Onosmodium helleri*), canyon mock-orange (*Philadelphus ernestii*), and Buckley tridens (*Tridens buckleyanus*). A seventh rare plant species, bracted twistflower (*Streptanthus bracteatus*), cannot be detected during summer of a drought year and was essentially omitted from this project. Information about the relative rarity, distribution, habitat, etc., of each of these species will be provided in a separate appendix at the end of the set of park reports.

Results of Rare Plant Surveys

Three of the six target species are shrubs which can be sought during most of the growing season. Canyon mock-orange is restricted to solution-pitted limestone boulders and rimrock in and along wooded steep-sided canyons; such habitat is absent from Hippie Hollow Park. Texabama croton is capable of occupying a broader range of habitats, perhaps including some of those within the park. However, it is such a conspicuous shrub that an absence report resulting from a survey of a park of this size is probably not entirely meaningless. The likelihood that the third target shrub, Texas amorphia, occurs somewhere within the park seems much higher, since appropriate habitat is present and several populations are known from nearby areas. Nonetheless, no Texas amorphia have been found to date at Hippie Hollow.

The other four target species are herbaceous plants, all of which could conceivably occur in Ashe juniper woodlands and openings on slopes at Hippie Hollow. One of these species, bracted twistflower, is a spring ephemeral which was not sought during surveys of any Travis County park during the summer of 1996. Two others, Heller marbledseed and Glass Mountains coral-root, were sought on 12 July 1996 and 30 August 1996, but no populations came to light. The former is a conspicuous plant which even during a dry summer is hard to overlook. The latter is an extremely inconspicuous denizen of juniper woodlands that is difficult to find during even the best of circumstances. A one-hour survey of such habitat on 30 August 1996 by Carr along with

Clif Ladd and Terri Siegenthaler revealed one stem of a close relative, crested coral-root (*Hexalectris spicata*), but no Glass Mountains coral-root.

Results of General Plant Inventory

Approximately 111 plant species have been observed within the park to date. Such a low number is not surprising given that, due to extended drought conditions during the summer of 1996, most herbaceous plants had by then either disappeared from the landscape or been desiccated to unrecognizable skeletal forms. Information about the status of all of these species is provided in the preliminary checklist attached to this report. A more complete inventory of the herbaceous flora will require additional visits during April and May of a normal year.

The flora of Hippy Hollow also includes seven species that are endemic to (found only in) central Texas: plateau gerardia (*Agalinis edwardsiana*), widow's tears (*Commelinantia anomala*), devil's shoestring (*Nolina lindheimeriana*), sevenleaf creeper (*Parthenocissus heptaphylla*), Lindheimer crownbeard (*Verbesina lindheimeri*), mountain grape (*Vitis monticola*), and twistleaf yucca (*Yucca rupicola*). Although endemic, none is presently considered a species of conservation concern. Information about the occurrence of these species within the park can be gleaned from the attached park plant list; general information about these endemics will be presented in a separate appendix at the end of the set of park reports.