

RARE PLANT SURVEY AND GENERAL PLANT INVENTORY  
OF BOB WENTZ PARK AT WINDY POINT AND THE ROMBERG TRACT,  
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. Bob Wentz Park at Windy Point and/or the adjacent Romberg Tract were visited for approximately three hours on 21 June 1996, two hours on 12 July 1996, one hour on 19 July 1996, two hours on 2 August 1996, one hour on 12 August 1996, and one hour on 30 August 1996.

**Location/Physical Setting**

Bob Wentz Park at Windy Point is located along the eastern shoreline of Lake Travis about 1 1/2 airmiles north of Mansfield Dam. Its entrance road lies on the southwest side of Comanche Trail near its northern end, north of R. M. 620. This road forms the northern boundary of the park and separates it from the Romberg Tract, a L-shaped property that extends upslope to the north. Bob Wentz Park features all the development concomitant with its use as a swimming beach. It also boasts a rather large camping area. Except for a large septic field near its southeastern corner, there is no development on the adjacent Romberg Tract.

Topography within the park is level to gently sloping. More serious topography is found on the Romberg Tract, which features steep slopes with northern, southern and western exposures. These slopes feed in part into two minor canyons, one near the eastern edge of the park and a deeper one draining northwest from the center of the Romberg Tract. Both are dry except immediately after rains, and there is no surface water within the park or the Romberg Tract. According to the Mansfield Dam Quadrangle, elevation ranges from about 960 feet in the panhandle of the Romberg Tract down to 681 feet, the normal pool level of Lake Travis (Figure 1).

Like most county parks on the shoreline of Lake Travis, Bob Wentz Park and the Romberg Tract are underlain by the Glen Rose Formation (Garner et al., 1980; Proctor et al., 1981). This Cretaceous formation is composed of alternating layers of hard limestone and soft marl which typically erode into a stairstep topography; this feature is readily apparent on open slopes in the southeastern part of the Romberg Tract.

On sheet 22 of the Travis County soil survey (Werchan et al., 1974), two soil units are mapped in the area (Figure 2). All of the park and lower slopes along the southern edge of the Romberg Tract are mapped as Tarrant soils, rolling. Tarrant soils are shallow to very shallow stony clays of limestone uplands. The surface layer is dark grayish-brown stony clay about 8 inches thick; the underlying layer is limestone. These soils are well drained, calcareous, moderately alkaline Lithic Haplustolls and are assigned to the Rocky Upland range site. Soils of most of the Romberg Tract are mapped as 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.

## Vegetation

The principal current vegetation of the Romberg Tract and northern parts of Bob Wentz Park is an evergreen woodland which occupies gentle lower slopes and most of the moderate to steep upper slopes. This woodland is clearly dominated by Ashe juniper (*Juniperus ashei*) and percent cover is generally high. Plateau live oak (*Quercus fusiformis*) is of secondary importance, and few other woody plants are present in significant numbers. The ground layer, as is often the case in “cedar brakes,” is particularly depauperate; under the dense shade of junipers only cedar sedge (*Carex planostachys*) and cedar panicgrass (*Dichanthelium pedicellatum*) are consistently present, and much of the ground is covered only with juniper scales.

In some areas, particularly on dry rocky southern exposures, this low-diversity woodland is punctuated with midgrass openings probably dominated by seep muhly (*Muhlenbergia reverchonii*) and tall grama (*Bouteloua pectinata*) with little bluestem (*Schizachyrium scoparium*) of secondary importance. Any number of perennial and annual forb species can be found in such openings, particularly during spring months, but few were detected during these surveys if only because of preceding drought conditions.

Another variant from the monotonous juniper woodland is found along the Romberg Tract’s principal ravine, which drains northwestward and exits the tract at a curve on Comanche Trail. In this slightly more mesic situation, Ashe juniper is joined by a number of other small trees and shrubs, most notably Texas oak (*Quercus buckleyi*), which is elsewhere common only on a moderate north-facing slope in the tract’s northern panhandle. The bottom of this shallow ravine is dotted with boulders of solution-pitted limestone that came to rest here after falling from the contact of the Edwards Limestone and Walnut Formation upslope (off site). The florula of these boulders adds considerably, particularly in terms of fernage, to the diversity of this area. The canopy of the woodland along the shallower canyon near the east edge of the park also includes many species other the juniper, including a few large plateau live oak, cedar elm (*Ulmus crassifolia*), and hackberry (*Celtis reticulata*). The park also includes various kinds of grassy clearings, most of which are dominated by King Ranch bluestem (*Bothriochloa ischaemum*).

Other communities include at least two bands of vegetation along the shoreline of Lake Travis. At the high water line is a strip of bermudagrass (*Cynodon dactylon*) dotted with occasional water-loving shrubs, such as buttonbush (*Cephalanthus occidentalis*) and chaste-bush (*Vitex agnus-castus*). Downslope, on dry silt and gravel exposed during period of low lake levels, is an assemblage of annuals such as fourspike heliotrope (*Heliotropium procumbens*), Vahl fimbry (*Fimbristylis vahlii*), sesbania (*Sesbania* sp.), and cocklebur (*Xanthium strumarium*), as well as bermudagrass.

### **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 marbleseed (*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**

Populations of two of the target plant species have been reported from the Romberg Tract. Texas amorphia occurs in scattered locations, mostly along the drainage on the western side of the panhandle. A population of Heller's marbleseed reported by DLS Associates (1990) could not be relocated during these surveys. Each species is discussed in more detail below.

Two of the other five target species are shrubs which can be sought during most of the growing season, and their failure to materialize during the current and previous surveys is probably indicative of their absence. Canyon mock-orange is restricted to solution-pitted limestone boulders and rimrock in and along wooded steep-sided canyons. Suitable boulders line the bottom of the canyon on the panhandle of the Romberg Tract, having rolled from a rimrock exposure of Edwards Limestone upslope off site. However, they support no canyon mock-orange. Texabama croton is capable of occupying a broader range of habitats, perhaps including some of those within the park, but it has not been found in the area to date.

Seemingly suitable habitat for one of the herbaceous targets, Glass Mountains coral-root, is found throughout the Romberg Tract. Its low diversity juniper woodlands were visited repeatedly during July and August 1996 in an attempt to locate a population of this cryptic orchid, all to no avail. It is likely that this species could be found on the Romberg Tract during a year in which rain actually falls prior to the July onset of flowering. Surveys at other seasons will be required to determine the presence of the two other herbaceous targets, bracted twistflower and Buckley tridens.

TEXAS AMORPHA AT THE ROMBERG TRACT. This endemic shrub was first reported from the area by DLS Associates (1990). Several shrubs were found “along the roadway just east of Comanche Trail, south of the ravine, and within the buffer zone at the northeastern end of the park.” An accompanying map provided a second frame of reference (Figure 3). For whatever reason, no Texas amorpha plants were found at any of these previously reported locations during surveys in the summer of 1996.

However, a total of 16 Texas amorpha shrubs turned up in two locations not reported by DLS Associates (Figure 4). The larger population lies in an oak-juniper woodland in and along the principal canyon draining the western part of the tract. On 21 June 1996, thirteen plants were observed on the stretch beginning a few feet east of Comanche Trail and extending upcanyon for perhaps 300 feet. Four of these plants were about four feet in height; the other individuals were heavily browsed sprouts from the bases of dead trunks or simply from the root crown. None of the mature plants possessed any intimation of imminent flowering, which by this date should have been obvious. On 19 July 1996, two additional plants were encountered in the deeper portion of the canyon west of Comanche Trail. One 4 foot shrub was found a few feet south of the very bottom of the canyon about 15 feet west of the wall of riprap on the road’s shoulder. One very spindly 12 foot shrub, with foliage only in the terminal foot or so, was found in the very bottom of the canyon about 25 feet below the second Glen Rose waterfall. Canopy coverage in this part of canyon is fairly high, and neither of these shrubs bore evidence of recent floral activity.

The sixteenth Texas amorpha was observed on 21 June 1996 in an oak-juniper woodland on a fairly steep north-facing slope along the northeast-southwest fenceline on the west side of tract’s northern panhandle. It was a mere sprout a few inches in height.

HELLER’S MARBLESEED AT THE ROMBERG TRACT. This endemic forb was also reported from the Romberg Tract by DLS Associates (1990) “in the buffer zone at the northeastern end of the park.” An accompanying map shows 10 dots on the lower portion of the north-facing slope in the park’s panhandle, just west of the northwest corner of the Romberg Tract (Figure 3). This area was visited on 21 June 1996 and 19 July 1996 and no Heller’s marbleseed plants were encountered. In fact the habitat, a low diversity Ashe juniper-shin oak woodland on very shallow dry soils with little organic material, seemed very unlikely to support a significant population of this species.

## **Results of General Plant Inventory**

Approximately 149 plant species have been observed within Bob Wentz Park and/or the Romberg Tract. Such a low number is not surprising given that, due to extended drought conditions during and preceding the summer of 1996, most herbaceous plants maintained a low profile during the entirety of this survey period. A more complete inventory of the herbaceous flora will require additional visits during a year of normal rainfall. Information about the status of all species observed is provided in the preliminary checklist attached to this report.

In addition to two target species reported above, the flora of Bob Wentz Park and the Romberg Tract includes six other species that are endemic to (found only in) central Texas: Lindheimer paintbrush (*Castilleja purpurea* var. *lindheimeri*), blackfoot spurge (*Chamaesyce angusta*), devil's shoestring (*Nolina lindheimeriana*), Lindheimer crownbeard (*Verbesina lindheimeri*), mountain grape (*Vitis monticola*), and twistleaf yucca (*Yucca rupicola*). 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.