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## Klosterman Preserve Site Evaluation

29 April 2020

### Report Background and Purpose

At the request of members of the WK Preservation Group, I conducted a site visit and review of property that the group has targeted for preservation on 27 April 2020. This report summarizes my evaluation of the 13.85-acre parcel adjacent to Klosterman Road in Tarpon Springs, Florida. The site is currently owned by the Pinellas County School Board and has been deemed surplus by them and is now offered for sale. The site is fronted by Klosterman Road to the south and is adjacent to developed land (MacGregor Way, Mariner Village and Tarpon Cove) to the west, developed land to the east along Carlton Road, and a 76-acre Pinellas County Environmental Preserve, the Mariner's Point Management Area, to the north. The purpose of the site visit was to evaluate the 13.85-acre property, herein referred to as Klosterman Preserve, for its ecological condition and suitability for preservation.

### Site Description and Environmental Characteristics

The site is comprised of uplands; the vast majority of it being a well-drained ridge that slopes slightly to the west as it meets the developments on its western boundaries. The ridge that comprises most of the property is situated on soils that developed from historic beach ridges and dunes. As such, the sands are coarse and support sandhill and scrub vegetation. The surface sands are white, but the subsurface is composed of yellow sand. This is a typical condition.

Overall, the vegetation reflects intact natural communities expected to occur on such soils. There is very little evidence of invasive and/or nonnative incursion on this site except for the extreme edges that border developments to the east and west and to a very limited extent in the vicinity of a former homestead in the interior of the site. The edge adjacent of the western development has significant numbers of tuberous sword fern (*Nephrolepis cordifolia*) and the edge immediately adjacent to Klosterman Road has some evidence of ruderal species such as giant guinea grass (*Urochloa maxima*) and roadside lantana (*Lantana strigocamara*) as well as Brazilian pepper (*Schinus terbinthifolius*). These two disturbed regions generally are no more than 50 feet in width, along the border adjoining the developed edges. The former homesite consists of a small area (approximately 400 ft<sup>2</sup>) of concrete foundation and a structure that may have been a former well. In this region, there are several woody species that have taken

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advantage of this past disturbance; most notably Brazilian pepper and carrotwood (*Cupaniopsis anacardioides*). None of these are mature specimens. One mature eucalyptus (*Eucalyptus* spp.) also occurs in the vicinity of the former homestead.

Except for the minimal areas of disturbance, the site is in excellent ecological condition. The vegetation exhibits evidence of both sandhill and sand scrub species and these species are mature and likely to be the historic vegetation native to this site. Sandhill canopy species of longleaf pine (*Pinus palustris*), and turkey and bluejack oak (*Quercus laevis* and *Q. incana*, respectively) are relatively common, however, the numbers of longleaf pine increase near the property's border with Mariner's Point Preserve to the north. Much of the site is dominated by sand scrub canopy species. Sand pine (*Pinus clausa*), in various age classes, was distributed throughout the site as were two oaks indicative of scrub, myrtle and Chapman's (*Quercus myrtifolia* and *Q. chapmanii*, respectively). No scrub oaks likely older than 50 years were in evidence. Scattered throughout the interior upland ridge portion of this site are live oak (*Quercus virginiana*). A well-developed live oak hammock constitutes the western edge of the parcel as it slopes to the lower elevation of the adjacent developments.

The understory of the undisturbed ridge portion of this site is comprised mostly of open sand with patches of forbs indicative of well-drained sandy communities of this region. There was little evidence of grasses and graminoids more indicative of sandhills. Widely dispersed small patches of wiregrass (*Aristida stricta*) and bluestem (*Andropogon virginicus*) were evident, but most of the vegetated portions of the understory were comprised of forbs. Most common were pinebarren frostweed (*Crocantemum corymbosum*), sky blue lupine (*Lupinus diffusus*), gopher apple (*Licania michauxii*), and honeycombhead (*Balduina angustifolia*). No evidence of listed plant species was noted, except for a small number of the state-endangered giant airplant (*Tillandsia utriculata*) within the oak hammock region. Much of the area is open and sunny with few areas of woody shrubs. Hog plum (*Ximenia americana*) was scattered throughout the site and a small area of Chickasaw plum (*Prunus angustifolia*) was found in the interior.

Wildlife observations were made during my brief site visit, but were not the primary purpose. Burrows of the state-listed threatened gopher tortoise (*Gopherus polyphemus*) were abundant and the diversity of burrow-entrance sizes indicates that the status of the population is healthy and significant. As this parcel is adjacent to several freshwater ponds, there is a possibility that several listed tortoise-burrow commensals are present as well. Other wildlife noted by sign or direct observation included black racer (*Coluber constrictor*), eastern towhee (*Pipilo erythrophthalmus*), nine-banded armadillo (*Dasypus novemcinctus*) and raccoon (*Procyon*

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*lotor*). Mounds indicative of southeastern pocket gophers (*Geomys pinetis*) also were evident. All of these are common to a wide variety of upland habitat types.

#### **Recommendation and Basis for Preservation**

This parcel is of utmost ecological significance, despite the general lack of listed species. Intact parcels of sandhill/scrub are extremely rare in Pinellas County. Both communities are classified as “globally imperiled” (G2/S2) by the Florida Natural Areas Inventory and nearly all historic examples of these systems in Pinellas County have been developed. Few examples remain and most that do are small fragments in County and City-managed parks and preserves. Adding approximately 13 acres of this community to preservation status would add greatly to the inventory of County protected lands. More significant, however, is its adjacency to existing preserved land. Preservation of this parcel would add significantly to the existing uplands already protected by Pinellas County’s Mariner’s Point Preserve. Currently, the County Preserve is a mosaic of uplands and estuarine wetlands. The relatively narrow band of longleaf pine-dominated uplands would be increased significantly by the addition of the Klosterman Preserve – effectively doubling its acreage and improving its long-term management possibilities. An opportunity to preserve uplands in this condition and of this type should not be missed.

The parcel also adds greatly to public-use opportunities. Currently, the estuarine system within the County’s Mariner’s Point Preserve offers some public recreation opportunities for personalized non-motorized watercraft such as kayaks and canoes, but there are few opportunities for upland walking trails given the geometry of the site in relation to possible public access points. Those opportunities would be greatly enhanced by the addition of the Klosterman Preserve parcel. Because of its location immediately adjacent to a well-traveled roadway (Klosterman Road) and its disturbed edge in that location, creation of a small access area for a public walking trail would be feasible without damage to intact communities interior of the edge. It also would provide opportunities for kayakers to have access from the estuarine part of Mariner’s Point Preserve. An existing trail system within the Klosterman Preserve parcel is partially overgrown, but could be easily cleared to make such a public trail with minimal impact. Additionally, the former homestead could serve as an informal education stop/point of historic interest.

Future management is always a valid consideration for lands proposed for additional acquisition. I believe that management of this parcel should not be an obstacle for acquisition. Unlike many upland sites that require periodic prescribed fire as a management tool, the openness of the upland understory on this parcel essentially precludes the need or opportunity

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to use prescribed fire. Sand scrub typically has a very long fire interval of 50 or more years. There is no evidence that this site has burned in recent history and it would seem that any management required to maintain it could be performed mechanically as needed. Acquisition would allow Pinellas County Parks and Recreation Department to assume management authority. As this agency is already responsible for managing the Mariner's Point Preserve, adding this additional acreage should be considered a natural assignment of management authority and a minimal additional management burden.

As the former Director of the Pinellas County Environmental Lands Division, I feel well-qualified to evaluate the potential of lands still possible for acquisition in this region of Florida. This parcel is of utmost significance and should not be passed up for preservation as a natural land.

**Dr. Craig N. Huegel, PhD, CWB**