VON ZUBEN MANAGEMENT PLAN CREATED AUGUST 2008 CURRENT APRIL 2011



I. INTRODUCTION

This is the management plan referred to in Section 5.2 of the Agreement Between Tenants in Common dated July 2008 (hereafter referred to as the "Co-Tenants Agreement"). The Co-Tenants Agreement will control in the event of any conflict between this plan and the Co-Tenants Agreement. A copy of the Co-Tenants Agreement is appended to this document.

II. SUMMARY

- 1. 3-acre property 50% owned by Harding Township and 50% owned by Harding Land Trust.
- 2. Once native meadow plants are established and invasive species are controlled, mowing can be reduced to once a year or even biannually.
- 3. Invasive species will be reduced over time and re-growth controlled.

4. An equestrian trail will be established and maintained; otherwise use is limited to passive recreation.

III. MANAGEMENT PLAN BACKGROUND:

- l. Property: Windy Hill Preserve (Von Zuben Lot 4.05, Block 7)
- 2. Location: Corner of James Street and Blue Mill Road
- 3. Ownership: Harding Land Trust 50% and Harding Township 50%. Execution of the HLT and Harding Township approved Management Plan will be supervised by HLT and activities and expenditures will be coordinated with HT Administrator. Where practical, volunteer donations of labor and/or equipment consistent with HT policy, will be used to maintain the property.
- 4. Historical Landscape context: Part of a tract of land that had been a racetrack for trotters. Old barn/farmstead. Prior to 1963 used primarily for hayfields.
- 5. Current Landscape context: When purchased, property consisted of a field with extensive stands of invasive species (mostly porcelainberry and multiflora rose). Several large standing dead trees posed a safety concern for ongoing maintenance and to visitors to the property. The northern most corner of the property traverses the sulky track and includes a small, forested wetland area. A dense stand of small cedar occurs in the northwest corner, which provides wildlife cover and a natural screen for the house on the adjacent lot.
- 6. Parcel Size: 3 acres
- 7. Conservation Values:
- Property drains toward stream tributary of Great Brook
- Linkage to other conservation properties (Margetts Field)
- Recreation: linked bridle paths and public wildlife observation
- Scenic viewscape, gateway

IV. GOALS & CHALLENGES:

GOAL 1: Create native perennial wildflower meadow to provide habitat for pollinator species and contribute to scenic viewscape at a Harding gateway.

Rationale: The seeds of many food and forage crops in New Jersey require insect pollinators. Pollinators are also important to the function of many terrestrial ecosystems because they enhance native plant reproduction. As a group, pollinators are threatened worldwide by habitat loss and fragmentation, use of pesticides, disease and parasites. A pollinators' meadow appears to be the most productive

ecological use of this small site and will also greatly enhance its scenic value. The existing native trees will be preserved whenever possible as well as the planted wooded hedgerows along both James Street and Blue Mill Road.

Challenges: The establishment of a native meadow habitat can take several years. Active management, such as frequent mowing, invasive species control, and selective planting will be needed to encourage meadow establishment. Invasive and exotic plants compete with native species, are unsightly and have damaged many of the mature trees on the property. Invasive shrubs and vines must be controlled by a combination of mechanical and chemical treatments. No non-native plants will be introduced. In addition, some minor grading of the site will facilitate mowing, maintenance and safe public access.

GOAL 2: Create site-appropriate public access to property.

Rationale: Encourage passive recreation by pedestrians such as bird and butterfly observation, a bridle trail connection, and a place for quiet reflection. Relocate the current bridle/foot trail from roadside shoulder to the interior property boundary along James Street. Install open space markers and bridle trail signage at entrance to property. Maintain mowed trail to keep visitors in desired areas and steer users away from adjacent private property. It will be important to keep property boundaries well marked.

As such, three posts (of natural materials) will be installed along the eastern property boundary to create a sight-line to easily monitor for encroachments. No other temporary or permanent structures such as fountains, statues, or benches etc, will be introduced.

Challenges: Establish mowing schedule for trail area and evaluate usage patterns to ensure that disturbance to sensitive habitat areas is minimized.

GOAL 3: Evaluate and revise management practices to ensure conservation objectives are met.

Rationale: Frequent evaluation will be needed to ensure restoration objectives are met. Annual monitoring and biological data collection will be used to evaluate the success of current practices and improve future management. The management plan will be evaluated and modified every two years or as needed, pursuant to the Co-Tenants Agreement.

Challenges: HLT staff will conduct annual monitoring on the site. In addition, a natural resource biologist from U.S. Fish and Wildlife Service or Natural Resources Conservation Service will evaluate the site and review management practices every two years. HLT will share the results of all such monitoring with HT.

V. IMPLEMENTING STRATEGIES

Plan implementation will focus on achieving the management goals with a careful eye toward cost containment using volunteers where practical. Any direct costs will be reviewed and agreed on in advance by Harding Township Administration and the Harding Land Trust. As appropriate, volunteers will be utilized according to policies established by HT and HLT.					
John R. Murray, President of Harding Land Trust	Date				
Marshall Bartlett, Mayor of Harding Township	Date				

Timeframe	Task/Description	Est. Cost	Responsible	Status
Spring 2009	Evaluate trees and remove dead & diseased trees.		HT	Completed
Spring 2009	Complete removal of invasive vines and shrubs.		HT	Completed
Summer and Fall 2010	Grade portion of site to support mowing and safe access (see attached map).	\$2,130 + additional \$800	HLT and HT (50-50 cost share)	Completed
Fall 2010	Reseed graded area with native grassland seed mix.	\$370 in materials. 1 day staff and volunteer labor	HLT	Completed
Spring 2011 and 2012	Mow meadow area (2 acres) to 6" in June.	\$250	HLT	Planned
Spring and Summer 2011	Thin stand of cedars to improve health and vitality. If thinning involves 1-3" caliper will accomplish with volunteers. HLT will flag trees and provide timeframe for HT arborist to review.	Volunteers and/or tree service	HLT – HT	Negotiable
Summers 2011 and 2012	Cut/pull invasive plants and Introduce native plantings as needed.	Volunteers - Planting cost TBD	HLT	
Fall 2011	Consult with Green Village Bridle Trail Association (GVBTA) to establish trail location on property and provide trail markers and request mowing as needed. GVBTA will maintain trail as needed to accommodate riders.	N/a	HLT - GVBTA	
Fall 2011	Purchase Open Space Marker. The standard Green Acres sign will also be _posted as required and HLT and HT will work together to develop language for open space marker.	\$1800	HLT	
Fall 2012	Install Open Space Marker.		HT	Requested/ Negotiable

Spring 2012	Survey and Install three natural materials boundary markers on western property line.	\$600	НТ	Underway
Annually	Ensure property boundaries are easily identifiable. Although no fencing is recommended, 3 boundary markers should be maintained along the eastern property line. Annual monitoring reports will be on file.	\$250	HLT	Underway
2013	Request assistance from United States Fish and Wildlife Service or other public service agency biologist to inspect the site and make management recommendations.	None	HLT	
Long-Term (year 3 and beyond)	We anticipate reducing mowing schedule to every spring, every other year.		HLT - HT	Under discussion
Long-Term (year 3 and beyond)	Invasive Species Control. Once per year, as needed.	1 day Volunteer time. Supplies \$150	HLT	
Review & Update	Pursuant to the Co- Tenants Agreement, the Management Plan will be reviewed and updated every two years or sooner at the request of either HLT or HT.	Any costs to be shared 50/50	HLT – HT	
Dispute Resolution	In the event of disagreements between HLT and HT, the dispute resolution process outlined in the Co-Tenants Agreement will be followed.			