

## REGION 3, SECTION 6 RECOVERY LAND ACQUISITION GRANT PROPOSAL

Submitted by the ODNR, Division of Natural Areas & Preserves  
2045 Morse Road, Building F-1, Columbus, OH 43229  
Proposal prepared by Melissa Moser

### **PROJECT TITLE:**

Conservation easement acquisition at Camp Oty'Okwa, Hocking County, Ohio to aid in recovery of the small whorled pogonia (*Isotria medeoloides*).

### **NEED:**

Protecting known *Isotria medeoloides* populations and essential habitat is the primary goal of the Small Whorled Pogonia Recovery Plan (Recovery Plan). Found within the 617-acre Camp Oty'Okwa in Hocking County (Exhibit A), this location is only the second known site in Ohio for the small whorled pogonia. The other site, consisting of one plant not observed since 1985, is found in Scioto County within the Shawnee State Forest.

The Recovery Plan indicates that a minimum of 61 self-sustaining populations distributed proportionally throughout the range of the species must be permanently protected before it can be de-listed. While most of the protected populations are in the northeastern U.S., Ohio is on the western edge of the species range. Protection of the Camp Oty'Okwa population is significant both ecologically and genetically because of its distance from the core populations. The 160-acre easement would protect the population as well as provide a considerable buffer of similar habitat where more plants could potentially be found. The Recovery Plan indicated that the species could be de-listed within a couple of years if recovery goals, such as above, could be met.

Camp Oty'Okwa is one of three residential camps in the country owned and operated by a Big Brothers Big Sisters agency. Its location in the Hocking Hills makes it easily accessible to visitors from the city of Columbus. The camp can accommodate large groups of people who are encouraged to explore nature. The small whorled pogonia population at Camp Oty'Okwa, located approximately one foot from a well-used hiking trail, is directly threatened by trampling from recreational users. Another concern is the increasing value of timber on the site. Because of the small size of the small whorled pogonia population, timbering could decimate the entire site. Development of the property is also a very real possibility given the value of land in Hocking County.

The small whorled pogonia was first seen at the camp in 1998 when there were 10 plants (1 in fruit, 9 vegetative). During the following four years, only vegetative stems were seen: 9 in 2000, 7 in 2001, 13 in 2002 and 2 in 2003. None were seen in the spring of 2004. Small whorled pogonia, like many orchid species, are long lived plants that exhibit periods of dormancy. This species has been known to remain dormant for several years before re-emerging. Plants have also been known to thrive and flower when habitat management, that includes reducing dense shade, is applied to the site. Habitat management is another critical factor in the long-term survival of the species in Ohio. The proposed conservation easement (Exhibit B) on the property will give ODNR the authority to move the hiking trail and provide permanent protection and

management of the plants. Upon protection of the site, a research plan (Exhibit C) will also be initiated which will address additional priorities of the Recovery Plan including monitoring existing populations and surveying for new populations. Goals of this plan include surveying known sites within the easement for the orchid and recording detailed information about individual plants. Surveys will also expand into areas containing suitable habitat, but where plants have not been recorded to date. The effects of habitat management and fencing will also be monitored.

A staircase will be built to protect the hillside where the trail will be diverted and a fence will be erected around the orchid population to provide additional protection from browsing animals (Exhibit D). The only reasonable area to which the trail can be relocated is uphill approximately 75 feet to a formerly used trail. With moving the trail to a location higher on the hillside, it will be necessary to provide a safe and ecologically sound means of accessing the rock formation known as "Counselor's Cave" which is the main destination of hikers to this area. If no improved stair system is installed, the foot traffic between the trail and cave area will have dramatic effects on the delicate hillside ecology because of the steepness of the slope. Much of this hillside is suitable small whorled pogonia habitat based upon the characteristics of the known site. Considerable erosion of soil will result if foot traffic is allowed on this hillside. It is proposed that a cable/rope barrier be erected to ensure that the staircase be used as the only means to get to the cave area from the trail.

The orchids are threatened by browsing deer and other mammals that may be using the existing trail. For this reason, a fence of sufficient height is needed to exclude deer from accessing the area until such a time that the effects of deer browsing can be determined. This fenced area should contain not only the known blooming pogonia plant but also all of the vegetative plants that are in the same general area. A fenced area measuring approximately 40 feet wide and 80 feet long will be needed to adequately protect the pogonia site.

**OBJECTIVE:**

The objective of this acquisition is to put a perpetual conservation easement in place, encompassing approximately 160 acres of a privately owned camp, to ensure protection and long-term management for the Federally threatened small whorled pogonia (*Isotria medeoloides*).

**EXPECTED RESULTS OR BENEFITS:**

As land in Hocking County becomes increasingly more valuable to developers, permanent protection of the site will be critical to protect the plant community. As written in the proposed site management plan (Exhibit E), the site will be preserved as a hemlock (*Tsuga canadensis*) gorge and associated oak-hickory forest protecting the State and Federally listed small whorled pogonia. The pogonia is the only rare plant species located within the easement area although there are other significant species present including many large hemlocks. Records of significant breeding birds on the property include the state threatened hermit thrush (*Catharus guttatus*). Other breeding birds of interest include: Magnolia warbler (*Dendroica magnolia*), blue-headed vireo (*Vireo solitarius*), Canada warbler (*Wilsonia Canadensis*), black-throated green warbler (*Dendroica virens*), solitary vireo (*Vireo solitarius*) and cerulean warbler (*Dendroica cerulea*).

The Hocking Hills region of Ohio is home to a unique ecosystem highlighted by geological features that include waterfalls and Blackhand sandstone cliffs. The conservation easement, located within this region, would add another parcel of protected land to over 9400 acres of Hocking State Forest property, 2200+ acres of Hocking Hills State Park property, 1600+ acres of state nature preserve property and more than 5000 acres of protected county property located in the vicinity of the camp (Exhibit F).

**APPROACH:**

Recognizing the significance of the site, the Division of Natural Areas and Preserves (DNAP) approached the camp with a proposal to dedicate the property as a state nature preserve in 1999. This dedication would have placed many restrictions on the property in order to ensure the protection of the plant community and the rare orchid. At that time, the organization was not interested in dedication because of the limitations it would place on the property and there was no financial incentive to agree to the dedication. However, recent budget concerns have prompted new discussions regarding the future protection of the site. The camp has agreed to the terms of the conservation easement with DNAP to protect a large part of the camp including the orchid population (Exhibit G). The easement will provide the site with the protection necessary for the long-term viability of the pogonia population and also provide the camp with the funds necessary to fulfill their needs. As a result of significant budget cuts to state agencies, DNAP does not have the funds available to purchase the easement. A partnership between USFWS and DNAP would provide the resources needed to assist the non-profit organization while protecting a globally rare plant species.

**LOCATION:**

The proposed easement is located in Hocking County, Benton Twp., Ohio.

**ESTIMATED COST:**

	<u>USFWS</u>	<u>DNAP</u>	<u>LANDOWNER</u>	<u>OTHER</u>	<u>TOTAL</u>
<b><u>LAND ACQUISITION</u></b>					
Conservation Easement Purchase	\$194,904.00	\$64,968.00			\$259,872.00
Appraisals	\$3,750.00	\$1,250.00			\$5,000.00
Survey (already completed)				\$20,000.00	\$20,000.00
Title		\$600.00			\$600.00
Mineral Title Search*					\$0.00
Easement/Boundary Posting		\$2,395.25			\$2,395.25
Negotiations and Coordination		\$3,154.24			\$3,154.24
<b>Subtotal</b>	<b>\$198,654.00</b>	<b>\$72,367.49</b>	<b>\$0.00</b>	<b>\$20,000.00</b>	<b>\$291,021.49</b>
<b><u>MANAGEMENT</u></b>					
DNAP Staff**		\$1,915.00			\$1,915.00
<b>Subtotal</b>	<b>\$0.00</b>	<b>\$1,915.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$1,915.00</b>
<b><u>RESEARCH/MONITORING</u></b>					
DNAP Staff		\$600.00			\$600.00
<b>Subtotal (annually)</b>	<b>\$0.00</b>	<b>\$600.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$600.00</b>
<b><u>FENCING PROJECT</u></b>					
Staff		\$1,915.00	\$500.00		\$2,415.00
Materials		\$1,044.00			\$1,044.00
<b>Subtotal</b>	<b>\$0.00</b>	<b>\$2,959.00</b>	<b>\$500.00</b>	<b>\$0.00</b>	<b>\$3,459.00</b>
<b><u>STAIRCASE/TRAIL IMPROVEMENTS</u></b>					
Planning/drawings			\$7,000.00		\$7,000.00
Materials	\$10,000.00				\$10,000.00
Labor		\$1,915.00	\$7,000.00		\$8,915.00
<b>Subtotal</b>	<b>\$10,000.00</b>	<b>\$1,915.00</b>	<b>\$14,000.00</b>	<b>\$0.00</b>	<b>\$25,915.00</b>
<b>TOTAL</b>	<b>\$208,654.00</b>	<b>\$79,756.49</b>	<b>\$14,500.00</b>	<b>\$20,000.00</b>	<b>\$322,910.49</b>
Percentage	64.62%	24.70%	4.49%	6.19%	

\*Mineral title search not necessary; verification provided by the camp.

\*\*First year, subsequent years at \$777/yr.

NOTE: In the event that partial funding is necessary, the cost of the staircase project can be omitted.  
Full funding is required for the acquisition cost or the easement cannot be purchased.

**SUMMARY:**

**Federal Share Requested: \$208,654.00 (64.62%)**  
**DNAP Share: \$79,756.49 (24.7%)**  
**Landowner Share: \$14,500 (4.49%)**  
**Other: \$20,000 (6.19%)**

