

DATE: February 15, 2024

MEMO TO: Nels Leutwiler, Chair
Preservation Foundation Board

FROM: Dr. Pati Vitt
Director of Natural Resources

RECOMMENDATION: Recommend approval of a \$45,000 grant over three years from unrestricted funds to support the Rare Plant Recovery Project and partnership with the Chicago Botanic Gardens.

FINANCIAL DATA: As of December 31, 2023, the Foundation’s total of unrestricted funding was \$317,637.26. Grants paid and payable from the unrestricted funds as of February 15, 2024, include:

Year	Amount
2024 (paid)	\$ 54,527.05
2024 (payable)	\$ 52,300
2025	\$ 31,000
Total Paid and Payable	\$ 137,827.05

The requested funds would be paid as an annual disbursement of \$15,000 in 2024, 2025, and 2026.

BACKGROUND:

The Lake County Forest Preserve District (District) was created to acquire, preserve, and manage lands “...for the purpose of protecting and preserving the flora, fauna, and scenic beauties within such district, and to restore, restock, protect and preserve the natural forests and such lands together with their flora and fauna, as nearly as may be, in their natural state and condition, for the purpose of the education, pleasure, and recreation of the public” (70 ILCS 805/5).

Our 100 Year Vision makes the commitment that we will maintain the biodiversity of Lake County. As such, the Lake County Forest Preserve District (District) strives to maintain viable populations of all naturally occurring plant species native to its preserves. For many widespread and common species, standard management practices, such as burning and invasive control, suffice to support thriving populations. Other species – principally those with highly specialized biotic and abiotic requirements – require specialized management practices. These include genetic augmentation of existing populations, hand pollination to ensure a high-quality seed set, and propagation by either seed or cuttings to increase both the size and number of existing populations. The Illinois Department of Natural Resources, The Nature Conservancy and the Chicago Wilderness Alliance have identified these species as “species in greatest need of conservation” and many are listed as state threatened and/or endangered in Illinois.

Since 2021, the District has partnered with Chicago Botanic Garden (CBG) scientists to focus on securing nine plant species in greatest need of conservation management. These are Ginseng, Goldenseal, Grass Pink Orchid, Purple Fringed Orchid, Carolina Vetch, Buffaloberry, Seneca Snakeroot, and Inland New Jersey Tea. Our collaborative work has resulted in doubling the District’s occurrences of both ginseng and goldenseal through seed propagation and division cuttings. Additional planting is proposed to further secure the future of these species in Lake County. We have also augmented the number of maternal lineages (seed-bearing plants) of low



bindweed among remnant populations. Plants from different populations were interplanted to ensure cross-pollination of genetically different and compatible plants resulting in viable seed production. Some very small populations are producing viable seed for the first time in many years. These seeds will be used to establishing new populations, as having more than one or two populations decreases the likelihood that the species will disappear from Lake County. Likewise, only a few Buffaloberry and Inland New Jersey Tea plants occur within reach of Lake Michigan’s shoreline. Our weather patterns have become increasingly unpredictable, and the resulting erosion of the Lake Michigan shoreline erosion and other factors related changing climate pose increasing challenges to the plant species that dwell there.

We are working with CBG to inventory the plant’s populations and to collect seed and cuttings. Our collaboration is the first to propagate these species to establish new populations at Fort Sheridan and Spring Bluff Forest Preserves. Finally, gentians, Seneca snakeroot, Carolina vetch, and grass pink orchid are species whose District populations are perilously low. Our collaboration with CBG will continue the important work of follow-up monitoring of recent seeding and plug plots where we are experimenting with various means of increasing recruitment of these species. We will also be inventorying for new populations, and to collaborate with nearby forest preserves and conservation districts to protect these rare species across our entire region.

Annual, year-end reports provided by Chicago Botanic Garden will document each priority species’ results of field monitoring and inventory work, propagation and field plantings totals, plot design, and recommendation for future research and conservation measures. Our collaboration with the Chicago Botanic Garden aligns with the District's strategic objectives to ensure no species are lost from Lake County and to create healthy, resilient populations and landscapes.

REVIEW BY OTHERS: Executive Director of the Preservation Foundation, Director of Community Engagement and Partnerships, Director of Administration, Acting Chief Operations Officer, and Forest Preserves Executive Director

PRESERVATION FOUNDATION BOARD:

Date: _____ Roll Call Vote: Ayes: _____ Nays: _____

Voice Vote Majority Ayes: _____ Nays: _____

Exhibit A: Project Budget

RARE PLANT RECOVERY PROJECT	Annual Cost/Year
Population monitoring/inventory	\$4,000.00
Pollen collection/hand pollination	\$2,000.00
Seed collection	\$2,000.00
Plant propagation (e.g. Goldenseal, gentian,)	\$3,000.00
New propagule planting	\$2,000.00
Follow-up monitoring	\$2,000.00
RARE PLANT RECOVERY PROJECT total per year	\$15,000.00
Grand Total Cost for 3 -Year Project	\$45,000.00