



# New York Natural Heritage Program

A Partnership between The Nature Conservancy and the NYS Department of Environmental Conservation

625 Broadway, 5<sup>th</sup> Floor Albany, NY 12233-4757 (518) 402-8947 Fax (518) 402-8925 www.nynhp.org

## **JOB DESCRIPTION**

**POSITION TITLE:** State Parks Ecologist  
**TNC JOB TITLE:** Applied Scientist II  
**SUPERVISOR:** Chief Ecologist, New York Natural Heritage Program  
**LOCATION:** NYS OPRHP, Albany, New York  
**PREPARED BY:** Greg Edinger & DJ Evans, NY Natural Heritage  
Thomas Lyons, NY State Parks  
**DATE PREPARED:** October 2006

### **PROGRAM BACKGROUND**

The NY Natural Heritage Program is a partnership between The Nature Conservancy and the New York State Department of Environmental Conservation that enables and enhances conservation of rare animals, rare plants, and significant natural communities. The Program accomplishes this mission by combining thorough field inventories, scientific analyses, expert interpretation, and the most comprehensive database on the locations and status of New York's distinctive biodiversity to deliver the highest quality information for natural resource planning and management, land use decisions, and conservation of New York's biodiversity.

NY Natural Heritage uses an integrated data management system, Biotics (Biodiversity Tracking and Conservation System), which includes an ArcView GIS application for spatial data, and an Oracle relational database for tabular data. The Program also uses MS Access, MS Excel, Crystal Reports, and manual files. Biotics and Heritage methodology, used in gathering and tracking rare species and natural community information, are shared across the international network of 75 Natural Heritage Programs and Conservation Data Centers.

### **SUMMARY OF POSITION**

*This position is within the Environmental Management Bureau (EMB) of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). The position has applicability to the entire State Park System and is focused upon conducting inventories of newly acquired state park land, continuing follow-up work at facilities previously surveyed, conducting inventories in connection with Agency projects and initiatives, and providing input as needed on site-specific projects within the state park system, especially where natural communities tracked by NY Natural Heritage may be involved.*

The state parks ecologist participates as a team member on a staff of scientists assigned to conducting inventories and participating in stewardship activities in the State Park System. He/she serves as the primary ecologist for this project and is responsible for various project-related tasks, including field season planning, landscape analyses, field surveys for natural communities and rare species, literature reviews, data entry into the NY Natural Heritage database, and report preparation. He/She assists in the development of the natural community and rare species components of the NY Natural Heritage database especially as it applies to the State Park System. The state parks ecologist may serve as the project manager for Heritage work within the State Park System. He/She may serve as a mentor for other staff on activities on which he/she has particular expertise, but does not supervise other staff. The position will be housed in the State Parks building, 17<sup>th</sup> floor, at the Empire State Plaza in Albany with additional space at the Heritage office at 625 Broadway in Albany.

## **ESSENTIAL DUTIES AND RESPONSIBILITIES**

1. **Manage & Coordinate Projects:** Work under the direction of EMB's Natural Resource Stewardship Coordinator and the Director of the NY Natural Heritage Program to plan, prioritize, and coordinate inventory work on state park lands. Serve as project manager for these projects by coordinating the work of NY Natural Heritage staff and State Park staff working on the project and training contractors and staff as needed. Review contracts, administer project budgets, and act as a liaison to project sponsors in coordination with the Directors of the NY Natural Heritage Program and EMB. Present project overviews at conferences and meetings and write periodic progress reports and final reports as needed.
2. **Field Work:** Conduct landscape analyses to assess ecological integrity and identify potential inventory sites using remote sensing data, other digital and hard-copy data layers, and information from the scientific literature, government agencies, and knowledgeable individuals. Conduct field surveys to document ecological communities and rare plants in project areas using the methods and techniques developed by the Natural Heritage Network and other experts.
3. **Database Management:** Transcribe, update, map, and quality control significant natural community and rare plant element occurrence records.
4. **Classification:** Assist the Chief Ecologist in the development of the state ecological community classification by transcribing and updating of high-priority natural community element occurrence records, maintaining natural community element files, and revising community descriptions.
5. **Innovation:** Participate in the ongoing development of new tools, methods, processes, and techniques that improve the collection, storage, interpretation, dissemination, and application of NY Natural Heritage information.
6. **Communications:** Communicate the role of the NY Natural Heritage Program and the NY State Office of Parks, Recreation, and Historic Preservation in the conservation of New York's biodiversity, and explain the utility of inventories and landscape analyses to staff and partners. In collaboration with the Directors of the NY Natural Heritage Program and the Environmental Management Bureau, communicate regularly with key project partners and others to maintain strong partnerships and facilitate effective conservation.
7. **Fund Raising:** Work with NY Natural Heritage Program and the Environmental Management Bureau in the identification and development of funding proposals that will improve the effectiveness of biodiversity conservation in the State Park System.
8. **Information Requests:** Respond to requests for ecological information from the NY Natural Heritage database and provide interpretation, as needed. Provide expertise and interpretation to OPRHP staff as needed.
9. **Mentor:** Serve as a mentor for other staff on activities on which he/she has particular expertise, through in-house training sessions and collaboration on project activities.

## **REQUIRED KNOWLEDGE AND SKILLS**

1. Graduate degree in ecology, biological sciences with 1-3 years related experience or 3-5 years experience in conservation science and/or equivalent combination of education and experience.
2. Course work and field experience indicating knowledge of community ecology and rare plants of New York State, or comparable work in another state, or research experience. Field inventory skills desired -- both ecological field methods and plant species identification.
3. Demonstrated experience with aerial photograph interpretation and community mapping. Project management and administrative experience are desirable; database software and spreadsheets (MS

Excel & Access), word processing (MS Word), and computer mapping skills using ArcMap or related products are required.

4. Ability to collect, manipulate, analyze, and interpret scientific data and prepare reports of findings.
5. Ability to synthesize, interpret and communicate scientific information to influence conservation practice.
6. Ability to work effectively with others under pressure and tight deadlines in a busy office environment. Capable of working independently and in an organized fashion to complete projects.
7. Knowledge of regional fauna and flora, natural communities, ecosystems, ecosystem processes, and their conservation needs.
8. Excellent written and oral communication skills. Ability to write technical reports utilizing available resources.
9. Willingness to travel throughout New York State and endure the rigors of field work for long days and extended periods.
10. Comfort in articulating and advocating for the missions of the NY Natural Heritage Program and the NYS Office of Parks, Recreation and Historic Preservation with respect to biodiversity conservation.

#### **WORKING CONDITIONS/PHYSICAL EFFORT**

The State Parks Ecologist may work in variable weather conditions, at remote locations, on difficult and hazardous terrain, and under physically demanding circumstances. These conditions may:

1. require physical exertion and/or muscular strain.
2. present possibility of injury.
3. require long hours in isolated settings.

Additional information on the New York Natural Heritage Program is available at [www.nynhp.org](http://www.nynhp.org)

Information on New York State Parks is available at <http://www.nysparks.com> and a document on Biodiversity in New York's State Park System at <http://www.nysparks.com/news/public>

#### **DEADLINE FOR APPLICATIONS: STARTING DATE**

Direct **cover letter and resume including contact information for three references** to:

Greg Edinger, Chief Ecologist  
New York Natural Heritage Program  
New York State Department of Environmental Conservation  
625 Broadway, 5<sup>th</sup> Floor  
Albany, NY 12233-4757