



New York  
Natural Heritage  
Program

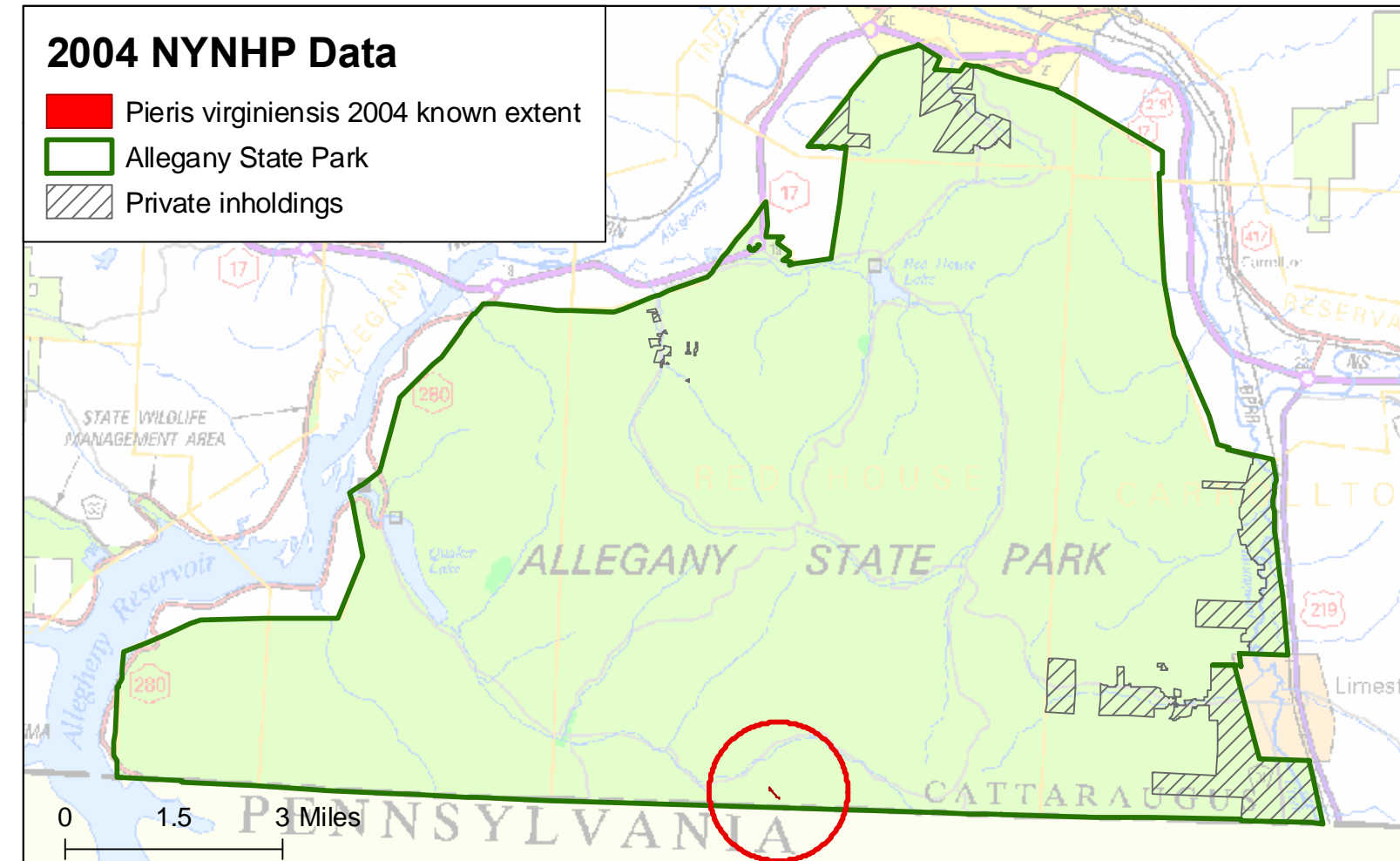
# New York Natural Heritage Program & State Parks: Working Together to Protect Biodiversity



Julie Lundgren, State Parks Ecologist

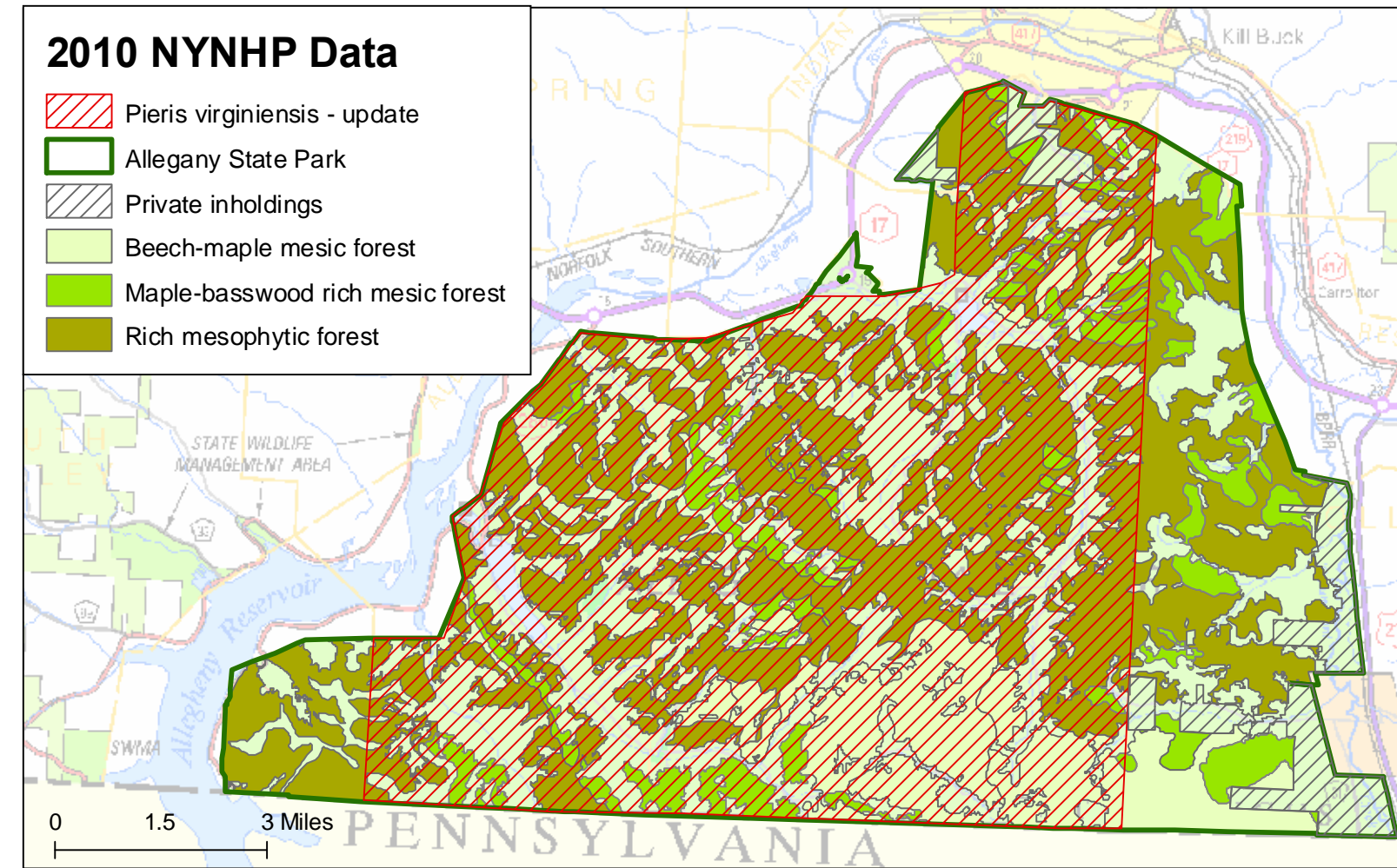
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West Virginia White (Pieris virginiana), a food plant (Kimberly Smith)

**West Virginia White (Pieris virginiana)**  
Wayne Gall first reports Pieris virginiana at one location in Allegheny State Park in 1999. Park staff Tom LeBlanc leads surveys from 2002-2005 and confirms 18 locations. In 2010, the NYNHP map is revised based on those sites and natural community types most likely to support the food plants.



From 1998 to 2003 the New York State Natural Heritage Program (NYNHP) was contracted by Office of Parks, Recreation and Historic Preservation (OPRHP) to compile data on rare species and natural communities in State Parks across the state. Full ecological community maps were delineated for 170 parks and 280,980 acres, and field surveys identified 160 new records for communities of statewide significance and 200 new records for rare plants and animals.

In 2008, a formal Partnership between OPRHP and NYNHP was established to continue this effort and to provide more detailed guidance for park managers and planners. The Partnership has two full-time biologists: Julie Lundgren, State Parks Ecologist and Kimberly Smith, State Parks Botanist. Since 2008, over 300 records have been updated or added to the NYNHP database for state parks, bringing the total to over 1330 locations for rare plant and animal species and significant communities currently known on OPRHP lands.

Improved digital orthoimagery, mapping tools, predictive modeling, site-specific knowledge from park staff, and continued field inventory has led to better mapping and new finds even in well-surveyed parks. This poster highlights some of the new discoveries, uses, and the value of continued inventories and collaboration to protect the biological richness of New York's State Parks.



Old growth forests and old growth trees provide inspiration and aesthetic value as well as biodiversity values from Allegheny to Montauk.



Post-fire research at Minnewaska State Park Preserve in 2008: Matt Medler (OPRHP), Gabe Chapin (TNC), John Thompson and interns (Mohonk), Michael Batchler (consultant), Tray Bialostoli (OPRHP).



## Why Keep Doing Natural Heritage Inventories? ...Because there is still more to be found!

### Highlights of state parks finds 2008-2010:

The state-endangered blunt-lobed grape fern (*Botrychium oneidense*) was rediscovered in Allegheny State Park, last seen in 1931.

Nearly a quarter century since small-whorled pogonia (*Isotria medeoloides*) was last seen in NY state, State Parks Botanist Kimberly Smith discovers this federally-threatened orchid in a NY state park.

A new location for a rare freshwater mussel, kidneyshell (*Ptychobranchus fasciolaris*) is discovered at a state park in western NY.

49 new records for rare moth species are found in 3 Long Island state parks by Hugh McGuinness; 6 species never before recorded in New York State!

Another 37 moth species are documented at Minnewaska State Park Preserve by Tim McCabe, bringing the total up to 625 moth species known in that park. 2 of the 3 rare moth species are confirmed as still present here.

Additional surveys help to refine the classification and mapping of sea level fens and maritime freshwater interdunal swales on Long Island.

Ecological communities are mapped on new parcels or parks at Hallocks Pond, Saratoga Spa, Fahnestock, Minnewaska, and other sites across the state.



Catocala jair is one of the rare moths found in the Long Island parks (Hugh McGuinness)

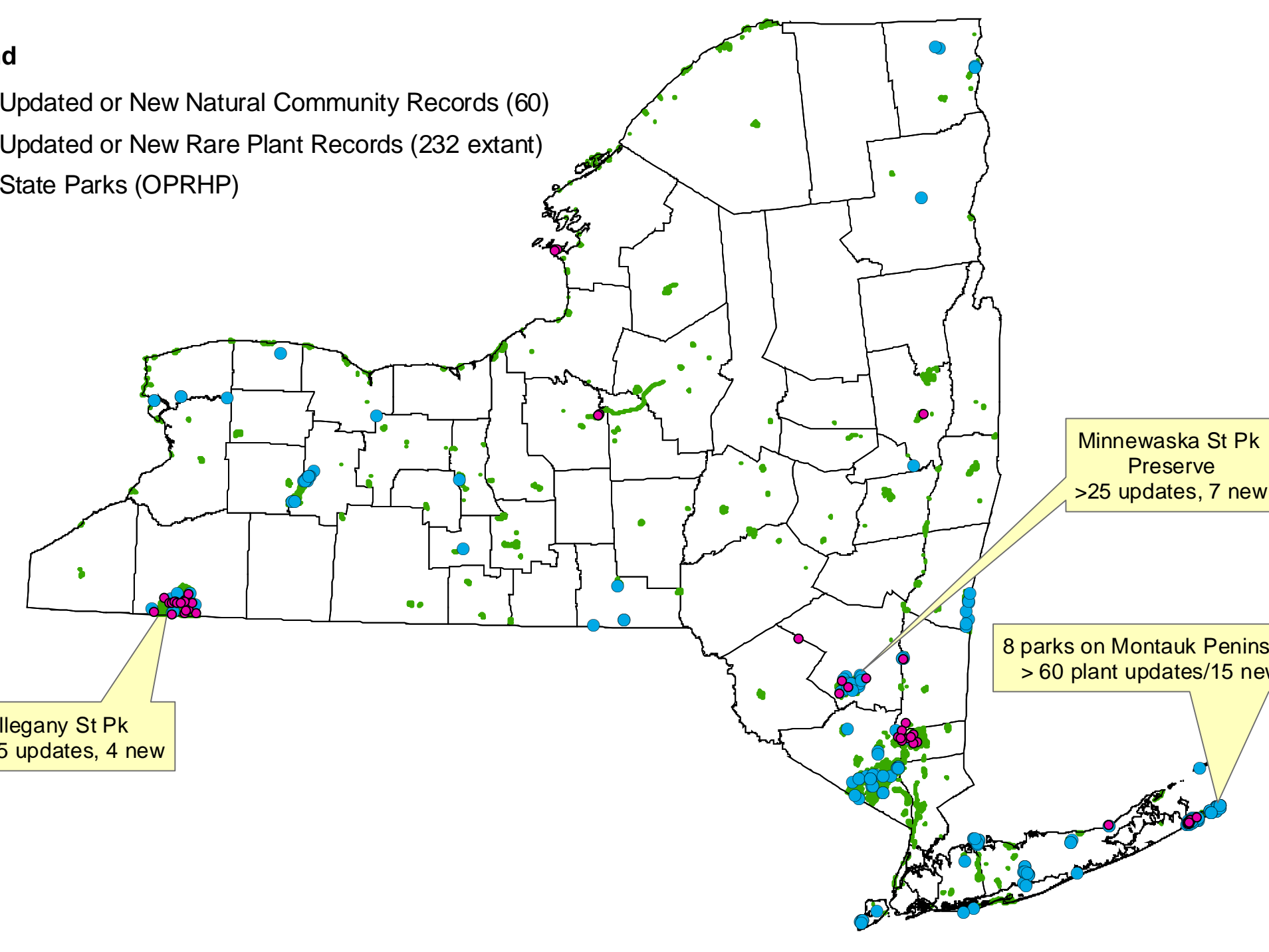


Blunt-lobe grape fern (*Botrychium oneidense*) (Kimberly Smith)

### State Parks Rare Plant & Natural Community Inventory 2008-2010

#### Legend

- Updated or New Natural Community Records (60)
- Updated or New Rare Plant Records (232 extant)
- State Parks (OPRHP)



Forest regeneration is a concern in many areas of the state. Studies in state parks can help to inform management decisions (Meg Janis).

### How Are The Data Being Used?

A bird habitat study following a fire in Minnewaska State Park brings together biologists from OPRHP, The Nature Conservancy & Mohonk Preserve.

A graduate thesis on emerald ash borer uses the statewide natural community maps and data from state parks to identify suitable study sites containing a large percent of ash (*Fraxinus* spp.).

Identifying potential habitat for the New England cottontail, a candidate for Federal listing (not the common Eastern cottontail).

Providing critical information for trail planning and management in Niagara, Allegany, Minnewaska, Green Lakes, and other state parks to help minimize impacts to rare species and natural communities of statewide significance.

Informing invasives species management plans and priorities.

Contributing to Master Plans which guide long-term management of individual state parks.

Data on vegetation composition, structure, and condition informs statewide and national natural community classification.

Rare species inventories provide important baseline data on locations, numbers, associated species (common and rare), and habitats.

#### Resources

New York Natural Heritage Program [www.nynhp.org](http://www.nynhp.org)  
- Rare Plant and Rare Animal Lists  
- Ecological Communities of New York State  
- Conservation Guides - information on natural communities and rare species

New York State Parks - park locations, facilities, and trail maps [www.nysparks.com/parks/](http://www.nysparks.com/parks/)

Nature Explorer: A Gateway to New York's Biodiversity <http://www.dec.ny.gov/natureexplorer/app/>

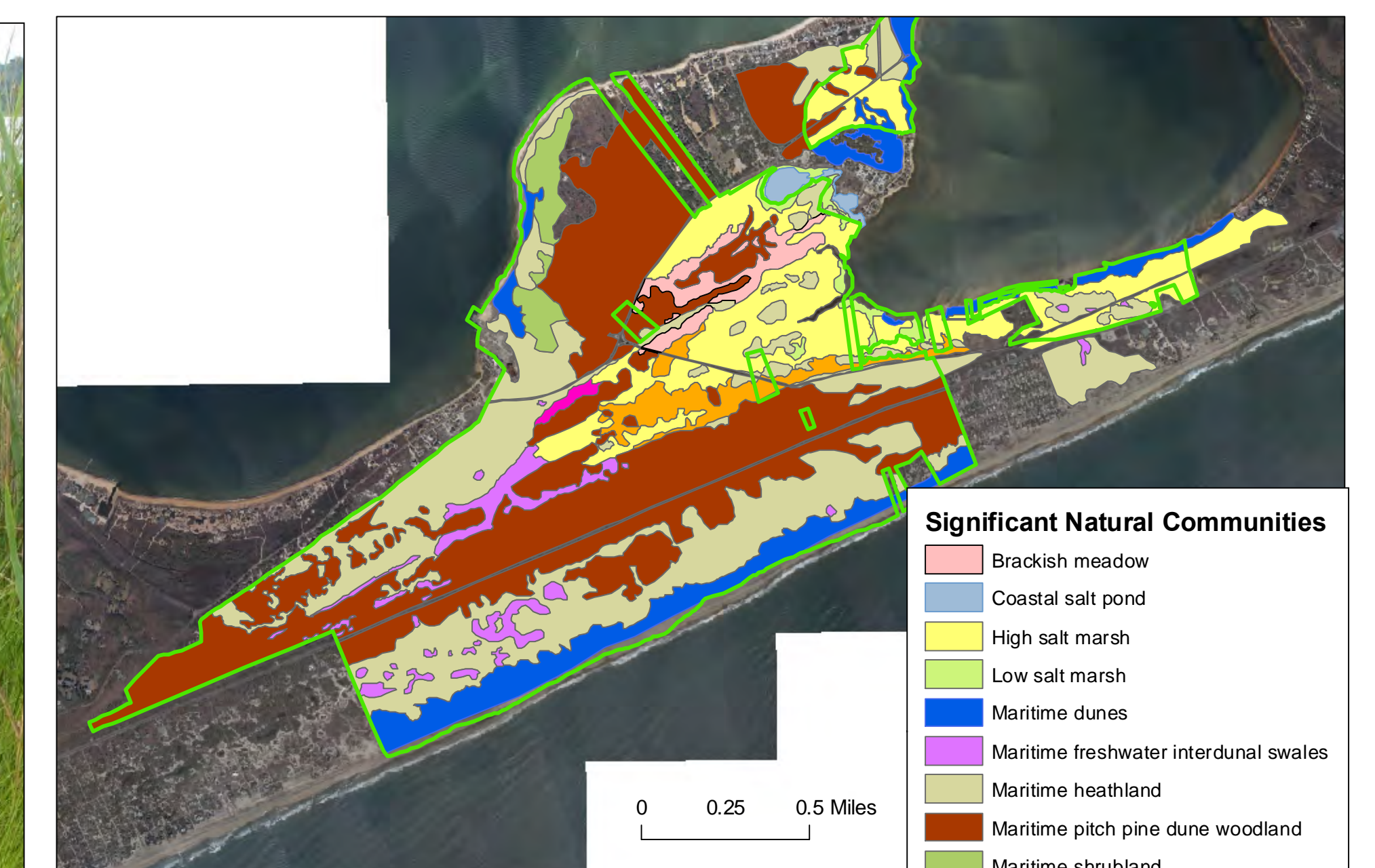
NatureServe Explorer: An Online Encyclopedia of Life Information on plant and animal species [www.natureserve.org/explorer/](http://www.natureserve.org/explorer/)

Photos by Julie Lundgren unless otherwise noted.

*Ptychobranchus fasciolaris* (kidneyshell) is considered in park management. Botanists Kimberly Smith and Steve Young (NYNHP) collect data at Allegheny State Park in the rain.



Assessing condition of natural communities: eelgrass wrack on the beach provides excellent foraging grounds for shorebirds while *Phragmites* alters structure and crowds out some of the native species like Rose mallow.



Mapping of high quality natural communities at Napeague State Park