

Parks and Preserves

Description:

The Hudson River Estuary corridor contains an abundance of parks and preserves (Figure 5). Parks and preserves are protected lands that often have multiple (and sometimes restricted) uses associated with them. Because of their protected status, these lands offer unique opportunities to conserve biodiversity. They include state parks, wildlife management areas, state forests, state reforestation areas, county parks, town and city parks, as well as private conservation lands. The Nature Conservancy, the Open Space Institute, the Audubon Society, and local land trusts are private groups that own conservation lands in the Hudson River Estuary corridor, some of which are open to the public.

State and federal lands comprise about 10% of the Hudson River Estuary corridor, with less than 1% under federal and 9.6% under state stewardship authority (Smith et al. 2001). Federal lands are clustered in the southern third of the Estuary corridor with the largest contiguous block managed by the Department of Defense (West Point Military Reservation). State government agency lands are generally well distributed, but large clusters do occur in the Catskill Mountains in the western portion of the Estuary corridor, and the Highlands and Mohawk/Black River Valley in the south. The Hudson River Estuary corridor is about 77% forested and nearly 12% of these forests are managed by state agencies, while 87% are privately managed (Smith et al. 2001).

Substantial responsibility for biodiversity conservation on public lands within the Hudson River Estuary corridor lies with the NYS Department of Environmental Conservation (DEC) and the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). These two organizations manage approximately 85% of the total public land area. The distribution of public land stewardship in the Hudson River Estuary corridor is as follows:

Table 1. Distribution of public land stewardship in the Hudson River Estuary corridor.

<u>Public Land Category:</u>	<u>Acres:</u>	<u>% of Public Lands:</u>
State Forest Lands (DEC)	268,262	50
State Parks (OPRHP)	138,227	25
Municipal/County Parks	39,417	7
Reservoir Buffers (NYC)	35,789	7
Other State/Federal Lands	21,070	4
U.S. Military Land	18,374	3
State Wildlife Management Areas (DEC)	14,918	3
Public Conservation Easements (DEC)	3,123	1
Total:	539,180	100

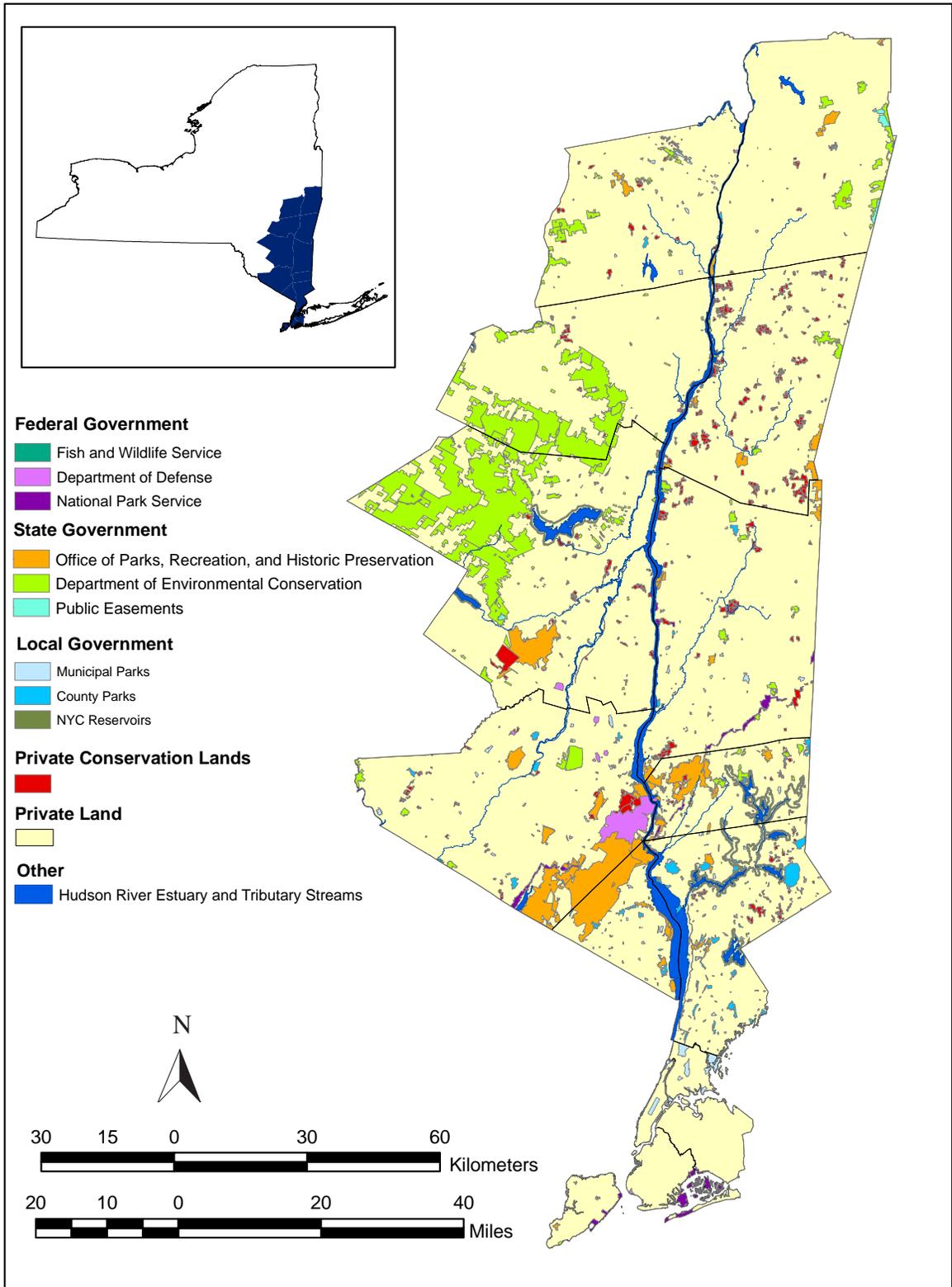


Figure 5. Types and distribution of public lands and private conservation lands in the Hudson River Estuary corridor.

The lands offering the greatest protection for biodiversity have a documented long-term intent, or preferably a written management plan or legal mandate to ensure long term protection of the existing natural habitat. The Hudson River Valley Gap Analysis described the levels of biodiversity protection provided by different types of land stewardship units found in the Hudson Valley (Smith et al. 2001). Land units are listed under their various levels of protection in Table 2.

Table 2. Typical levels of biodiversity protection associated with different land stewardship units found in the Hudson Valley (one agency may manage several different types of land unit).

Permanent Protection:

US Military Reservation
The Nature Conservancy Preserves
USFWS National Wildlife Refuges
OPRHP State Park Preserves
NYSDEC Wild Forest, Wilderness, Campgrounds/Ski Areas
NYSDEC Tidal Wetland Areas
NYSDEC Wetland/Unique Areas
NYSDEC Wildlife Management Areas
Private Conservation Land

Majority Protected (but some areas subject to localized, low-intensity uses):

OPRHP State Parks

Mostly Protected (but some areas may receive use that alters existing natural habitat):

US Military Reservation
OPRHP State Parks, Historic Sites
NPS National Recreation Areas
NYSDEC Education Centers
NYSDEC Reforestation Lands
NYSDEC Wild Forest, Wilderness, Campgrounds/Ski Areas
NYSDEC Wildlife Management Areas
NYSDEC Multiple Use Areas
NYSDEC Forest Preserves
NYSDEC Tidal Wetland Areas
NYSDEC Wetland/Unique Areas
State Military Reservations
City of New York Parks and Recreation
NYCDEP Watershed Protection Areas
Private Conservation Land
Private Conservation Easements

Unprotected From Habitat Conversion (most lands subject to intensive use):

NPS National Historic Sites
OPRHP State Parks, Historic Sites, Canal Parks
NYSDEC State Recreation Areas
NYSDEC Multiple Use Areas
NYSDEC Lands Pending Classification
NYSDEC Forest Preserves
Private Conservation Easement

Ecological Importance:

The ecological importance of parks and preserves relates in part to their protected status. However, parks and preserves can provide widely differing levels of biodiversity protection. The Gap Analysis Project (Smith et al. 2001) mapped the proportion of land cover types found under different levels of biodiversity protection. Four forest types accounted for 90% of the land cover in permanent protection: Sugar-Maple Mesic, Evergreen-Northern Hardwood, Oak, and Spruce Fir. Eighty-eight percent of vertebrate species native to the Hudson River Estuary corridor had less than 10% of their predicted habitat in permanent protection. Nearly all (94%) of the listed or ranked species (by NYSDEC, USFWS, or The Nature Conservancy) have less than 10% of their predicted distribution in permanent protection. The low degree of protection afforded to certain land cover types (such as grasslands or water related habitats) may be one reason some species can maintain only small populations with limited distribution in the Hudson River Estuary corridor (Smith et al. 2001).

While some parks and preserves contain nationally and globally rare elements of biodiversity, their larger role may be to support more common ecological communities that are locally rare due to surrounding land uses. For example, Van Cortlandt Park and Ward Pound Ridge Reservation are park lands in close proximity to New York City where some rare species are found and natural vegetation is mostly intact. In a recent analysis (Miller and Klemens 2002), the Ward Pound Ridge Reservation was found to be a “hub” or large core area that is better able to support healthy, viable wildlife populations than smaller areas in eastern Westchester County. The report identified other areas in the region that could act as hubs and also broad swaths of habitat (used by wildlife as migration corridors) that connect the hubs. Based on biological surveys completed within a three-town area, the project identified a biodiversity corridor (Figure 6) that complements preservation of the Ward Pound Ridge Reservation and recommended that the lands be kept in a relatively unfragmented state.

Conservation Strategies:

Conservation strategies for parks and preserves should address maintaining habitats and ecological communities in their natural state. Where appropriate, habitat restoration can be considered. Potential threats to biodiversity (e.g., invasive and overabundant species, potential impacts from permitted land uses) should be evaluated and addressed. Opportunities to educate the public about biodiversity conservation can be encouraged on

these lands through a variety of mechanisms such as interpretive trails, field walks led by naturalists, and educational pamphlets and brochures. The New York State Open Space Plan suggests that both public land acquisition and private land conservation strategies are necessary to achieve adequate biodiversity protection. Guidelines for acquisition or private conservation should consider the need to buffer parks and protect their ecological communities by strategically acquiring adjacent land or limiting degrading land uses around the park.

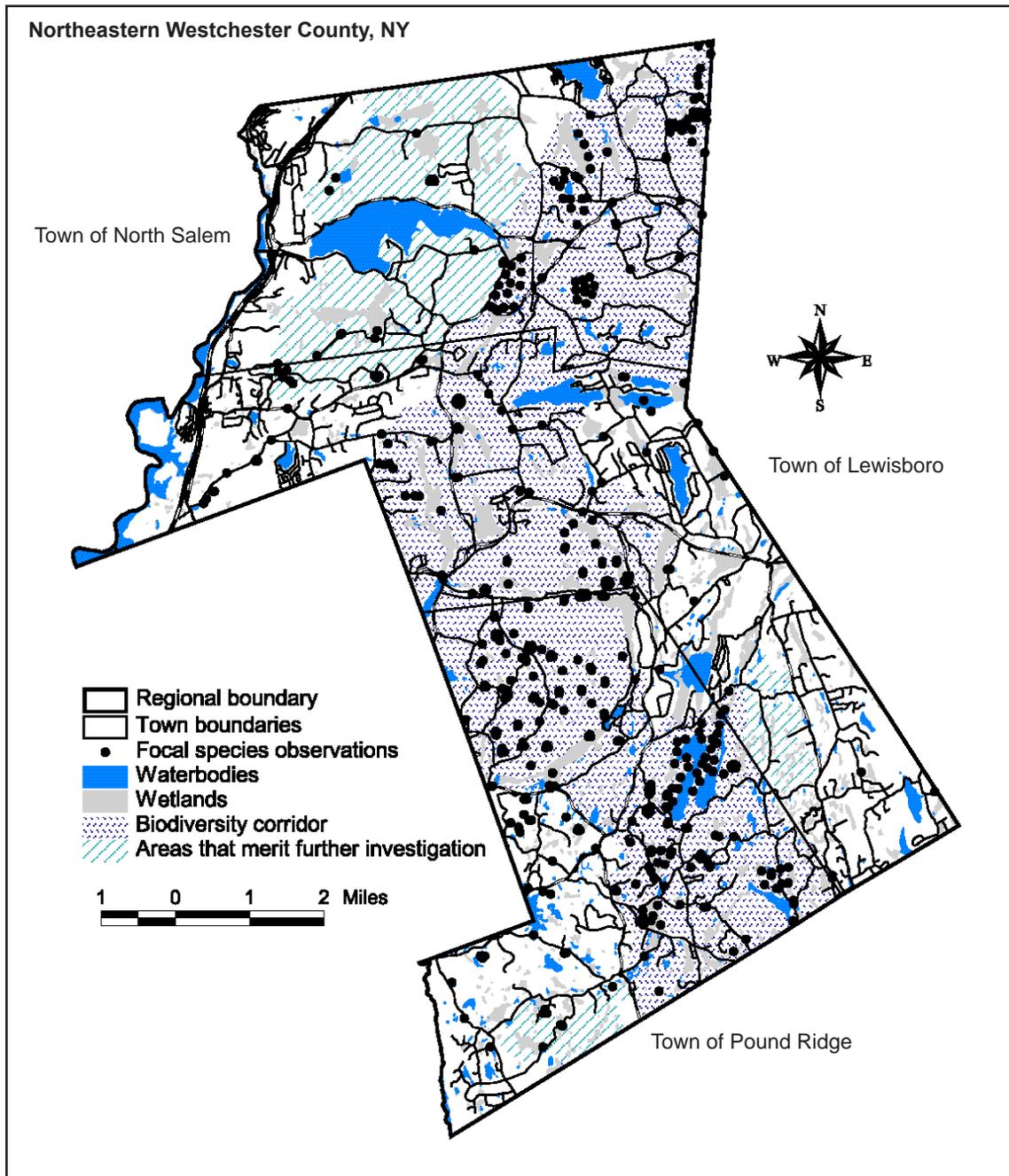


Figure 6. Biodiversity corridor and areas that merit further investigation in three towns of eastern Westchester County (map courtesy of the Wildlife Conservation Society's Metropolitan Conservation Alliance) (Miller and Klemens 2002).