

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, Albany, New York 12233-4757
Phone: (518) 402-8935 • **FAX:** (518) 402-8925
www.dec.state.ny.us



October 1, 2008

John D. Schaffer
Tetra Tech
1000 American Road
Morris Plains, NJ 07950

Dear Mr. Schaffer:

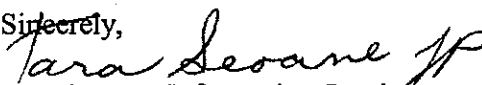
In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed Remedial Investigation of former Patchogue Manufactured Gas Plant Facility, site as indicated on the map you provided, including a 2 mile radius, located in the Town of Brookhaven, Village of Patchogue, Long Island, Suffolk County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and should not be released to the public without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environment impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Tara Seoane, Information Services
New York Natural Heritage Program

cc: Reg. 4, Wildlife Mgr.
Reg. 4, Fisheries Mgr.
Peter Nye, Endangered Species Unit, Albany

Natural Heritage Report on Rare Species and Ecological Communities



NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

~This report contains SENSITIVE information that should not be released to the public without permission from the NY Natural Heritage Program.

~Refer to the User's Guide for explanations of codes, ranks and fields.

~Location maps for certain species and communities may not be provided 1) if the species is vulnerable to disturbance, 2) if the location and/or extent is not precisely known, 3) if the location and/or extent is too large to display, and/or 4) if the animal is listed as Endangered or Threatened by New York State.

Natural Heritage Report on Rare Species and Ecological Communities



BIRDS

Sternula antillarum (formerly *Sterna antillarum*)

Least Tern	NY Legal Status: Threatened	NYS Rank: S3B - Vulnerable	Office Use 8303
Breeding	Federal Listing:	Global Rank: G4 - Apparently secure	ESU
	Last Report: **	EO Rank: **	
	County: Suffolk		
	Town: Brookhaven		
	Location: At, or in the vicinity of, the project site.		
	Directions: **		
General Quality and Habitat:	**For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.		

FISH

Aphredoderus sayanus

Pirate Perch	NY Legal Status: Unlisted	NYS Rank: S2 - Imperiled	Office Use 8225
	Federal Listing:	Global Rank: G5 - Demonstrably secure	
	Last Report: 1984-04-12	EO Rank: Good, Fair or Poor	
	County: Suffolk		
	Town: Brookhaven		
	Location: Great Patchogue Lake		
	Directions: The fish were found in the Patchogue River, just south of the Sunrise Highway (State Highway 27) bridge at the north end of Great Patchogue Lake.		
General Quality and Habitat:	The rank is based on NatureServe's Generic Element Occurrence Rank Specifications of January 11, 2008. The population at this site is small and is surrounded by development. The fish were caught in a clear, fast-flowing stream about 1-3 ft deep and about 15 ft wide.		

VASCULAR PLANTS



Eurybia spectabilis

Showy Aster

NY Legal Status: Threatened

NYS Rank: S2 - Imperiled

Office Use
9956

Federal Listing:

Global Rank: G5 - Demonstrably secure

Last Report: 1991-09-10

EO Rank: Good or Fair

County: Suffolk

Town: Islip

Location: Bayport Aerodrome

Directions: From Montauk Highway in Bayport, take Third Avenue north to the entrance to airport. Check in at the office and walk to the north end of runway. The plants are in an overrun area of shrubs and small pitch pines.

General Quality and Habitat: 500-1000 plants in very disturbed area. Small airfield with a mowed grass airstrip. Surrounded by woods and residential development except on north side where there is a larger patch of woods. At north end of mowed runway there is a sandy natural area with shrubs and herbs. This is the most interesting part of the airport. *Aster spectabilis* is found on sandy soils. Associated plant species are *Aster solidagineus*, *Lechea* sp., *Solidago juncea*, *Comptonia*, *Pteridium*, *Eupatorium hyssopifolium*, *Pinus rigida*, *Gaylussacia baccata*, *Schizachyrium*, *Quercus ilicifolia*, *Vaccinium angustifolium*, *Baptisia tinctoria*, *Hypericum gentianoides*.

SC

Oenothera oakesiana

Oakes' Evening-primrose

NY Legal Status: Threatened

NYS Rank: S2 - Imperiled

Office Use
2471

Federal Listing:

Global Rank: G4G5Q - Apparently secure

Last Report: 2006-08-30

EO Rank: Fair or Poor

County: Suffolk

Town: Brookhaven

Location: Swan River

Directions: The site is on both sides of the Swan River south of Sunrise Highway. From the junction of Route 27 and Phyllis Drive, go east 0.2 mi to Swan River just south of Route 27. The plants are at the edge of the island of pine and cherry vegetation about 50 feet to the west of a culvert. In 2006 the plants were on the west side of the river at the sandy, open edge of the woods. UTM 669252 E, 4516201 N.

General Quality and Habitat: There are 4-5 plants in a very disturbed habitat, but they have persisted at a low level. The plants were found on the banks of a small stream through former pine barrens, near a major highway. All of the area south of the road is undeveloped. The slopes are nearly devoid of vegetation because of ATV use. There is dumping to the east across the culvert. The stream has very little characteristic vegetation in open sand. The site is very disturbed. The plants were scattered along the edge of the oak woods. Some plants were in shade. Associated species: *Ambrosia artemisifolia*, *Artemisia vulgaris*, *Centaurea maculosa*, *Conyza canadensis*, *Diodia teres*, *Lolium perenne*.

Sericocarpus linifolius

Flax-leaf Whitetop

NY Legal Status: Threatened

NYS Rank: S2 - Imperiled

Office Use
7647

Federal Listing:

Global Rank: G5 - Demonstrably secure

Last Report: 1992-09-03

EO Rank: Good or Fair

County: Suffolk

Town: Islip

Location: Bayport Aerodrome

Directions: From Montauk Highway in Bayport, take Third Avenue north to the entrance to the airport. Check in at the office and walk to the north end of the runway.

General Quality and Habitat: There are hundreds of plants in small threatened habitat. Small airfield with a mowed grass airstrip. Surrounded by woods and residential development except on north side where there is a larger patch of woods. At north end of mowed runway there is a sandy natural area with shrubs and herbs. This is the most interesting part of the airport. *Aster solidagineus* is found on sandy soils. Associated plant species are *Aster spectabilis*, *Lechea* sp., *Solidago juncea*, *Comptonia*, *Pteridium*, *Eupatorium hyssopifolium*, *Pinus rigida*, *Gaylussacia baccata*, *Schizachyrium*, *Quercus ilicifolia*, *Vaccinium angustifolium*, *Baptisia tinctoria*, *Hypericum gentianoides*.

SC

Natural Heritage Map of Rare Species and Ecological Communities


Prepared September 22, 2008 by the NY Natural Heritage Program, NYS DEC Albany, NY




Legend

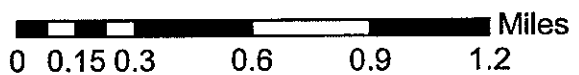
 Project Site

NY Natural Heritage Program Database Records*

 Animal

 Plant

1:30,000



*The locations that are displayed are considered sensitive and should not be released to the public without permission. We do not provide map locations for all records. Please see report for details.



Natural Heritage Report on Rare Species and Ecological Communities



NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

HISTORICAL RECORDS

The following plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier.

There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown and therefore location maps are generally not provided.

If appropriate habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there.

Natural Heritage Report on Rare Species and Ecological Communities



VASCULAR PLANTS

Carex collinsii

Collins' Sedge

NY Legal Status: Endangered

Federal Listing:

Last Report: 1929-07-10

County: Suffolk

Town: Islip

Location: Bayport

Directions: Bayport.

General Quality and Habitat: Dark swamp woods, bog in woods.

NYS Rank: S1 - Critically imperiled

Global Rank: G4 - Apparently secure

EO Rank: Historical, no recent information

Office Use
2531

M

Lemna valdiviana

Pale Duckweed

NY Legal Status: Endangered

Federal Listing:

Last Report: 1845-09-02

County: Suffolk

Town: Brookhaven

Location: Patchogue

Directions: Grow in ponds near Patchogue, Long Island. The plants are growing underwater in masses.

General Quality and Habitat: Growing underwater. Ponds. Habitat similar to *Lemna trisulca*.

NYS Rank: S1 - Critically imperiled

Global Rank: G5 - Demonstrably secure

EO Rank: Historical, no recent information

Office Use
2158

M



Symphotrichum concolor var. concolor

Silvery Aster

NY Legal Status: Endangered

Federal Listing:

Last Report: 1868-09-16

County: Suffolk

Town: Brookhaven

Location: Patchogue

Directions: Patchogue.

**General Quality
and Habitat:**

NYS Rank: S1 - Critically imperiled

Global Rank: G5T5 - Demonstrably secure

EO Rank: Historical, no recent
information

Office Use
9311

M

3 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

DIVISION OF ENVIRONMENTAL PERMITS REGIONAL OFFICES

REGION	COUNTIES	REGIONAL PERMIT ADMINISTRATORS
1	Nassau & Suffolk	John Pavacic NYS-DEC BLDG. 40 SUNY at Stony Brook Stony Brook, NY 11790-2356 Telephone: (631) 444-0365
2	New York City (Boroughs of Manhattan, Brooklyn, Bronx, Queens, & Staten Island)	John Cryan NYS-DEC One Hunters Point Plaza 47-40 21st Street Long Island City, NY 11101-5407 Telephone: (718) 482-4997
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster & Westchester	Margaret Duke NYS-DEC 21 South Putt Corners Road New Paltz, NY 12561-1696 Telephone: (845) 256-3054
4	Albany, Columbia, Greene, Montgomery, Rensselaer & Schenectady	William Clarke NYS-DEC 1150 North Wescott Road Schenectady, NY 12306-2014 Telephone: (518) 357-2069
4 (sub-office)	Delaware, Otsego & Schoharie	Kent Sanders NYS-DEC Route 10 HCR#1, Box 3A Stamford, NY 12167-9503 Telephone: (607) 652-7741
5	Clinton, Essex, Franklin & Hamilton	Thomas Hall NYS-DEC Route 86, PO Box 296 Ray Brook, NY 12977-0296 Telephone: (518) 897-1234
5 (sub-office)	Fulton, Saratoga, Warren & Washington	Thomas Hall NYS-DEC County Route 40 PO Box 220 Warrensburg, NY 12885-0220 Telephone: (518) 623-1281
6	Jefferson, Lewis & St. Lawrence	Brian Fenlon NYS-DEC State Office Building 317 Washington Street Watertown, NY 13601-3787 Telephone: (315) 785-2245
6 (sub-office)	Herkimer & Oneida	J. Joseph Homburger* NYS-DEC State Office Building 207 Genesee Street Utica, NY 13501-2885 Telephone: (315) 793-2555

7	Cayuga, Madison, Onondaga & Oswego	John Feltman NYS-DEC 615 Erie Blvd. West (Env.Permits Room 206) Syracuse, NY 13204-2400 Telephone: (315) 426-7438
7 (sub-office)	Broome, Chenango, Cortland, Tioga & Thompson	Michael Barylski* NYS-DEC 1285 Fisher Avenue Cortland, NY 13045-1090 Telephone: (607) 753-3095
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne & Yates	Peter Lent NYS-DEC 6774 East Avon Lima Road Avon, NY 14414-9519 Telephone: (607) 226-2466
9	Erie, Niagara & Wyoming	Steve Doleski NYS-DEC 270 Michigan Avenue Buffalo, NY 14203-2999 Telephone: (716) 851-7165
9 (sub-office)	Allegany, Cattaraugus, Chautauqua	Ken Taft* NYS-DEC 182 East Union, Suite 3 Allegany, NY 14706-1328 Telephone: (716) 372-0645

* Deputy Regional Permit Administrator

USERS GUIDE TO NY NATURAL HERITAGE DATA

New York Natural Heritage Program, 625 Broadway, 5th Floor, Albany, NY 12233-4757 phone: (518) 402-8935



NATURAL HERITAGE PROGRAM: The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYS DEC) and The Nature Conservancy. Our mission is to enable and enhance conservation of rare animals, rare plants, and significant communities. We accomplish this mission by combining thorough field inventories, scientific analyses, expert interpretation, and the most comprehensive database on New York's distinctive biodiversity to deliver the highest quality information for natural resource planning, protection, and management.

DATA SENSITIVITY: The data provided in the report are ecologically sensitive and should be treated in a sensitive manner. The report is for your in-house use and should not be released, distributed or incorporated in a public document without prior permission from the Natural Heritage Program.

EO RANK: A letter code for the quality of the occurrence of the rare species or significant natural community, based on population size or area, condition, and landscape context.

A-E = Extant: A=Excellent, B=Good, C=Fair, D=Poor, E=Extant but with insufficient data to assign a rank of A-D.
F = Failed to find. Did not locate species during a limited search, but habitat is still there and further field work is justified.
H = Historical. Historical occurrence without any recent field information.
X = Extirpated. Field/other data indicates element/habitat is destroyed and the element no longer exists at this location.
U = Extant/Historical status uncertain.
Blank = Not assigned.

LAST REPORT: The date that the rare species or significant natural community was last observed at this location, as documented in the Natural Heritage databases. The format is most often YYYY-MM-DD.

NY LEGAL STATUS – Animals:

Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.

- E - Endangered Species:** any species which meet one of the following criteria:
 - Any native species in imminent danger of extirpation or extinction in New York.
 - Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.
- T - Threatened Species:** any species which meet one of the following criteria:
 - Any native species likely to become an endangered species within the foreseeable future in NY.
 - Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of the Federal Regulations 50 CFR 17.11.
- SC - Special Concern Species:** those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. Unlike the first two categories, species of special concern receive no additional legal protection under Environmental Conservation Law section 11-0535 (Endangered and Threatened Species).
- P - Protected Wildlife** (defined in Environmental Conservation Law section 11-0103): wild game, protected wild birds, and endangered species of wildlife.
- U - Unprotected** (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.
- G - Game** (defined in Environmental Conservation Law section 11-0103): any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

NY LEGAL STATUS – Plants:

The following categories are defined in regulation 6NYCRR part 193.3 and apply to NYS Environmental Conservation Law section 9-1503.

- E - Endangered Species:** listed species are those with:
 - 5 or fewer extant sites, or
 - fewer than 1,000 individuals, or
 - restricted to fewer than 4 U.S.G.S. 7 ½ minute topographical maps, or
 - species listed as endangered by U.S. Dept. of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.
- T - Threatened:** listed species are those with:
 - 6 to fewer than 20 extant sites, or
 - 1,000 to fewer than 3,000 individuals, or
 - restricted to not less than 4 or more than 7 U.S.G.S. 7 and ½ minute topographical maps, or
 - listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

R - Rare: listed species have:

- 20 to 35 extant sites, or
- 3,000 to 5,000 individuals statewide.

V - Exploitably vulnerable: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked.

U - Unprotected; no state status.

FEDERAL STATUS (PLANTS and ANIMALS): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527. The codes below without parentheses are those used in the Federal Register. The codes below in parentheses are created by Heritage to deal with species which have different listings in different parts of their range, and/or different listings for different subspecies or varieties.

(blank) = No Federal Endangered Species Act status.

LE = Formally listed as endangered.

LT = Formally listed as threatened.

C = Candidate for listing.

LE,LT = Formally listed as endangered in part of its range, and as threatened in the other part; or, one or more subspecies or varieties is listed as endangered, and the others are listed as threatened.

LT,PDL = Populations of the species in New York are formally listed as threatened, and proposed for delisting.

GLOBAL AND STATE RANKS (animals, plants, ecological communities and others): Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Intraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world. ? = Indicates a question exists about the rank. Range ranks, e.g. S1S2, indicate not enough information is available to distinguish between two ranks.

GLOBAL RANK:

G1 - Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.

G2 - Imperiled globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.

G3 - Vulnerable: Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.

G4 - Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 - Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

GH - Historically known, with the expectation that it might be rediscovered.

GX - Species believed to be extinct.

NYS RANK:

S1 - Critically imperiled: Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.

S2 - Imperiled: Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.

S3 - Vulnerable: Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.

S4 - Apparently secure in New York State.

S5 - Demonstrably secure in New York State.

SH - Historically known from New York State, but not seen in the past 15 years.

SX - Apparently extirpated from New York State.

SxB and SxN, where Sx is one of the codes above, are used for migratory animals, and refer to the rarity within New York State of the breeding (B)populations and the non-breeding populations (N), respectively, of the species.

TAXON (T) RANK: The T-ranks (T1 - T5) are defined the same way as the Global ranks (G1 - G5), but the T-rank refers only to the rarity of the subspecific taxon.

T1 through T5 - See Global Rank definitions above.

Q - Indicates a question exists whether or not the taxon is a good taxonomic entity.

Revised April,