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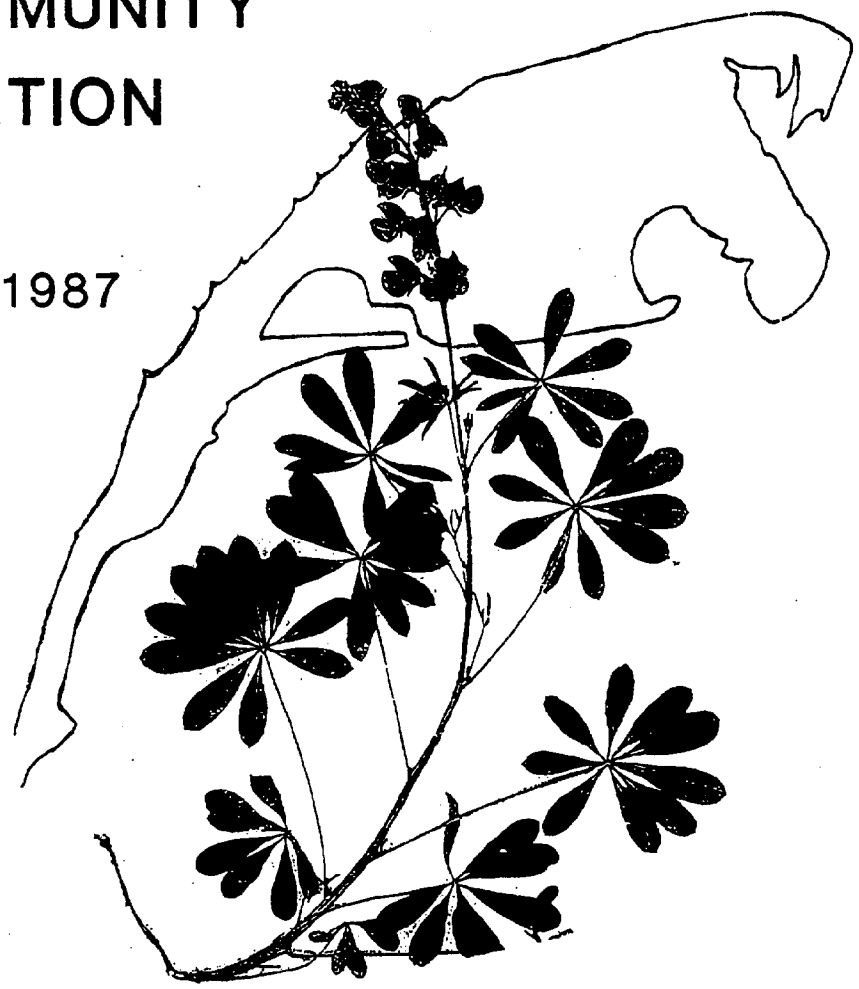
ATTACHMENT #11

PRESQUE ISLE STATE PARK:

BOTANICAL SURVEY and NATURAL COMMUNITY CLASSIFICATION

DECEMBER, 1987



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THE CLEVELAND MUSEUM of NATURAL HISTORY

WESTERN PENNSYLVANIA CONSERVANCY

Coastal Zone

Funded and Coordinated through
Dept. of Environmental Resources
Office of Resources Management
Bur. of Water Resources Management
Div. of Coastal Zone Management

Bissell, James K.

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BOTANICAL SURVEY
and
NATURAL COMMUNITY CLASSIFICATION
for
PRESQUE ISLE STATE PARK,
ERIE COUNTY,
PENNSYLVANIA

December, 1987

by

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ACKNOWLEDGEMENTS

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In particular, we would like to recognize Kathleen McKenna, Botanist, Bureau of Forestry, for originating and developing the proposal, and for her important assistance with numerous project details.

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We thank Dave Parker for providing us with boats and canoes free of charge throughout the field season. Dave also assisted us with transporting the canoes.

Special thanks must go to Museum volunteer Beverly Danielson, who assisted Curator Bissell with most of the 27 field days at Presque Isle and worked more than two weeks on the Presque Isle natural communities map. We thank Museum volunteer Florence Selby for preparing the base map used for the Presque Isle natural communities map.

Thanks go to Museum Botany Assistant Barbara Hosta for contributing several days of effort to the report outside her regular paid time. Barbara also developed the cover.

We acknowledge the Museum Kirtlandia Society Adopt-A-Student Program for funding Joe Balczon, a student from Behrend Campus of Penn State. Joe assisted Curator Bissell with natural community mapping and he conducted water quality analysis of the interior ponds. We also thank Mrs. Billie Elaine Smith who contributed $100 towards Joe's expenses.

We acknowledge the Garden Club of Cleveland and Shaker Lakes Garden Club. Each club donated $100 to this study.

We thank Evelyn Anderson, Jean Stull and other members of the Presque Isle Audubon Society for their assistance with this study, and we applaud them for their continued efforts to bring about protection of the unique biota in the park.

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PRESQUE ISLE STATE PARK BOTANICAL SURVEY AND NATURAL COMMUNITY CLASSIFICATION

i. Introduction.

Under contract to the Commonwealth of Pennsylvania, Department of Environmental Resources, Bureau of State Forestry, investigations were undertaken to collect data describing the plants of special concern and natural communitites of Presque Isle State Park, Erie County, Pennsylvania, during 1987. The special concern plant field studies were a continuation of research conducted in 1985 and 1986 by James K. Bissell, Cleveland Museum of Natural History. The natural community studies were initiated in 1987 by James K. Bissell and Charles W. Bier, Western Pennsylvania Conservancy.

A. Plants of Special Concern:

During the 1987 field season one-hundred and thirty-two (132) new occurrences of thirty-eight species were documented. Eight of these plants were not previously discovered during 1985-1986 field studies. Five of these species were found in the interior palustrine ponds, which were the focus of 1987 special concern plant surveys on the peninsula. One of these species, green water-milfoil (Myriophyllum verticillatum), was not known in Pennsylvania before this year. Voucher specimens were collected for some new discoveries, and are deposited in Cleveland Museum of Natural History.

B. Natural Communities

The primary method of this investigation involved the use of high resolution colored aerial photography at a scale of 1 inch: 400 feet. Two sets of negatives on loan to Cleveland Musuem from the U. S. Army Corps of Engineers, Buffalo Office, were printed. The photographs were recorded: 1986 April 27, and 1986 November 25. These photographs were then utilized during in-field surveys of the natural communities of the peninsula. Natural communities were delineated by comparing the photographs to on-site observations; with the results recorded as community boundaries on photocopies of the aerial photographs. Additional notations were made regarding the dominant plant associates, structure, moisture and other parameters of each community. Also noted were degrees and types of disturbances impacting some of the communities mapped. Nearly 100% of the area within the park and the adjacent U. S. Coast Guard Station property was visited and evaluated. Field studies included wading and canoeing into wetlands, and the use of a glass-bottom bucket to investigate ponds and bays for mollusks.

Field Survey

The days involved in both the special concern plants and natural community field surveys are as follows:

Bissell: twenty-seven days
May: 21
June: 4, 17, 19, 24, 30
July: 2, 15, 16, 17, 29, 30
August: 1, 5, 6, 18
September: 9, 10, 23, 30
October: 2, 7, 9, 10, 15, 17
November: 1

Bier: eleven days
June: 30
July: 14, 15, 24
August: 6*, 14 (* assisted by Paul G. Wiegman, Western PA Conservancy)
September: 4, 9
October: 7, 22, 23

SUMMARY of PRESQUE ISLE 1985-86 BOTANICAL SURVEYS
-CLEVELAND MUSEUM of NATURAL HISTORY

Forty-three species listed as Plants of Special Concern in Pennsylvania (POSCIP) were documented at Presque Isle State Park by the Botany Department of the Cleveland Museum of Natural History during the 1985 and 1986 field season. One hundred and ninety-six (196) occurrences of the 43 listed species were mapped. Completion of the work required thirty-six (36) field days and forty-five (45) days of in-museum work by curator Bissell. In addition, volunteers at the museum spent 350 hours working on the Presque Isle Project during 1985 and 1986. Part-time assistant, Barbara Hosta spent 420 hours processing the specimens, preparing field books, and organizing the data for the 1985 and 1986 reports for the Pennsylvania Natural Diversity Inventory.

The forty-three POSCIP species reported from Presque Isle are found in the following five plant communities:

1. Palustrine sand flats
2. Dry sand plain
3. Dunes
4. Ponds
5. Mixed emergent marshes

1. Palustrine sand plain

The palustrine sand plain is a moist sparsely vegetated sandy flat. Standing water is often present in the spring. The water table often drops below the surface during the summer. Typical sand plain species includes: Juncus articulatus, Juncus balticus,

Juncus alpinus, Cyperus rivularis, Cyperus flavescens, Agalinis paupercula, Carex viridula, Carex garberi, and Hypericum majus.

Eighteen POSCIP species were documented within the palustrine sand plain:

Agalinis paupercula	Tentatively Undetermined
Carex bebbii	Endangered
Carex garberi	Endangered
Carex viridula	Endangered
Cyperus diandrus	Threatened
Cyperus engelmanii	Endangered
Eleocharis elliptica	Endangered
Eleocharis pauciflora	Endangered
Hemicarpha mircrantha	Endangered
Hypericum majus	Threatened
Juncus alpinus	Threatened
Juncus balticus	Rare
Juncus brachycephalus	Rare
Juncus torreyi	Threatened
Lathyrus palustris	Tentatively Undetermined
Lobelia kalmii	Endangered
Potentilla anserina	Threatened
Potentilla paradoxa	Endangered

2. Dry sand plain

The dry sand plain is an open, dry grassland usually dominated by Sorghastrum nutans, Panicum virgatum and Andropogon scoparius. Other species common in the sand plain include: Carex muhlenbergii, Carex tonsa, Rumex acetosella and Dichanthelium sabulorum.

Five POSCIP species were found within the dry sand plain:

Dichanthelium sabulorum	Threatened
Digitaria cognatum	Rare
Germanium bicknellii	Tentatively Undetermined
Lithospermum caroliniense	Endangered
Lupinus perennis	Rare

3. Dunes

Sand dunes and drift beaches at Presque Isle support nine POSCIP species. Ammophila breviligulata and Populus deltoides are the most frequent dune builders, but in some areas Panicum virgatum, Andropogon scoparius and Elymus canadensis are important dune builders. Active dunes at Presque Isle are best developed from the Light House eastward to the tip of Gullpoint.

Nine POSCIP species occur within the dunes and drift beaches at Presque Isle:

Ammophila breviligulata	Threatened
Artemisia campestris ssp.caudata	Endangered
Cakile edentula	Rare
Chamaesyce polygonifolia	Threatened
Cyperus schweinitzii	Rare
Lathyrus japonicus	Threatened
Ptelea trifoliata	Rare
Sporobolus cryptandrus	Rare
Triplasis purpurea	Endangered

4. Ponds

This plant community is found along the bay shoreline and within open ponds in the interior sections of the park. The ponds which have well developed aquatic beds are sometimes sparsely covered with Nuphar advena, Nymphaea odorata, Brasenia schreberi and Potamogeton natans.

The five aquatic bed POSCIP species documented are:

Potamogeton richardsonii	Endangered
Potamogeton zosteriformis	Tentatively Undetermined
Utricularia gibba	Tentatively Undetermined
Utricularia intermedia	Tentatively Undetermined
Utricularia minor	Tentatively Undetermined

5. Mixed emergent marshes

The emergent wetland complex includes Typha swamp, Carex meadows, Calamagrostis marshes, non-persistent Nuphar-Nymphaea-Pontederia marshes and Acer-Quercus-Nyssa-Cephalanthus savannas with extensive mixed herbaceous marsh openings.

Six POSCIP species were documented:

Carex aquatilis	Threatened
Cladium mariscoides	Threatened
Eleocharis quadrangulata	Endangered
Scirpus acutus	Endangered
Scirpus fluviatilis	Rare
Zizania aquatica	Rare

FOUR MANAGEMENT SUGGESTIONS

for

POSCIP SPECIES

at

PRESQUE ISLE STATE PARK

(1) Initiate an alien eradication program.

Several alien plants now well established at Presque Isle pose a serious threat to the long-term survival of native plants within the park. The uncontrolled spread of these aliens in the park probably poses a greater threat to ecologically sensitive areas than the five million people who annually visit the park. The six aliens well established at Presque Isle include Japanese bush-honeysuckle (Lonicera morrowi), Japanese knotweed (Polygonum cuspidatum), narrow leaved cattail (Typha angustifolia), hybrid cattail (Typha X glauca), Chinese bittersweet (Celastrus orbiculatus), and European alder (Alnus glutinosa). If these aliens continue to spread in the park, many of the significant natural areas in the park will be destroyed.

(2) Experiment with possible methods for controlling Phragmites and hybrid cattail within park wetlands.

Phragmites (Phragmites australis) and hybrid cattail (Typha X glauca), pose a serious threat to the long term survival of several rare wetland communities within the park. The

phragmites growing within Dead Pond is currently competing with several plants which are endangered, threatened or rare in PA: four-angled spike-rush (Eleocharis quadrangulata); hard stem bull-rush (Scirpus acutus); water sedge (Carex aquatilis); and twig-rush (Cladium mariscoides). Dead pond is the only location where twig-rush currently grows in the park. There are only 21 twig-rush plants and a dense stand of phragmites now grows above the twig-rush. A research program should be initiated to determine if treatment of the aerial portions of phragmites with the herbicide Rodeo favors the growth of Cladium within the phragmites stand.

(3) Establish a water quality monitoring program for the interior ponds; Long Pond, Big Pond, Pond of the Woods, Grave Yard Pond, Yellow Bass Pond, Ridge Pond, Niagara Pond, Cranberry Pond and Meander Pond.

Rare plant inventories by the museum were carried out within the isolated interior ponds during the 1987 field season; Ridge Pond, Big Pond, Long Pond, Yellow Bass Pond, Horseshoe Pond, Meander Pond, Niagara Pond and Cranberry Pond. Several rare submersed aquatic species were found within Ridge Pond, Big Pond, Niagara Pond, Meander Pond and Horseshoe Pond. One aquatic plant found in both Ridge and Niagara Ponds, two leaved water-milfoil (Myriophyllum heterophyllum), grows nowhere else in Pennsylvania. Pollution from the sand mounds may degrade the water quality of the interior ponds, and a decline in water quality would likely

threaten the survival of the rare aquatic plants such as the two-leaved water milfoil.

(4) Establish a deer exclosure to protect some species which are severely grazed and browsed by deer in the park.

The large deer population in the park is a threat to the survival of several plant species in the park. Among the plants which the deer are grazing and browsing, hairy puccoon (Lithospermum caroliniense) seems to be the most seriously threatened by deer. Hairy puccoon, an endangered plant in Pennsylvania, grows nowhere else in the state. During 1987 the deer severely grazed the puccoon at all locations where it grows in the park. All puccoons on the Long Ridge sand plain were eaten to ground level. Construction of an exclosure fence may be the only method to protect the puccoon.

Purpose and utility of this study

The objective of this study was to collect detailed information describing the plants of special concern and the natural communities present at Presque Isle, Erie County, Pennsylvania. This information was gathered in a detailed format which especially focussed upon providing the exact location of the plants and communities involved. The majority of the field studies were accomplished within Presque Isle State Park, although the area managed by the U. S. Coast Guard at its station near Horseshoe Pond was also investigated. The results of this study should be of value to the following agencies during their management of Presque Isle's natural resources:

: Bureau of State Parks (PA DER)
Presque Isle State Park
: U.S. Coast Guard
: Bureau of Water Resources Management (PA DER)
Coastal Zone Management
: Bureau of Forestry (PA DER)
Forest Advisory Services
: Pennsylvania Game Commission
: Pennsylvania Fish Commission

The detailed information provided in this report can be reviewed and utilized by these agencies during their mandated operations, for example:

a) Bureau of State Parks, U. S. Coast Guard: This report will be on file with the Superintendent, Presque State Park for use in both addressing the challenges of the daily management of the park's resources, and for use in long range planning. Thus, the Bureau will be more effective in carrying out its stated "Management Objectives (4700.000)", including the provisions for wildlife, fishery, wetlands, vegetative management, water resource management and natural areas. These objectives cover

both the overall natural resources of state parks, and the endangered or unique resources. This report provides site specific information to allow management of plants of special concern and the unique natural communities associated with these species, as well as common and special concern animals. The detailed natural community map will be especially useful to the park superintendent, and is intended as a consultation tool for park staff. This report could be used in a similar way by U.S. Coast Guard personnel.

b) Bureau of State Parks, Bureau of Forestry: Baseline data is now available that can act as a foundation for future research, including continued studies involving the location of additonal species of special concern (flora/fauna), their ecology and management (monitoring and habitat protection). In addition, future research can continue to refine the present knowledge of the peninsula's natural communities, as presented herein.

c) PA Game Commission, PA Fish Commission: The results of this study may be useful to these agencies in their management of wildlife at Presque Isle, especially as related to the natural community types outlined, and as related to plants of special concern.

d) Bureau of State Parks, Bureau of Water Resources Management (Division of Coastal Zone Management), and state/federal natural resources regulatory agencies: Development projects in the form of park improvements, shoreline protection/management and other environmental alterations, can consult the map and associated plants of special concern data (presented here and as stored in PA Natural Diversity Inventory) during early planning stages to assist their assessment of the potential environmental impacts to the natural resources treated during this study.

e) Department of Environmental Resources: This study provides information which could assist in meeting the requirements of 25 PA. Code Chapter 82, Conservation of Pennsylvania Native Wild Plants, and by helping to " determine measures to manage wild plants in order to provide for continued existence of the plants" and allowing the evaluation of sites suitable for designation as "public wild plant sanctuaries" as required by P.L. 157 No. 170, known as the Wild Resource Conservation Act.

NATURAL COMMUNITY CLASSIFICATION: PRESQUE ISLE

During the field investigations involved with this study, the natural communities of Presque Isle were both delineated and classified. The large color coded map accompanying this report is the result of the comparison of color aerial photography and the natural communities experienced in the field. These natural communities were categorized through a draft format consistent with the classification utilized in the Pennsylvania Natural Diversity Inventory (PNDI) project. Note: the PNDI natural community classification is also in a draft phase as field research continues across the state.

The primary or gross level of natural community classification is the " Ecological Unit", and follows Cowardin, et al (1979). In the classification, Ecological Units are identified by Roman numerals. The secondary classification level is the name of the overall Natural Community type encompassing the Community; followed by the third and final level, the specific name for each Plant Community based upon one or more of the following attributes:

1) the names of the dominant canopy vegetation up to a maximum of three species; if more than three apparently codominant species exist, a generic name is applied (e.g., "mixed aquatic bed");

2) the name of a characteristic, obligate, or faithful plant species;

3) a dominant, or characteristic, physiognomic (e.g., savannah, etc.) or abiotic environmental feature (e.g., substrate, soil chemistry, etc.)

Plant communities are identified by the term "community" at the

end of the name. Given this introduction, the draft classification of the natural communities of Presque Isle determined during this study are as follows:

I. Lacustrine
  A. Eastern Great Lakes Littoral Zone
     (further undefined at present)
  B. Eastern Great Lakes Bay
     Mixed Aquatic Bed Community (bays, large ponds)

II. Palustrine
  A. Great Lakes Palustrine Sandplain
     1) Mixed Herbaceous Calcareous Sandplain
     2) Populus deltoides - Mixed Herb Sandplain Community
     3) Shrub Savannah Sandplain Community
     4) Populus deltoides - Shrub Thicket Savannah Community
     5) Calamagrostis canadensis - Mixed Herb Community
     6) Calamagrostis canadensis - Myrica Savannah Community
     7) Calamagrostis canadensis - Mixed Broadleaf - Pine Plantation Forest Community
     8) Calamagrostis canadensis - Populus deltoides - Mixed Shrub Savannah Community
     9) Calamagrostis canadensis - Mixed Forest/Shrub Savannah Community
  B. Robust/Graminoid Emergent Marsh
     1) Mixed Robust/Graminoid Emergent Marsh Community
     2) Carex spp. Marsh Community
     3) Decodon verticillatus Marsh Community
        Note: Communities 1 & 2 merged during mapping
  C. Circumneutral Deciduous Shrub Swamp
     1) Mixed Circumneutral Deciduous Shrub Swamp Community
     2) Cephalanthus occidentalis - Decodon verticillatus Community
     3) Mixed Broadleaf Shrub - Broadleaf Tree Swamp Savannah Community
  D. Eastern Great Lakes Sandspit Ponds and Bays
     1) Mixed Aquatic Bed Community
     2) Non-persistent Mixed Emergent Marsh Community (Mixed Graminoid-Nuphar Community)

III. Terrestrial
  A. Eastern Great Lakes Beach/Dune
     1) Cakile edentula - Sporobolus cryptandrus Community (sparsely vegetated shifting sands-open beach)
     2) Ammophila breviligulata Dune Community

B. Eastern Great Lakes Dry-Mesic Sandplain

1) Mixed Graminoid Sandplain Community
2) Mixed Forest Sandplain Savannah/ *Quercus velutina-Sassafras-Prunus serotina* Savannah Community
3) Shrub Thicket Sandplain/ *Populus deltoides-Myrica-Lonicera morrowi* Community
4) Shrub Savannah Sandplain/ *Sorgastrum nutans* Community
5) Mixed Pine Planatations - cultural, not a natural community and included here only for mapping reasons. Occurs on one of the above sandplain communities.
6) Great Lakes Broadleaf Sandplain Forest *Populus deltoides* Loam Forest Community
7) *Salix fragilis-S. alba* Community
8) *Quercus-Prunus serotina-Acer rubrum* Community

Reference:

Cowardin, L. M. *et al.* 1979. FWS/OBS - 79/31

Pennsylvania Natural Diversity Inventory

Initiated in 1981 through a cooperative agreement between the Pennsylvania Department of Environmental Resources and the Western Pennsylvania Conservancy, the Pennsylvania Natural Diversity Inventory (PNDI) is modelled after The Nature Conservancy's Natural Heritage Programs. PNDI is coordinated by PA D.E.R., Bureau of Forestry, with technical assistance from the Western Pennsylvania Conservancy in 31 western counties, and by The Nature Conservancy in 36 eastern counties.

The Pennsylvania Natural Diversity Inventory is a multiple index data system which collects and manages locational, ecological, status and source information pertaining to the state's "natural resources of special concern". These resources include rare and endangered species, biological communities (natural communities), and significant examples of geologic features.

Baseline information is collected from a variety of sources, such as plant and animal specimens deposited in museums, relevant literature, graduate thesis papers, and details provided by expert biologists. This data is managed through several techniques including the plotting of localities on U.S.G.S. 7.5' quadrangles, and the creation of computerized reports describing each mapped occurrence of an endangered species, unique wetland community, etc.. Presently, the PNDI database contains more than 6,500 records and additional supporting data.

In order to have the PNDI system reflect the actual status of these special concern resources as accurately as possible, historic reports are being confirmed or denied through field studies. Previously unknown occurrences of species and natural communities are also sought. These studies are conducted by associate researchers, consulting biologists, interested volunteers, graduate students and PNDI staff. The PNDI project also works in conjunction with the efforts of the Pennsylvania Game Commission and the Pennsylvania Fish Commission. Newly collected data from this wide variety of sources is used to update and refresh the data system. Thus, PNDI is a dynamic information resource.

A primary function of the PNDI data system is as a tool in the management of natural resources, and as a guidance mechanism in the determination and implementation of conservation objectives. The computerized database facilitates the evaluation of proposed developments, such as road construction, commercial forestry practices and flood control projects. Because PNDI stores site specific locality and status data, populations of imperiled species, or examples of unique natural communities can be managed for more effectively. PNDI also provides basic information to biologists conducting further studies regarding the range and distribution, life history, or more detailed ecological questions pertaining to the commonwealth's natural diversity of species, natural communities and their habitats.

Requests for information should be directed to: Pennsylvania Natural Diversity Inventory, Coordinator, Bureau of Forestry, Division of Forest Advisory Services, P. O. Box 1467, Harrisburg, PA 17120.

1987 RARE PLANT SURVEY

PRESQUE ISLE STATE PARK

<u>Ammophila</u> <u>breviligulata</u> Fern.

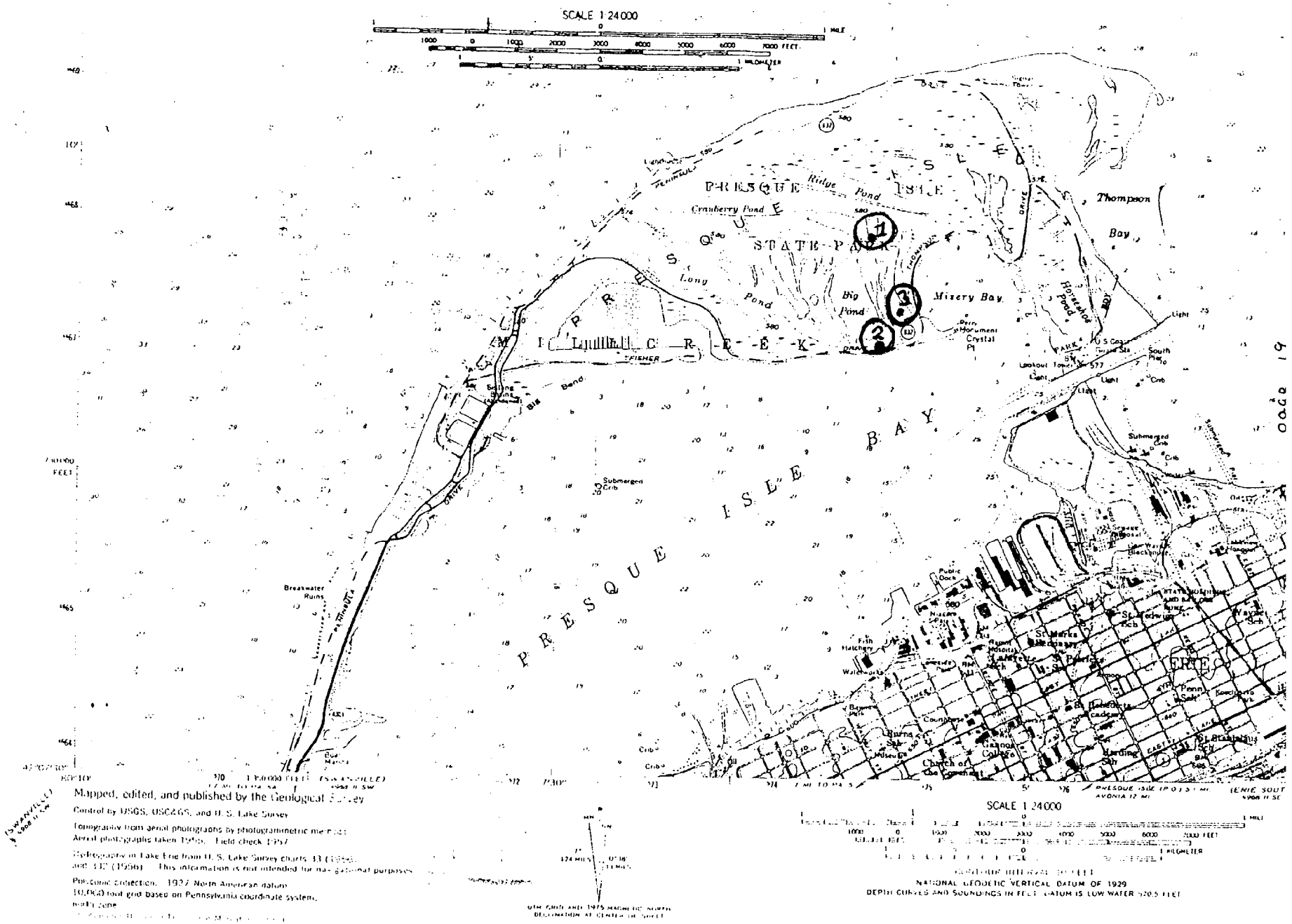
Ammophila breviligulata Fern.

1. 2 October 1987
   Locally common on open sand barren just below power line along northwest shore of Thompson Bay 18 degrees and 1.05 mile from Perry Monument.

2. 9 October 1987
   Local, a few large clones within Sorgastrum-Andropogon-Panicum virgatum sand plain along east shore of Misery Bay; 50 degrees and .4 mile from Perry Monument.

3. 17 October 1987
   Local, single clone about 60 feet across on upper beach with Populus deltoides savannah; 270 degrees and 2.1 miles from Perry Monument.

4. 1 November 1987
   Local small clone on dry, open sands along west side of PA 832; east of east central shore of Niagara Pond; .6 mile and 30 degrees from Perry Monument.



Acorus americanus Michx.

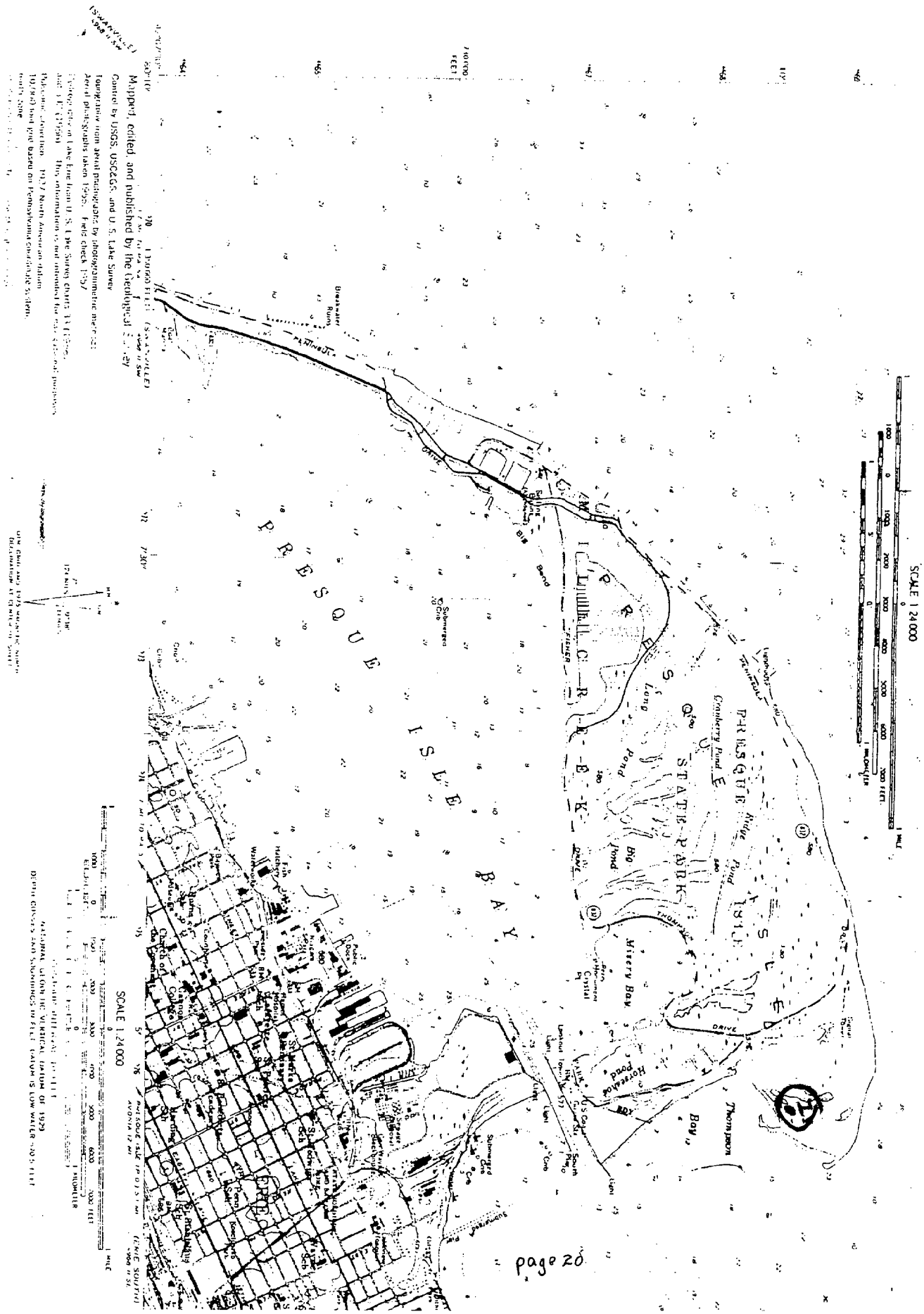
Acorus americanus Michx.

1. 19 June 1987 JKB:1987:105
   Locally common, four clones established within non-persistent emergent marsh along north side of channel.

2. 30 September 1987
   Local, several clones one to five meters across widely scattered on wet flats; vegetation cover is shrub savannah-mixed herbaceous marsh; located between west shore of Big Pond and southeast shore of Grave Yard Pond; .25 miles and 292 degrees from Perry Monument.

3. 30 September 1987
   Occasional several clones widely scattered on open sparsely vegetated mud flats along southern shore of Big Pond; .4 mile and 260 degrees from Perry Monument; most clones are one to two meters across; one clone is 30 meters across; most clones are growing among fallen Acer rubrum - Fraxinus americanus logs.

Aster dumosus L.



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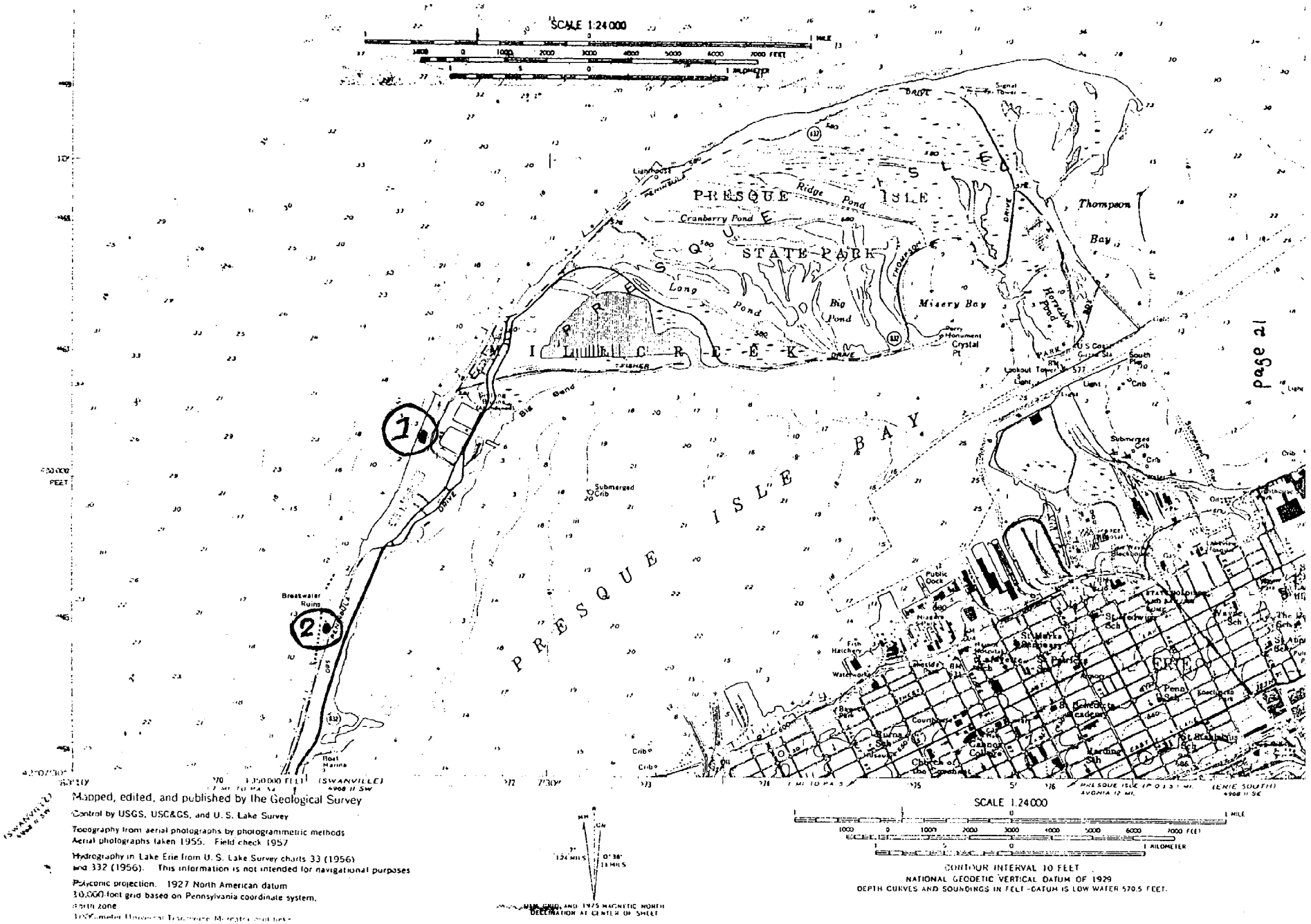
Aster dumosus L.

1. 13 August 1985 JKB:1985:282
Local to occasional on open flats; .53 miles and 118 degrees from Signal Tower Foundation.

Cakile edentula (Bigel.) Hook.

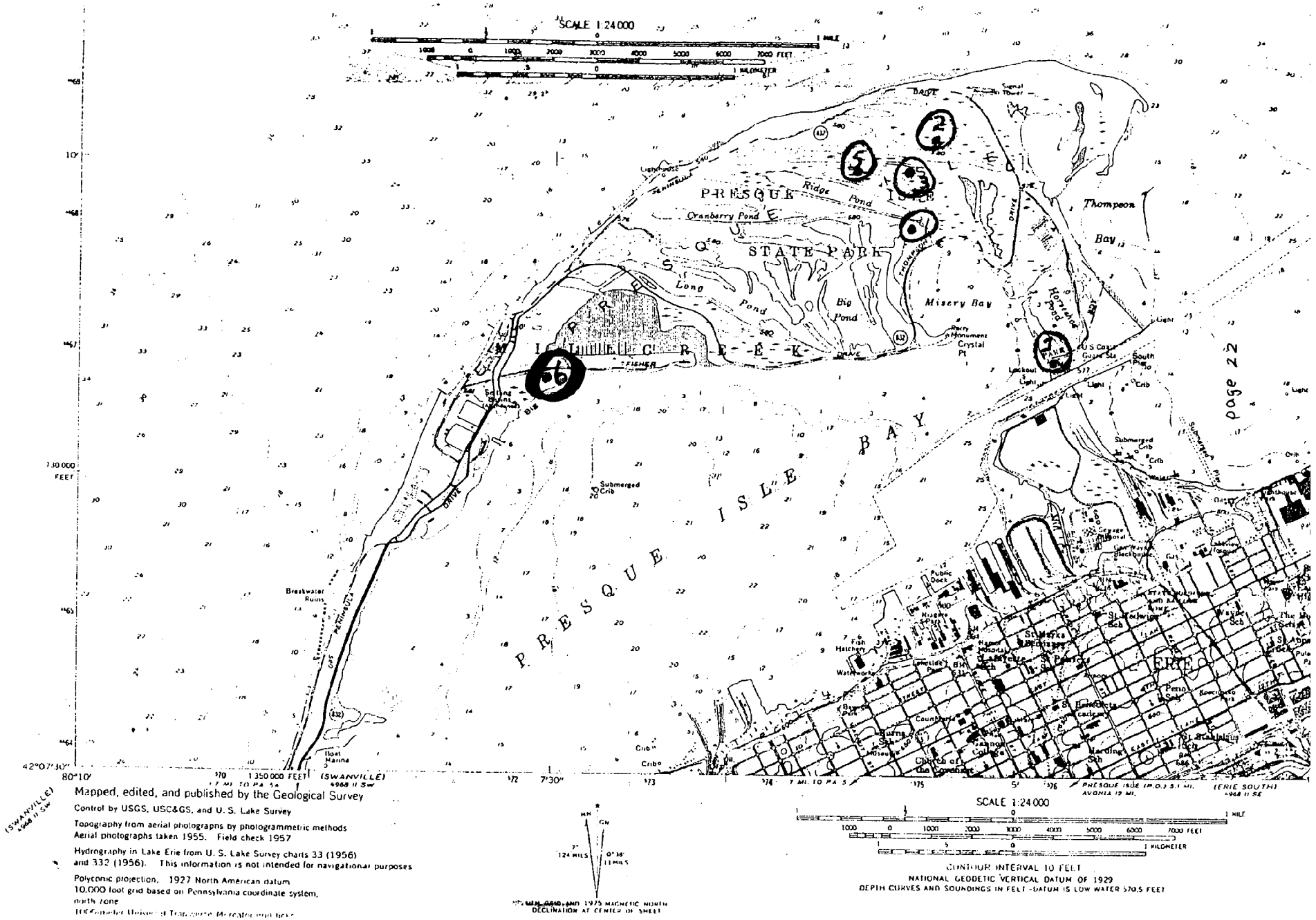


Cakile edentula (Bigel.)Hook.

1. 9 October 1987
   Occasional on bull-dozed beach north and south of Ammophila clone; 258 degrees and 2.45 miles from Perry Monument.

2. 17 October 1987
   Occasional on bull-dozed gravelly beach along lake side of peninsula neck; 3.2 miles and 243 degrees from Perry Monument.

Carex aquatilis Wahlenb.



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and U. S. Lake Survey

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1955. Field check 1957

Hydrography in Lake Erie from U. S. Lake Survey charts 33 (1956) and 332 (1956). This information is not intended for navigational purposes

Polyconic projection. 1927 North American datum
10,000 foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks

1975 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Carex aquatilis Wahlenb.

1.13 May 1987
Occasional in open marhses adjacent to North Pier just southwest of new Coast Guard Building; .55 miles and 104 degrees from Perry Monument.

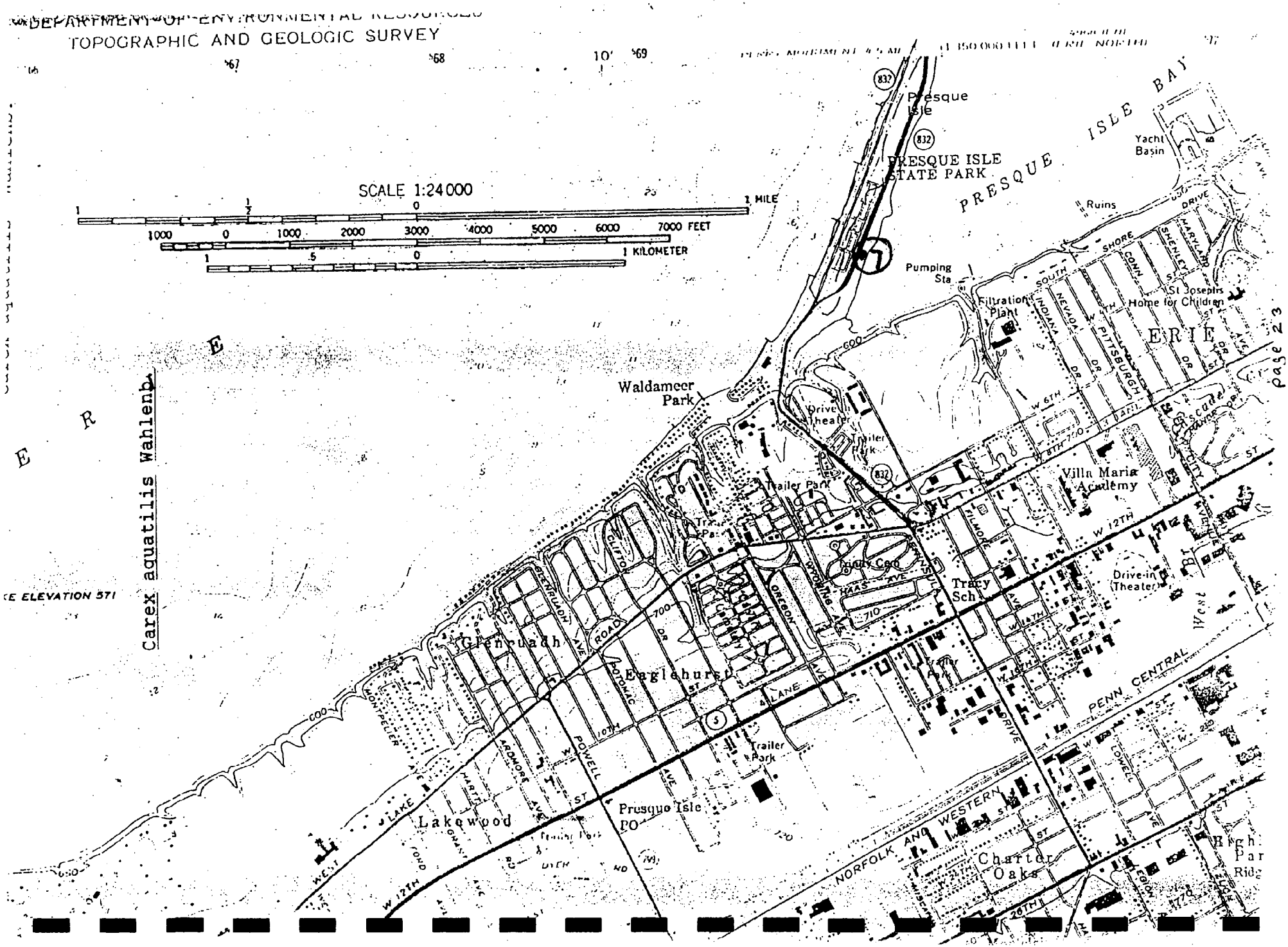
2. 17 June 1987
Locally common in shallow waters between Calamagrostis meadows and Cephalanthus swamps; 356 degrees and .95 mile from Perry Monument.

3. 17 June 1987
Occasional within Carex stricta marsh flats east of open waters of Yellow Bass Pond; .8 mile and 345 degrees from Perry Monument.

4. 17 June 1987
Occasional within swamp forest-swamp shrub savannah with mixed herbaceous marsh openings north and northeast of north shore of Grave Yard Pond; .5 mile and 340 degrees from Perry Monument.

5. 17 June 1987
Occasional to common throughout extensive Carex stricta-Calamagrostis-Carex aquatilis meadow west of open waters of Yellow Bass Pond;.85 mile and 335 degrees from Perry Monument.

6. 24 June 1987
Local and rare single stand about 7 meters across;263 degrees and 1.9 miles from Perry Monument.

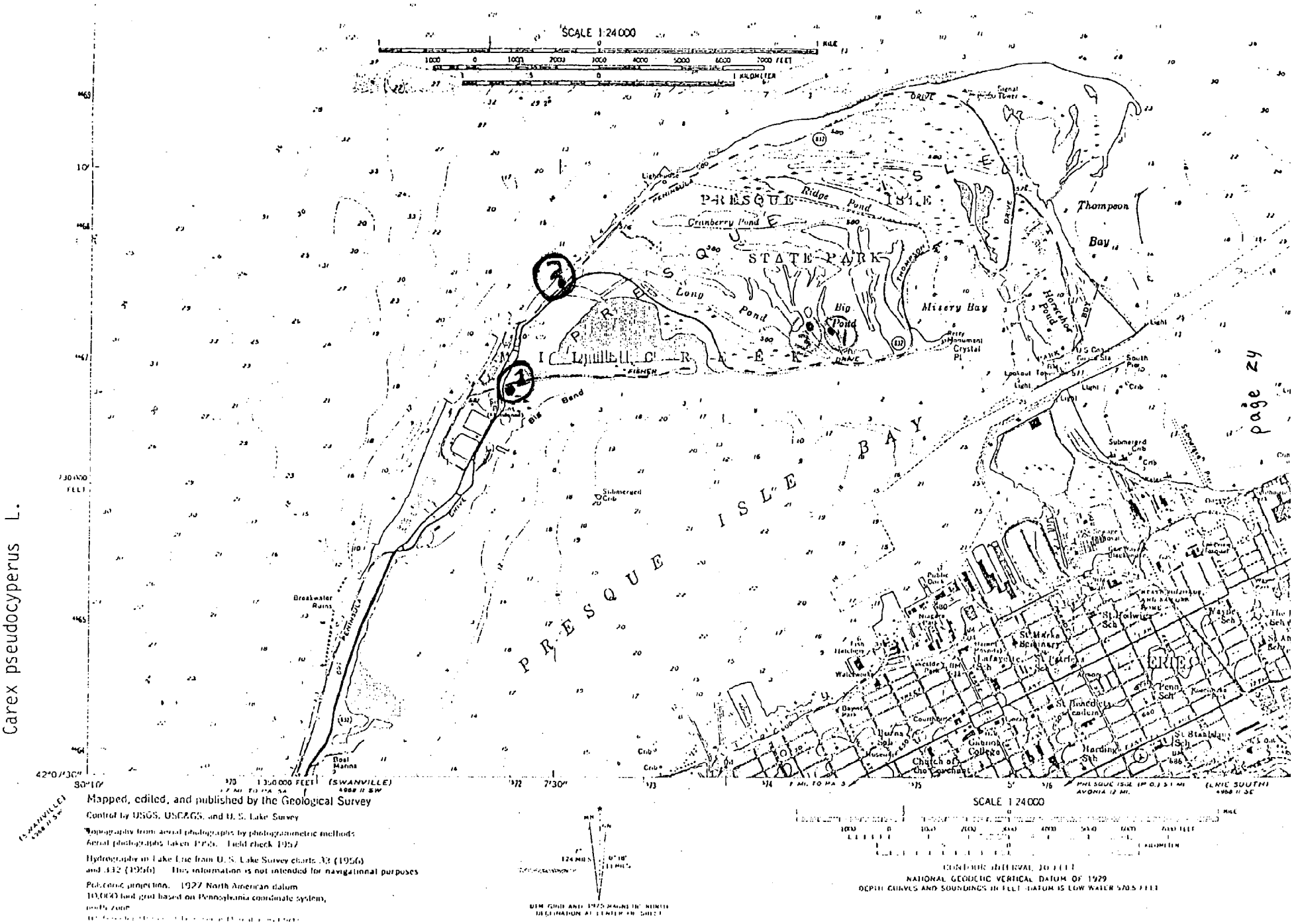

DEPARTMENT OF ENVIRONMENTAL RESOURCES
TOPOGRAPHIC AND GEOLOGIC SURVEY
SCALE 1:24000
1 MILE
7000 FEET
1 KILOMETER
Carex aquatilis Wahlenb.
Presque Isle
PRESQUE ISLE STATE PARK
PRESQUE ISLE BAY
Yacht Basin
Ruins
Pumping Sta
Filtration Plant
St Josephs Home for Children
ERIE
Waldameer Park
Drive-in Theater
Trailer Park
Villa Maria Academy
Tracy Sch
Drive-in (Theater)
Penn Central
Greenbush
Eaglehurst
Lakewood
Presque Isle PO
Trailer Park
Norfolk and Western
Penn Central
Charter Oaks
W 12TH
W 26TH
PITTSBURGH
INDIANA
NEVADA
OREGON
POTOMAC
POWELL
ARMORE
MONTPELIER
CLIFTON
PENINSULA
HAAS
FILMORE
DRIVE
SHORE
MARYLAND
SHENLEY
ELEVATION 571

Carex aquatilis Wahlenb.

7. 24 June 1987
   Local small stand about five meters across in shallow open marsh just west of barrier beach on Bay Shore; 228 degrees and 4.17 miles from Perry Monument - this marsh is located due east of first cross-over between PA 832 lanes.

8. 24 June 1987
   Local in marsh behind barriers beach on Presque Isle Bay shoreline due east of first turn into Beach 1; 4.17 miles and 228 degrees from Perry Monument.
   parking area.

Carex pseudocyperus L.



page 24

Carex pseudocyperus L.

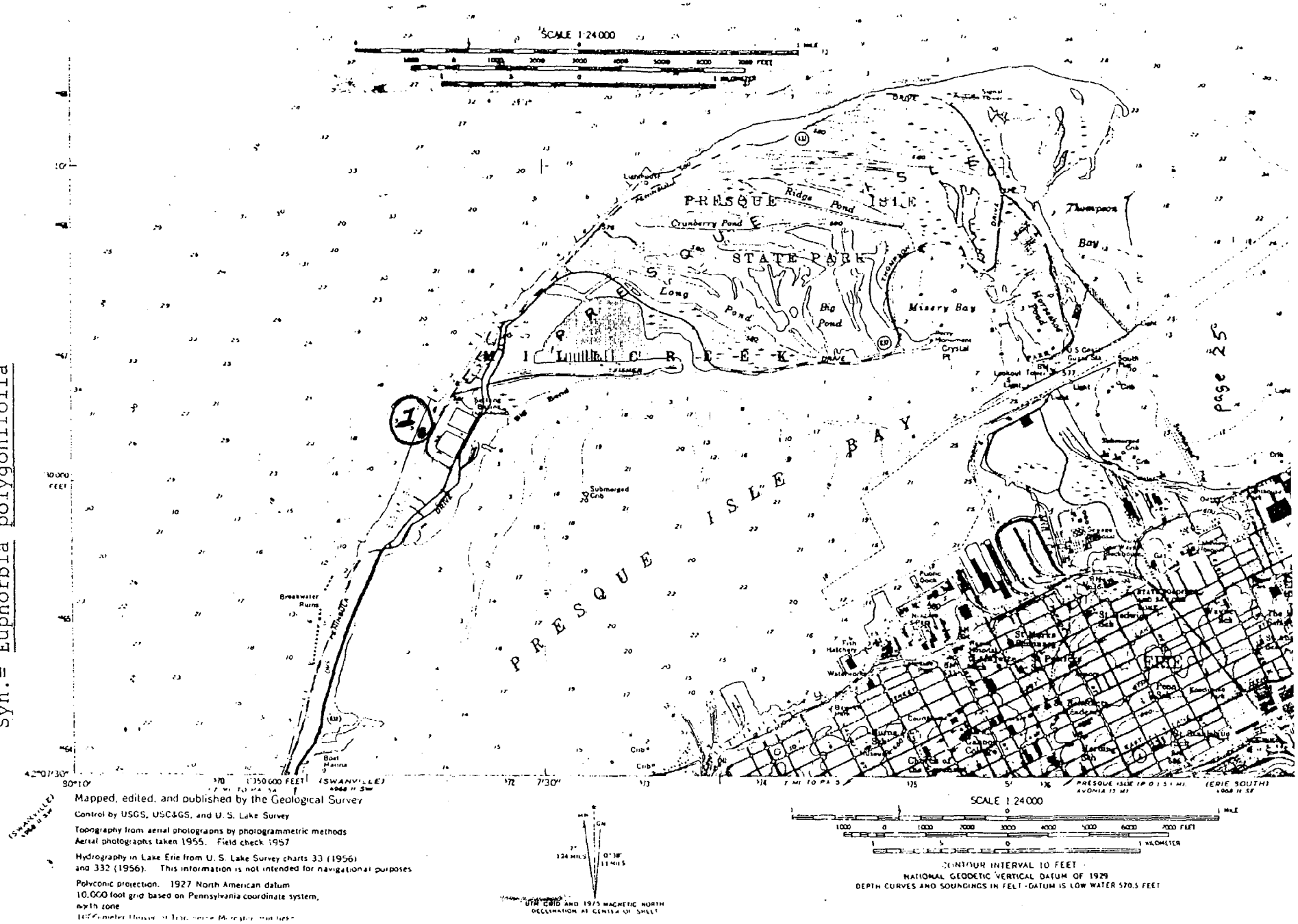
1. 24 June 1987 JKB:1987:119
   Locally common on Calamagrostis-Carex stricta meadows adjacent to open Nyssa savannah; .07 miles and 140 degrees from junction of West Fisher Drive with northbound lane of PA 832.

2. 24 June 1987 JKB:1987:120
   Local and rare; single plant growing with Carex comosa on moist sands along shore of Duck Marsh at base of bike trail fill; 278 degrees and 1.82 mile from Perry Monument.

3. 30 June 1987 JKB:1987:130
   Occasional within Calamagrostis-Carex stricta meadow on moist sands on north point of peninsula jutting into Channel between Big Pond and Long Pond; 274 degrees and .65 mile from Perry Monument.

4. 30 June 1987 JKB:1987:131
   Rare single plant observed on prostrate rotting log; 270 degrees and .5 mile; this site is located on peninsula of land along west side of Big Pond; vegetation adjacent to log is predominantly Carex stricta-Carex aquatilis-Calamagrostis emergent marsh meadows.

Chamaesyce polygonifolia (L.) Small
Syn.= Euphorbia polygonifolia



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and U. S. Lake Survey

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1955. Field check 1957

Hydrography in Lake Erie from U. S. Lake Survey charts 33 (1956) and 332 (1956). This information is not intended for navigational purposes

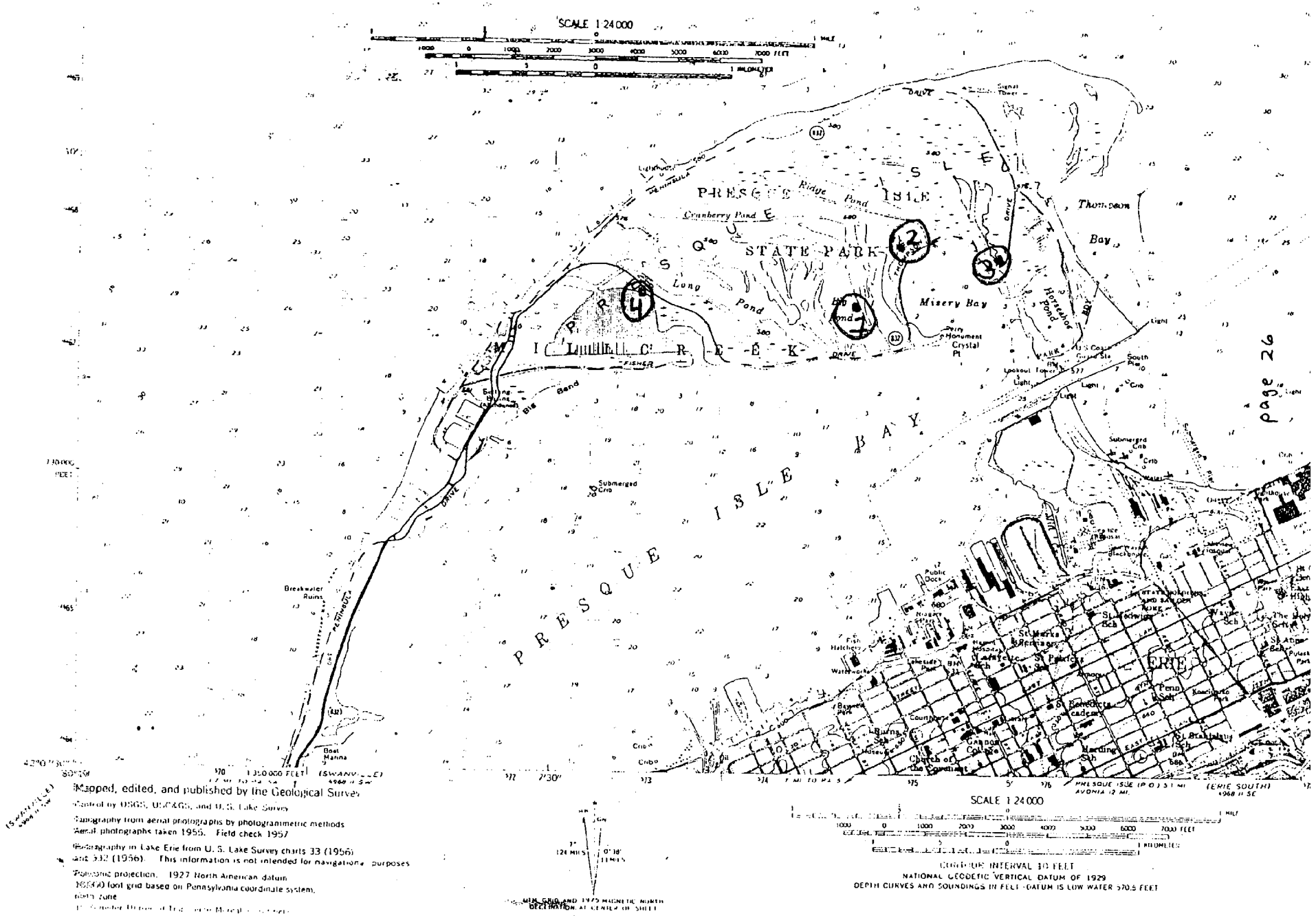
Polyconic projection. 1927 North American datum
10,000 foot grid based on Pennsylvania coordinate system, north zone

UTM GRID AND 1975 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Chamaesyce polygonifolia (L.) Small
Syn.= Euphorbia polygonifolia

1. 9 october 1987
   Occasional on open, bare bull-dozed beach north and south of Ammophila clone; 258 degrees and 2.45 mile from Perry Monument.

Cyperus diandrus Torr.



Cyperus diandrus Torr.

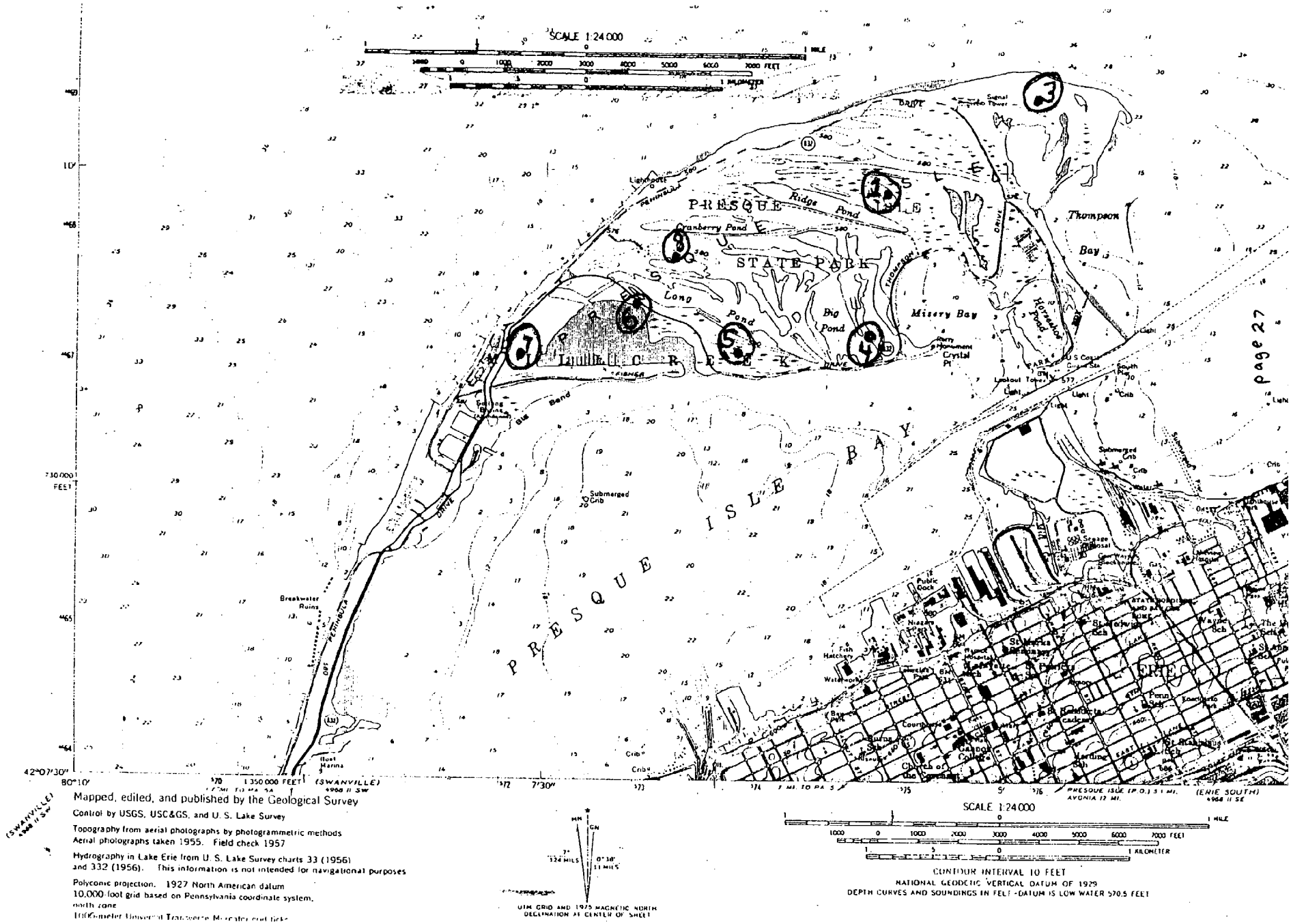
1. 6 August 1987
   Local, a few plants on sparsely vegetated low relief muddy shore flats along east side of Big Pond; none collected; .4 mile and 287 degrees from Perry Monument.

2. 18 August 1987
   Occasional in mowed sparsely vegetated flats just east of east shore of Grave Yard Pond and just south of boat livery area; .48 mile and 335 degrees from Perry Monument.

3. 9 September 1987
   Local, three plants observed on low relief, sparsely vegetated sandy shore flats along southernmost shore edge of Niagara Pond just north of PA 832; .42 mile and 36 degrees from Perry Monument.

4. 30 september 1987
   Local, a few plants on sparsely muddy flats just south of PA 832 about .1 mile east of bridge over Long Pond - Marina Lake Channel; flats predominantly Carex stricta and Calamagrostis; 1.42 miles and 278 degrees.

Cyperus engelmanii Steud.



Cyperus engelmanii Steud.

1. 9 September 1987
   Local on open, peaty Carex stricta and Carex aquatilis hummocks on northeast shore edge of Yellow Bass Pond; 343 degrees and .8 mile from Perry Monument.

2. 10 September 1987
   Occasional on low relief, muddy flats with Carex aquatilis - Nuphar marsh just west of Presque Isle Bay shore due west of southernmost entrance to Beach 1 parking area.

3. 23 September 1987
   Local on mud flats along north-central shore of pond; 1.22 miles and 21 degrees from Perry Monument.

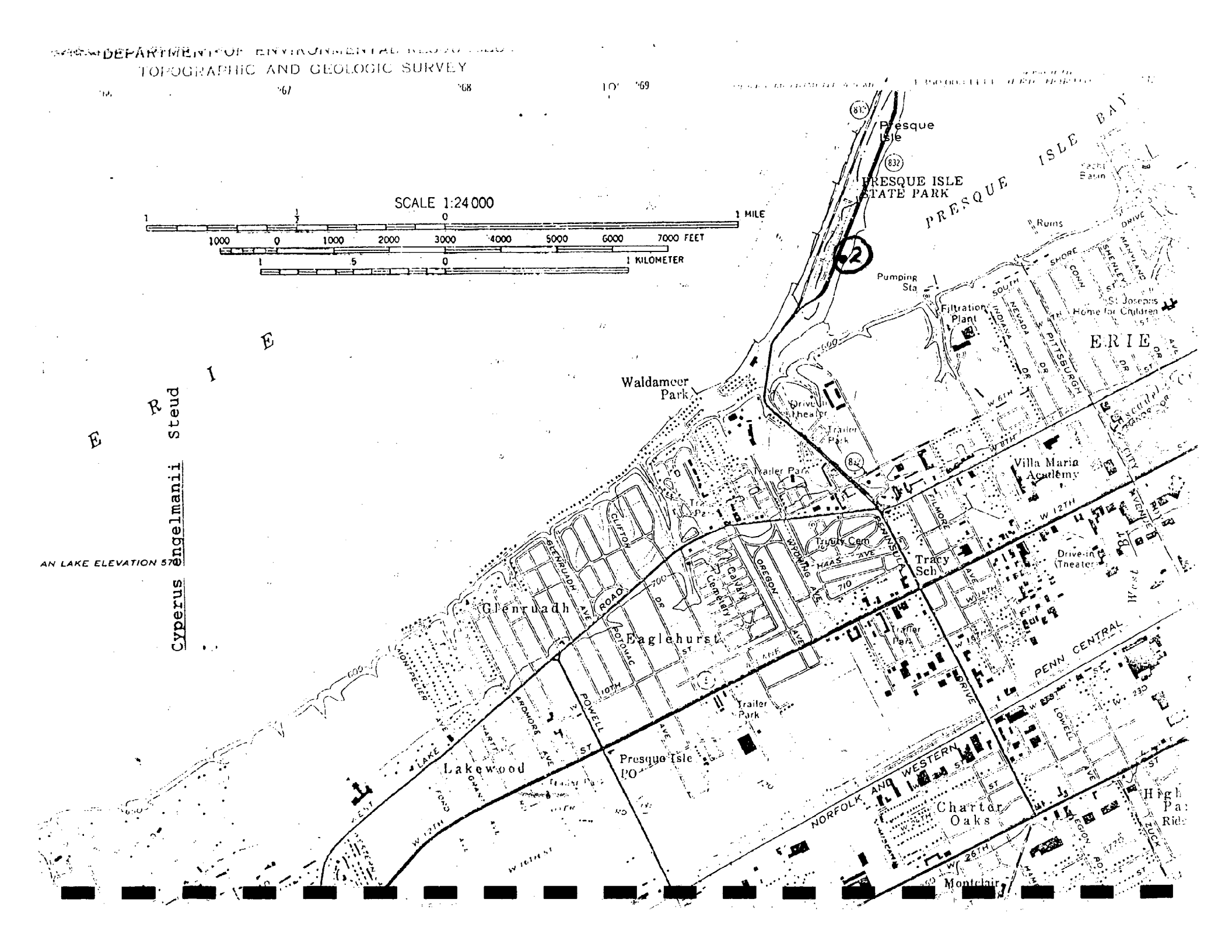
4. 23 September 1987
   Occasional in open Calamagrostis - Carex stricta - Carex aquatilis meadow southeast of southeast shore of Big Pond
   NOTE: on 30 September 1987, Cyperus engelmanii was found throughout mixed emergent marshes between Big Pond and Grave Yard Pond; also, the plant grow on mud flats all along south and western shore edges.

5. 30 September 1987
   Occasional within sparsely vegetated sections of Calamagrostis meadow due east of Marina Lake mouth; 1 mile and 265 degrees from Perry Monument.

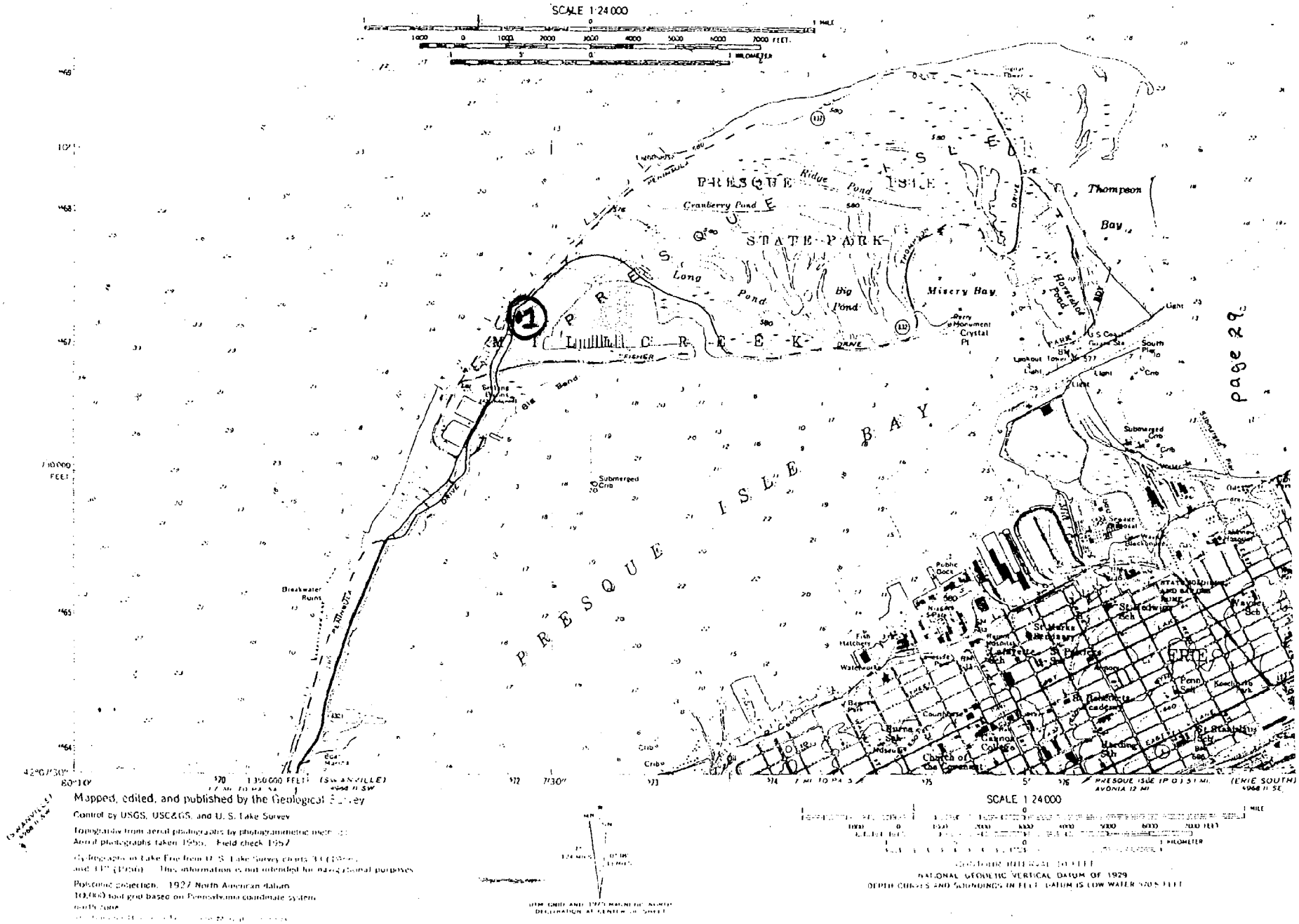
6. 30 September 1987
   Occasional on sparsely vegetated flats in association with Cyperus diandrus; 1.42 miles and 278 degrees from Perry Monument.

7. 7 October 1987
   Local, a few plants on Calamagrostis flats; 269 degrees and 1.9 miles from Perry Monument.

8. 15 October 1987
   Occasional on moist mud flats along north shore of "pond of the Woods" east of Maintenance Buildings.


DEPARTMENT OF ENVIRONMENTAL RESOURCES
TOPOGRAPHIC AND GEOLOGIC SURVEY
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
Presque Isle
PRESQUE ISLE STATE PARK
PRESQUE ISLE BAY
Pumping Sta
Filtration Plant
St Josephs Home for Children
ERIE
Waldameer Park
Trailer Park
Villa Maria Academy
Tracy Sch
Drive-in (Theater)
Glenruadh
Eaglehurst
Lakewood
Presque Isle PO
Charter Oaks
PENN CENTRAL
NORFOLK AND WESTERN
Montclair
Cyperus engelmanii Steud
AN LAKE ELEVATION 57

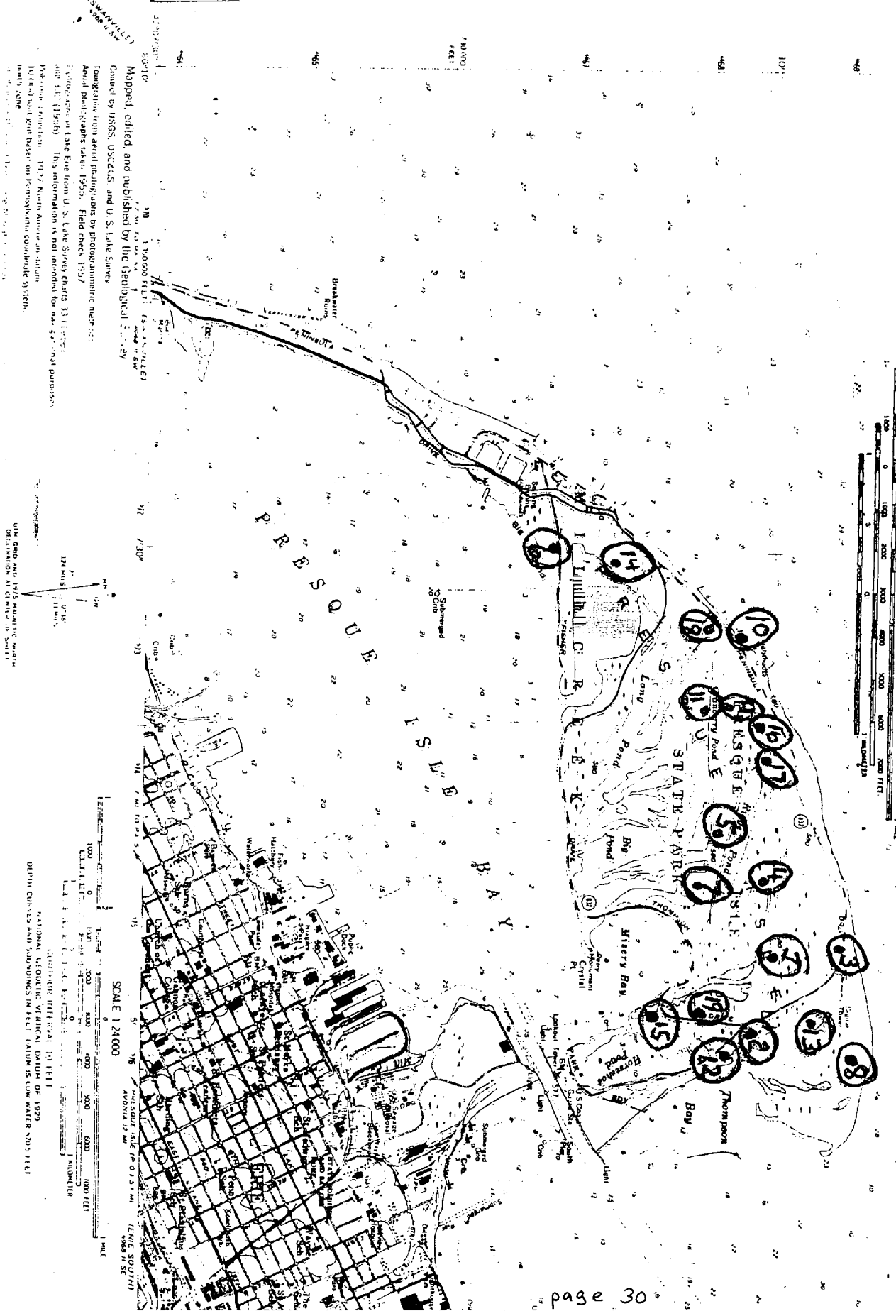
Cyperus schweinitzii Torrey



Cyperus schweinitzii Torrey

1. 7 October 1987
   Local on open eroding sand embankment; along east side of bike trail about .25 mile north of West Fisher Drive; 2 miles due west of Perry Monument.

Dichanthelium sabulorum
var. patulum (Scribn. & Merr.) Gould & Clark



Dichanthelium sabulorum
var. patulum (Scribn. & Merr.) Gould & Clark

1. 21 May 1987
Long Ridge: Occasional to locally common on open bare sands within sandy blow-outs and occasional on sparsely vegetated sands along crest of Ammophila/Sorgastrum/ Andropogon scoparius/ Panicum virgatum sand plain; section with Dichanthelium sabulorum var. patulum extends from .19 mile to .53 mile west of Thompson Road Plaque Stone.

2. 21 May 1987
Locally common on sparsely vegetated sands on sloping embankment northeast of junction of Thompson Road (PA 832) and Beach 11 turn off; principal cover is Sorgastrum/Panicum virgatum and Andropogon scoparius; three Lithosperum caroliniense are growing with Dichanthelium sabulorum var. patulum at this site; .8 mile and 24 degrees from Perry Monument.

3. 17 June 1987
Local on small sandy opening along south side of PA 832 just west of Budny Beach Entrance; 1.15 miles and 2 degrees from Perry Monument.

4. 17 June 1987
Occasional within small (3 to 4 meter width) bare sandy blowouts along south side of ridge north west of Yellow Bass Pond basin; .85 miles and 340 degrees from Perry Monument.

5. 19 June 1987
Occasional within small to large sandy blowouts within forest openings along south side of Fox Ridge north of Boat House Pond; .8 mile and 313 degrees from Perry Monument.

6. 24 June 1987
Rare in sandy openings on forested slope south of West Fisher Drive about .3 mile east of PA 832 junction; 1.8 miles and 264 degrees from Perry Monument.

7. 16 July 1987
Locally common in barren sandy opening; 322 degrees and .55 mile from Perry Monument.

8. 16 July 1987
Occasional to common on dune ridges and sand barrens about .25 mile due east of Signal Tower Foundation.

Dichanthelium sabulorum Continued
var. patulum (Scribn. & Merr.) Gould & Clark

9. 17 July 1987
Local in sandy opening within red oak-black oak-red maple-sassafras forest on ridge along north side of east basin of Cranberry Pond; 299 degrees and 1.25 mile from Perry Monument.

10. 30 July 1987
Occasional to common in sandy openings along north side PA 832 about .2 mile west of Light House.

11. 30 July 1987
Locally common in open sandy blowout within red oak-black oak-white pine forest savannah on high ridge south of east basin of Cranberry Pond; 1.2 miles and 294 degrees from Perry Monument.

12. 5 August 1987
Locally common on open sand barrens along southwest shore of Thompson Bay at western section of Beach 11; 30 degrees and .77 mile from Perry Monument.

13. 2 October 1987
Locally common in sand blowout within Sorgastrum - Ammophila sand plain below power line along northwest shore of Thompson Bay; 18 degrees and 1.05 mile from Perry Monument.

14. 9 October 1987
Occasional on sand blowouts within Quercus rubra-Sassafras savannah on sand ridge just west of Marina Lake shoreline; 271 degrees and 1.78 miles from Perry Monument.

15. 9 October 1987
Occasional on open barrens within Sorgastrum-Andropogon Panicum-Ammophila sand plain; along east shore of Misery Bay; 50 degrees and .4 mile from Perry Monument.

16. 15 October 1987
Occasional on sand blowouts along north side of Ridge Pond basin; .3 miles and 88 degrees from Light House.

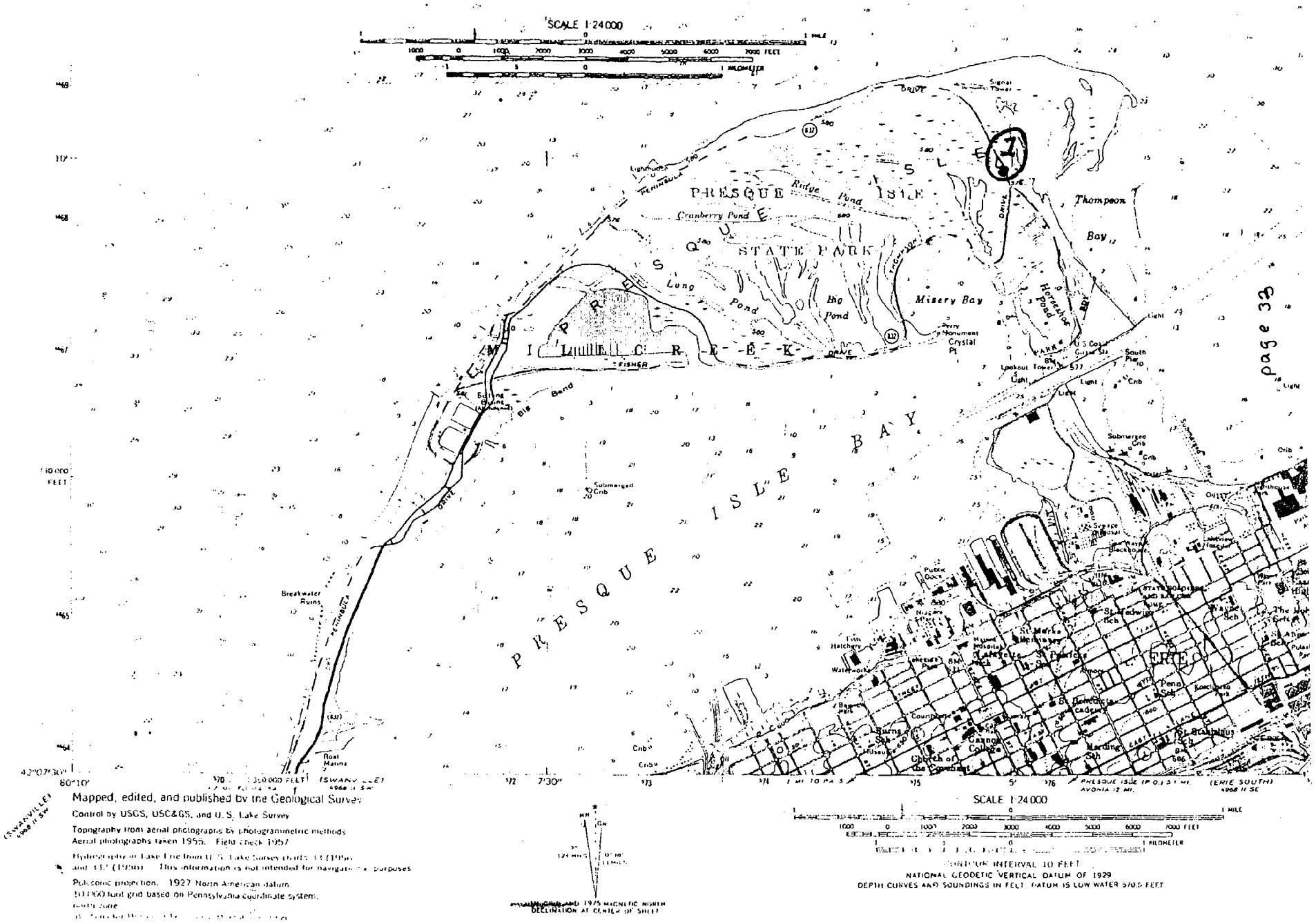
17. 15 October 1987
Locally common open blowout along south shore of Ridge Pond Basin; .45 mile and 88 degrees from Light House.

18. 17 October 1987
Locally common on open bare snads north of drive to maintenance buildings below power line about .1 mile west of west shore of Cranberry Pond; 1.55 miles and 288 degrees from Perry Monument.

Dichanthelium sabulorum
var. patulum Continued

19. 1 November 1987
Local on open sandy barrens with Sorghastrum nutans-Panicum virgatum-Myrica sandplain on sandy ridge along west side of PA 832; .6 mile and 30 degrees from Perry Monument.

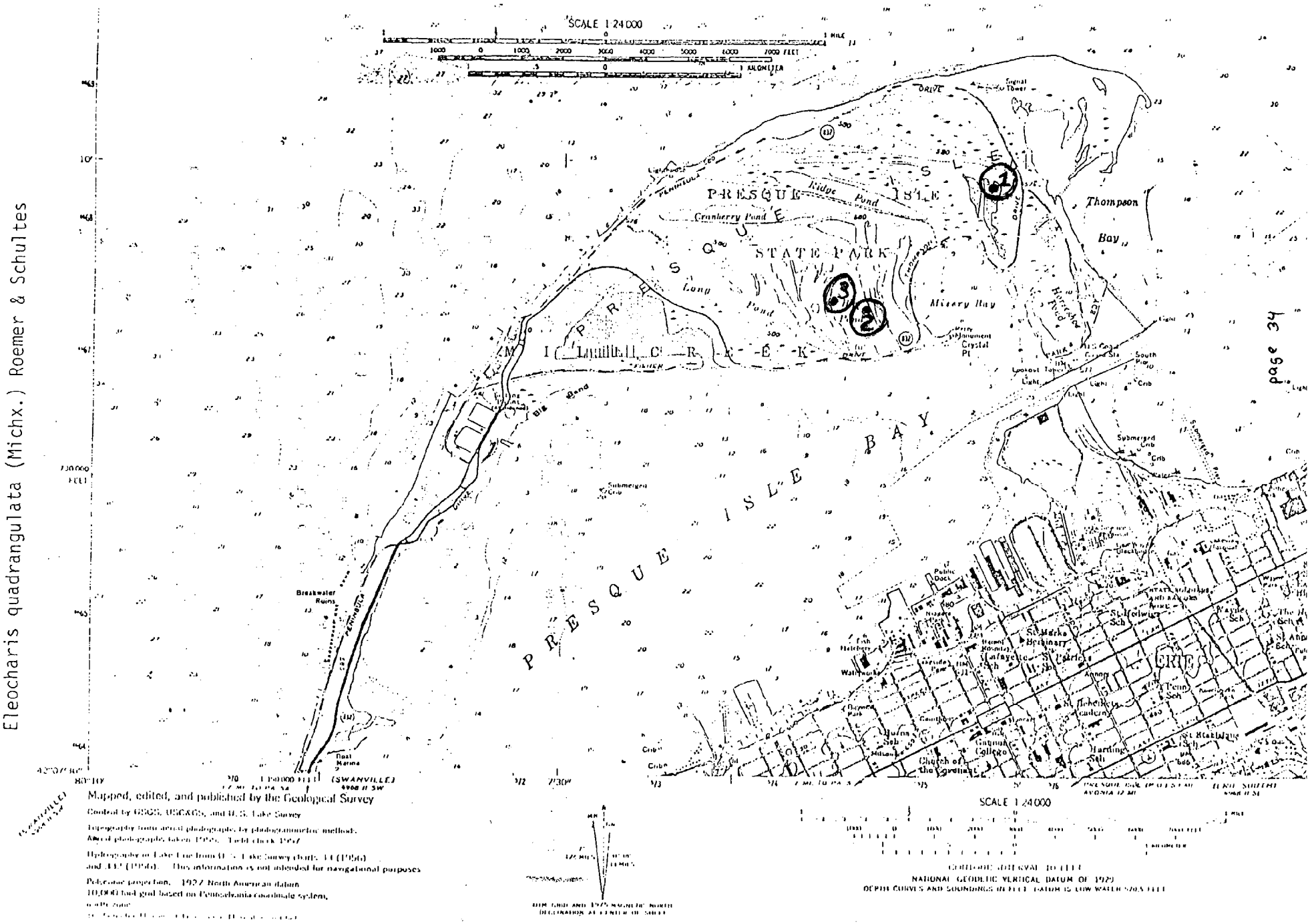
Eleocharis elliptica Kunth.



Eleocharis elliptica Kunth.

1. 21 May 1987
   Locally common small clones scattered in moist open, low flats along west side of Thompson Rd. (PA 832) just south of Thompson Circle.

Eleocharis quadrangulata (Michx.) Roemer & Schultes



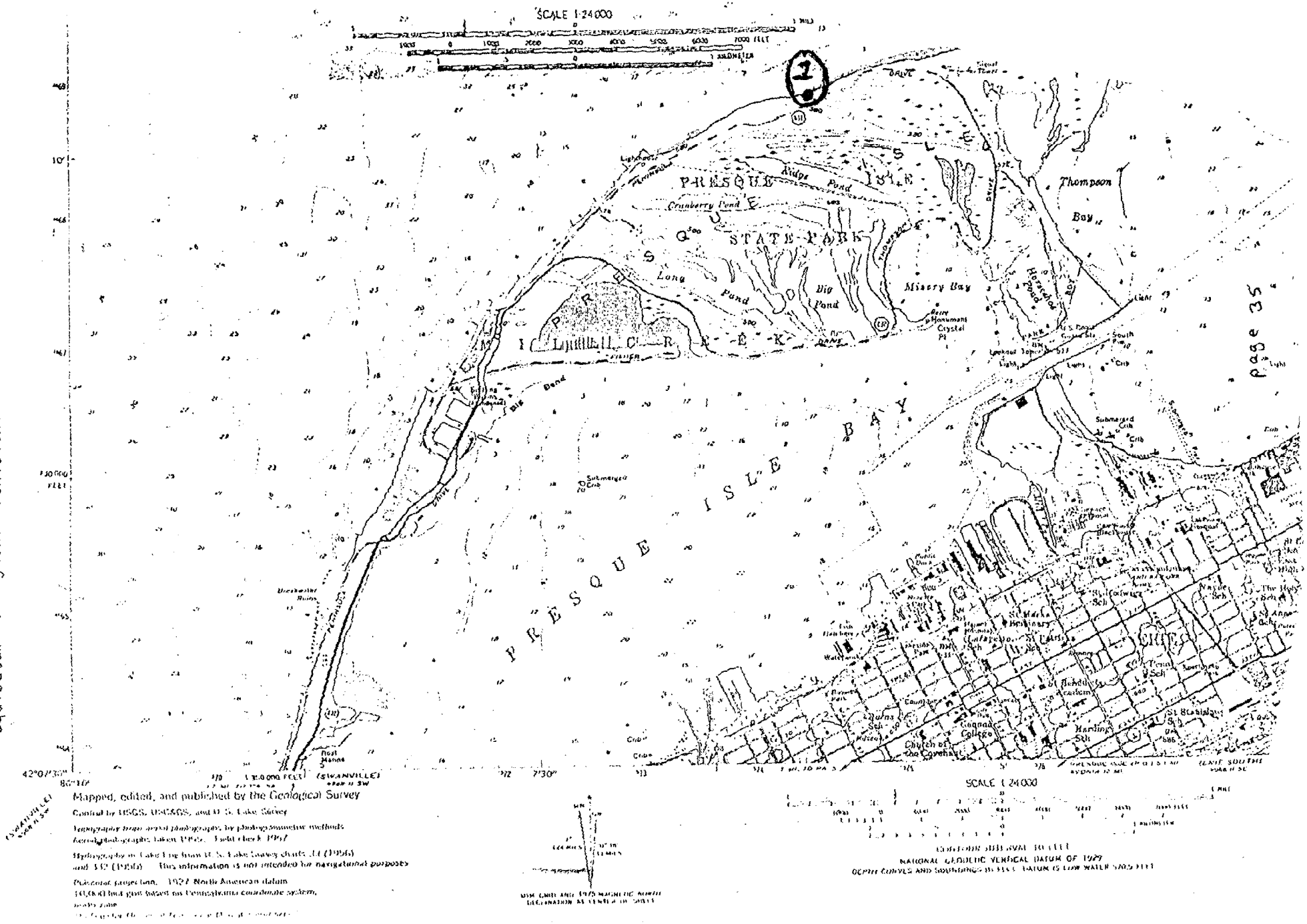
Eleocharis quadrangulata (Michx.) Roemer & Schultes

1. 5 August 1987
   Occasional; several clones widely scattered in .1 to .3 meter depth waters in association with Sparganium americanum and Sagittaria rigida along northern and northwestern shore edges of Niagara Pond growing along edges of Carex stricta-Carex aquatilis sedge marshes; .72 miles and 13 degrees from Perry Monument.

2. 6 August 1987
   Locally common dozens of fruiting culms along east central shore edge of Big Pond clone covers about nine square feet;.55 miles and 286 degrees from Perry Monument.

3. 9 September 1987
   Local, single clone observed on Nuphar advena marsh along west central shoreline of Big Pond; .4 mile and 288 degrees from Perry Monument.

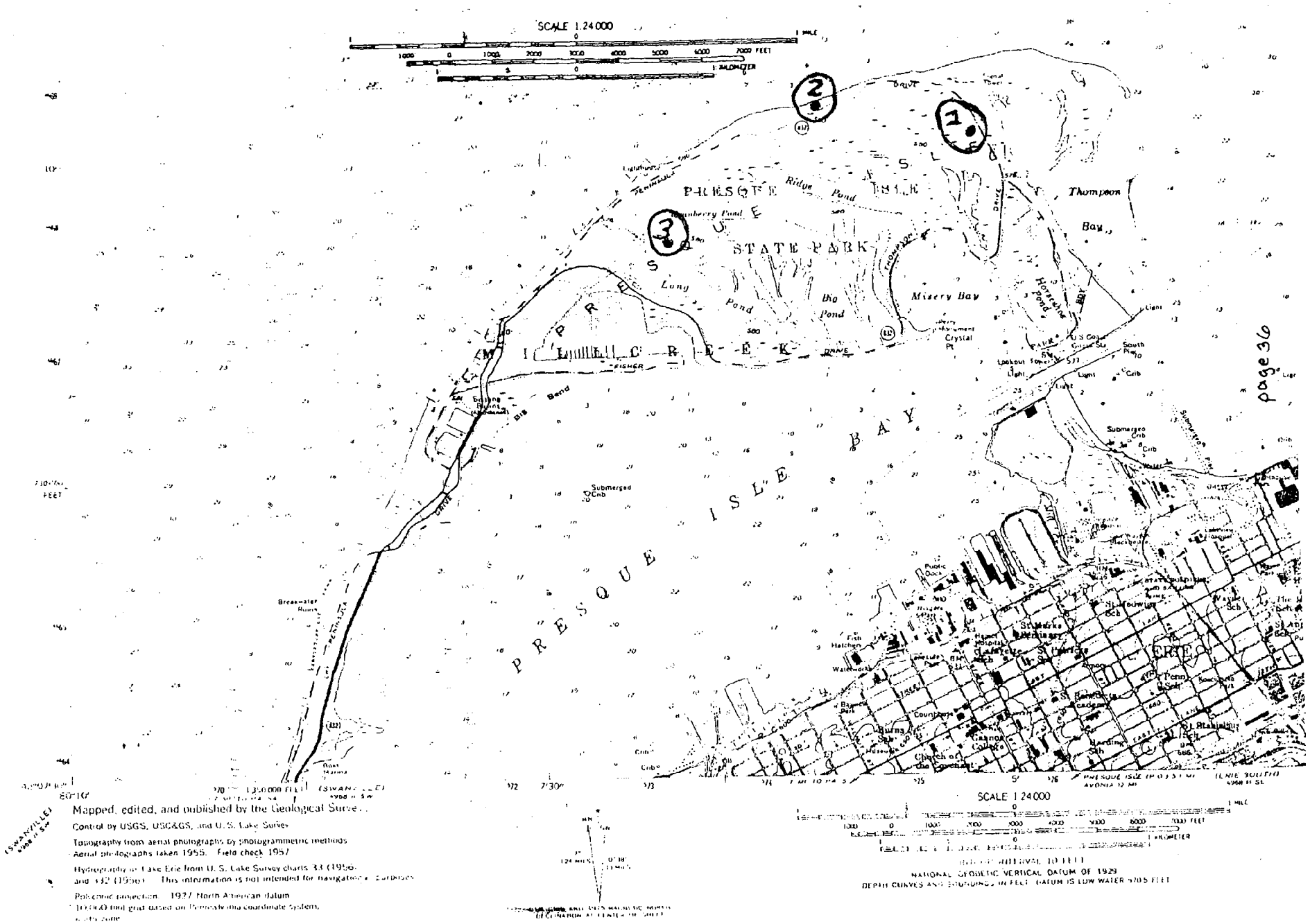
Equisetum variegatum Schleich. ex Weber & c.



Equisetum variegatum Schleich ex Weber & C.Mohr

1. 10 October 1987
   Occasional on moist palustrine flats between winter drift beach ridges: 67 degrees and .7 to .83 miles from Light House.

Hypericum majus (Gray) Britt.



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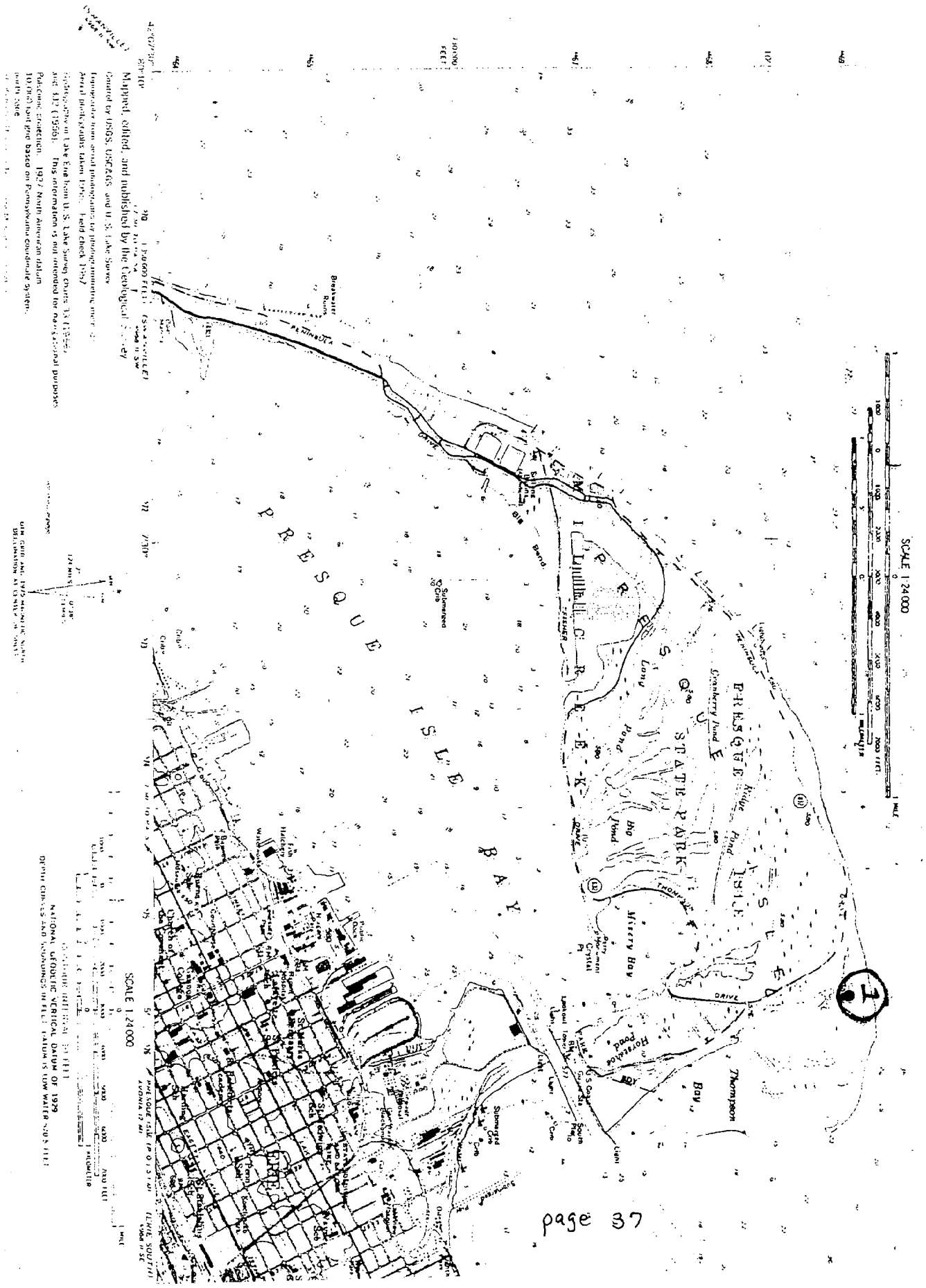
Hypericum majus (Gray) Britt.

1. 30 July 1987
   Locally abundant; large stand of dozen of individuals on root ball of blown Populus deltoides along east central shoreline of South Twin Pond; .9 mile and 13 degrees from Perry Monument.

2. 10 October 1987
   Local a few plants widely scattered on moist sand flats; .83 miles and 67 degrees from Light House.

3. 17 October 1987
   Local, about one dozen plants on prostrate rootball of fallen tree; 1.35 mile and 288 degrees from Perry Monument.

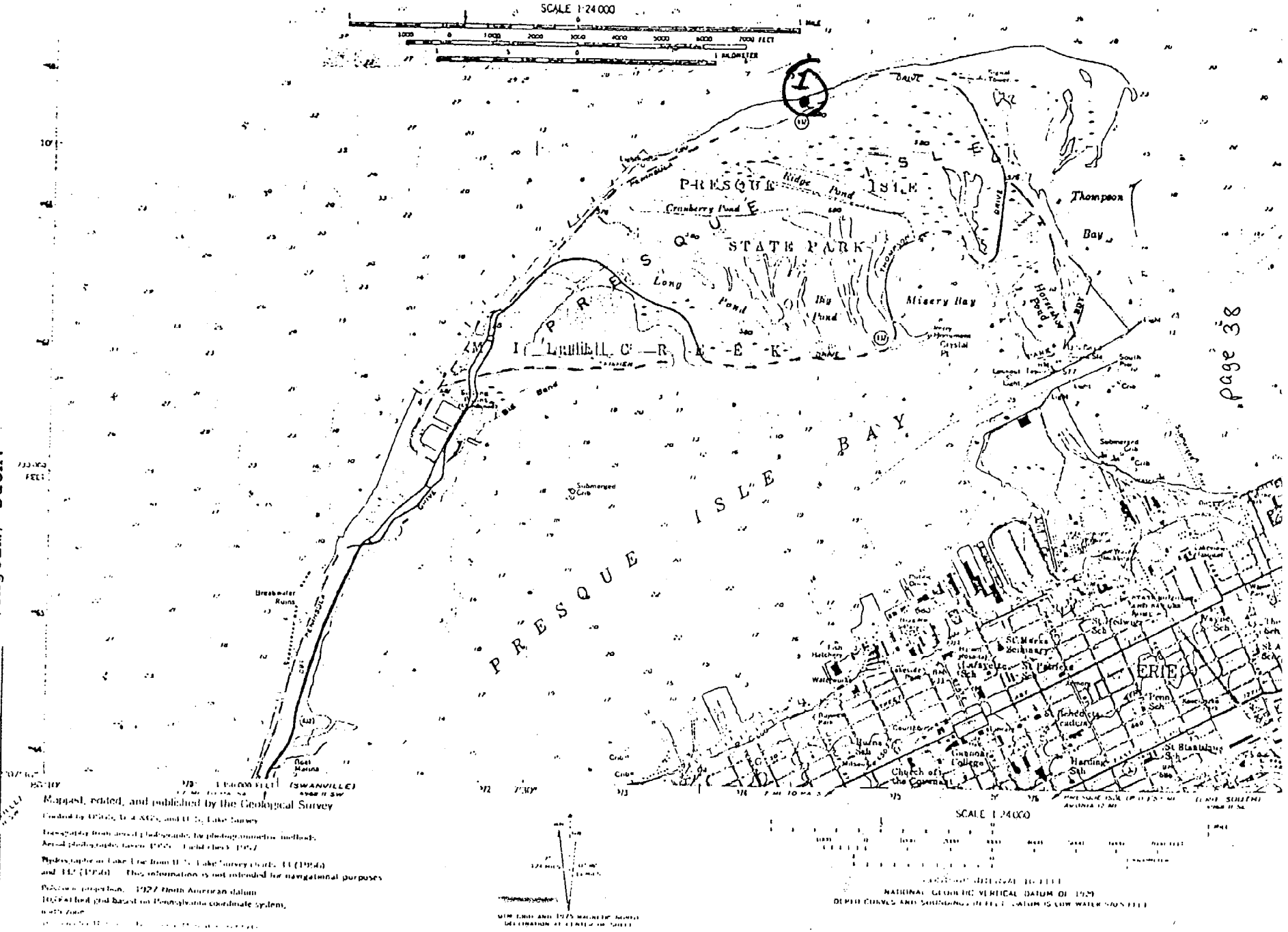
Juncus biflorus Ell.



page 37

Juncus biflorus Ell.

1. 9 July 1985 JKB:1985:205
Occasional to locally common throughout; 84 degrees and 500 ft. from Signal Tower Foundation.

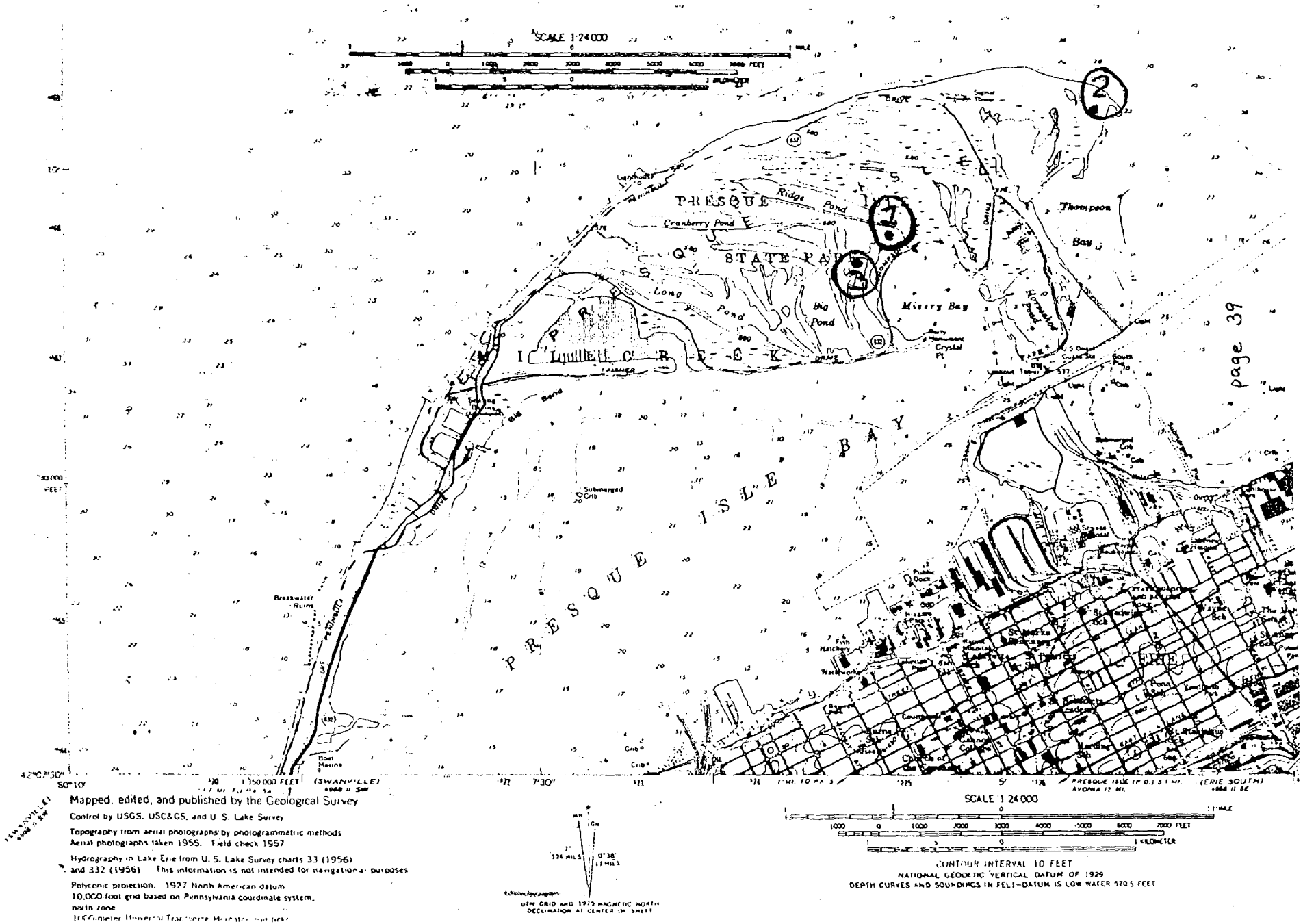


Juncus brachycephalus (Engelm) Buch.

Juncus brachycephalus

1. 10 October 1987
   Local, about one dozen plants widely scattered on moist sparsely vegetated palustrine sand flats; .83 miles and 68 degrees from Light House.

Lathyrus palustris L.



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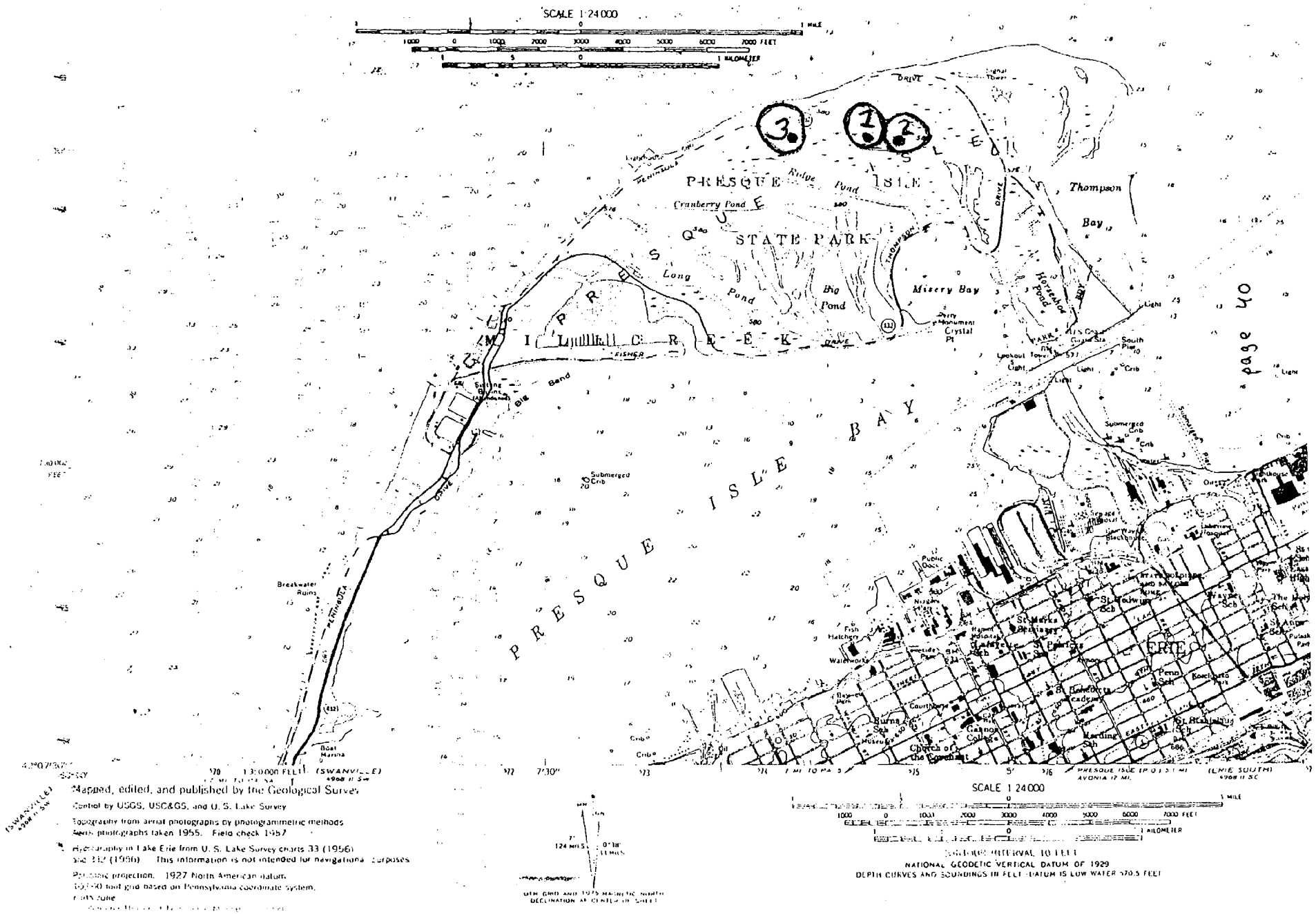
Lathyrus palustris L.

1. 19 June 1987
   Occasional within Carex stricta marshes northeast of boat livery area;.5 miles and 336 degrees from Perry Monument.

2. 16 July 1987
   Occasional along shallow ponds at easternmost sections of Gull Point.

3. 30 September 1987
   Occasional on Calamagrostis flats along trail running along south side of channel between Big Pond and Grave Yard Pond; .5 miles and 318 degrees from Perry Monument.

Lithospermum carolinense (Walt.) ex J.F.G



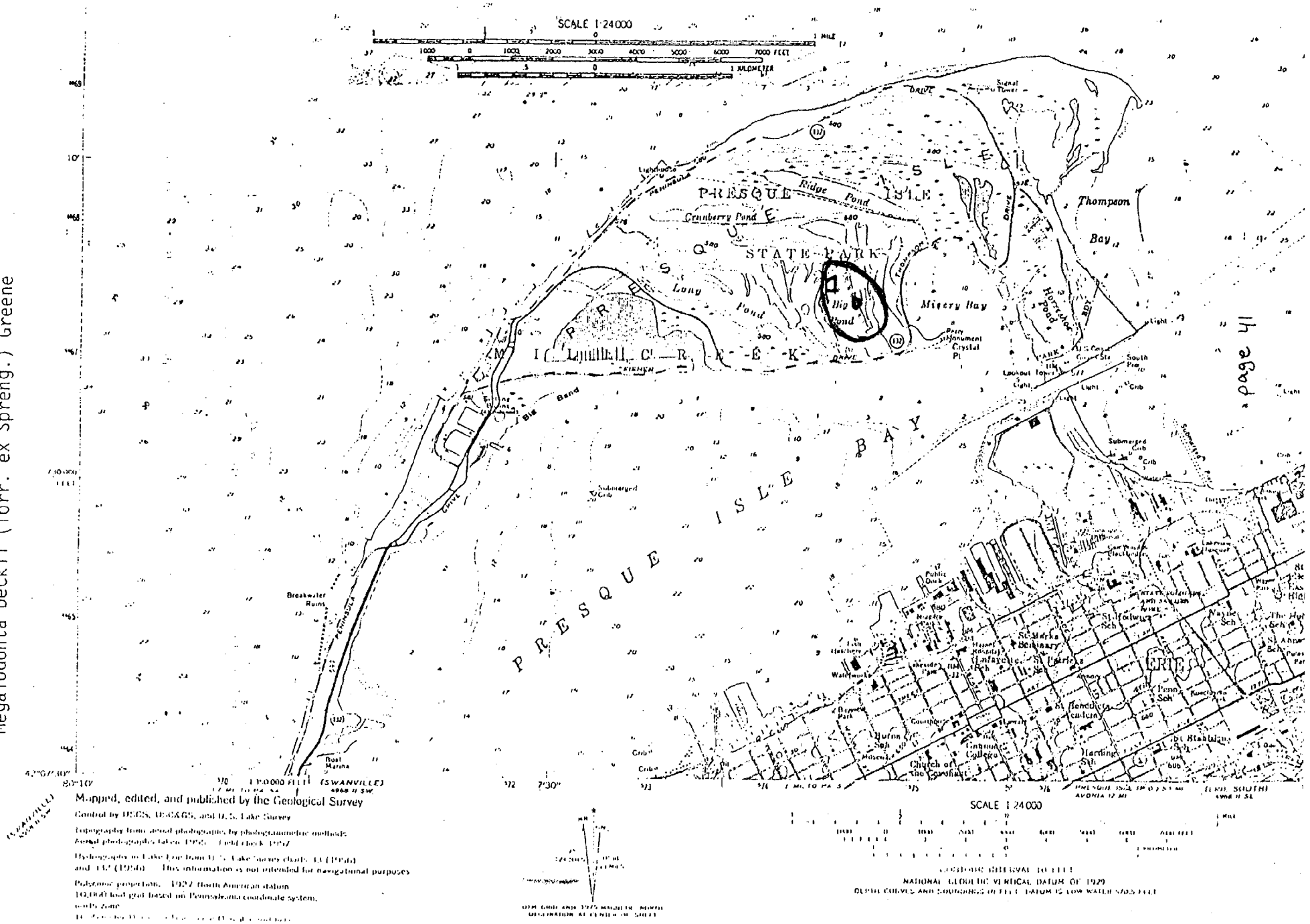
Lithospermum caroliniense (Walt.) ex J.F.G.

1. 21 May 1987
   Local, single robust plant with two blooming shoots on open sands along west of Long Ridge; .85 mile and 358 degrees from Perry Monument.

2. 21 May 1987
   Local single plant along south side of Long Ridge Trail about .55 miles west of Thompson Circle; 341 degrees and .91 miles from Perry Monument; plant was eaten to ground level by late June.

3. 17 June 1987
   Local, two plants along south side of Long Ridge trail 200 ft. apart within sand barren-pine planting about .95 mile west of Thompson Circle; 1.13 miles and 323 degrees from Perry Monument; both plants were eaten to ground level late in summer.

Megalodonta beckii (Torr. ex Spreng.) Greene



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Megalodonta beckii (Torr. ex Spreng.) Greene

1. 6 August 1987 JKB:1987:227
   Locally common all along east central shoreline of Big Pond; dozens of plants producing aerial, simple leaves.

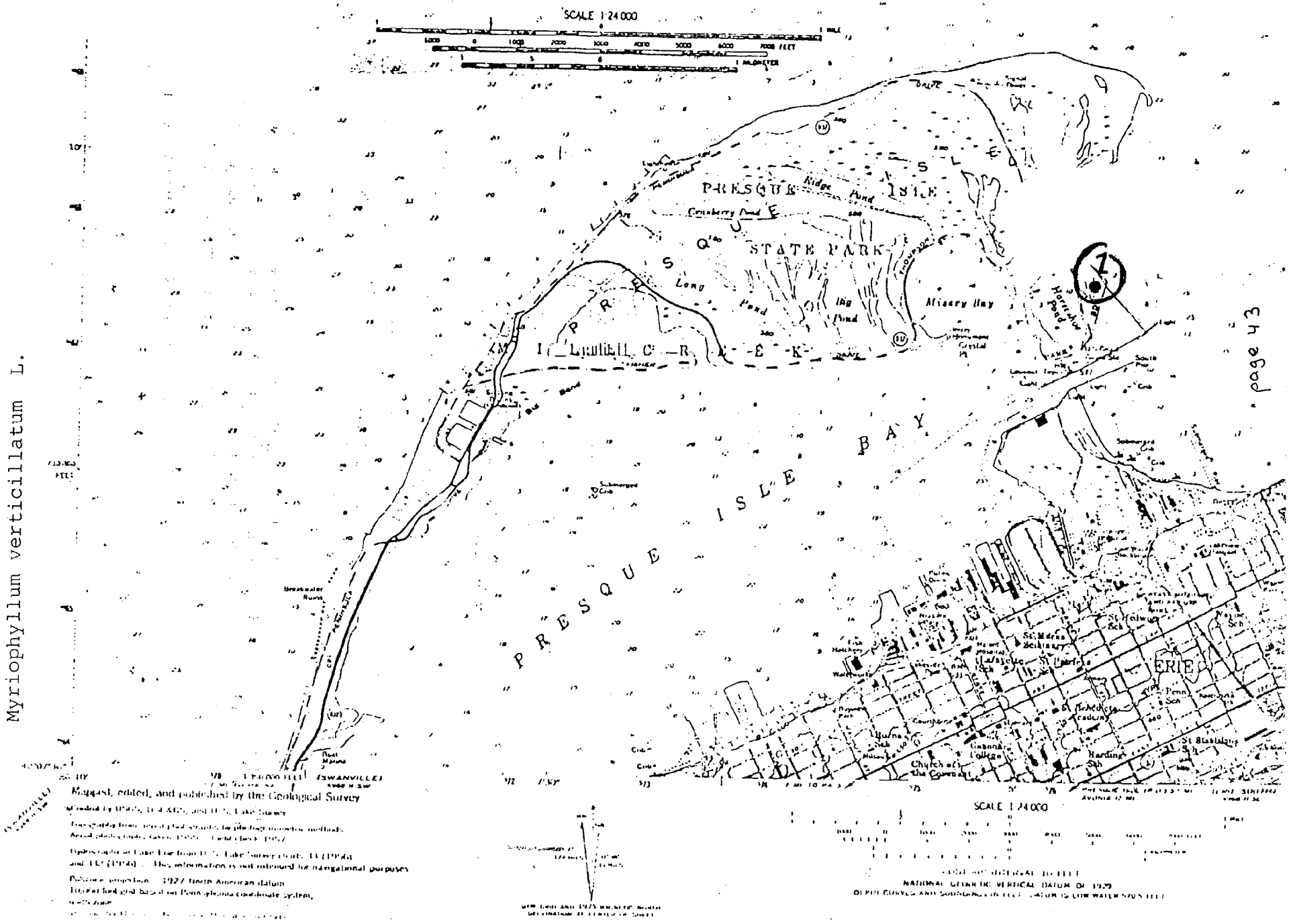
Myriophyllum heterophyllum Michx.

Myriophyllum heterophyllum

1. 29 July 1987 JKB:1987:203
   Common; floating in open waters of Ridge Pond.

2. 29 July 1987 JKB:1987:205
   Common to locally abundant; thousands of plants in open Nuphar-Nymphaea pond near middle of basin; absent from southernmost section of pond near PA 832; dominant submersed plants within sothernmost section of Nuphar-Nymphaea ponds are Elodea canadensis and Ceratophyllum demersum.

Myriophyllum verticillatum L.



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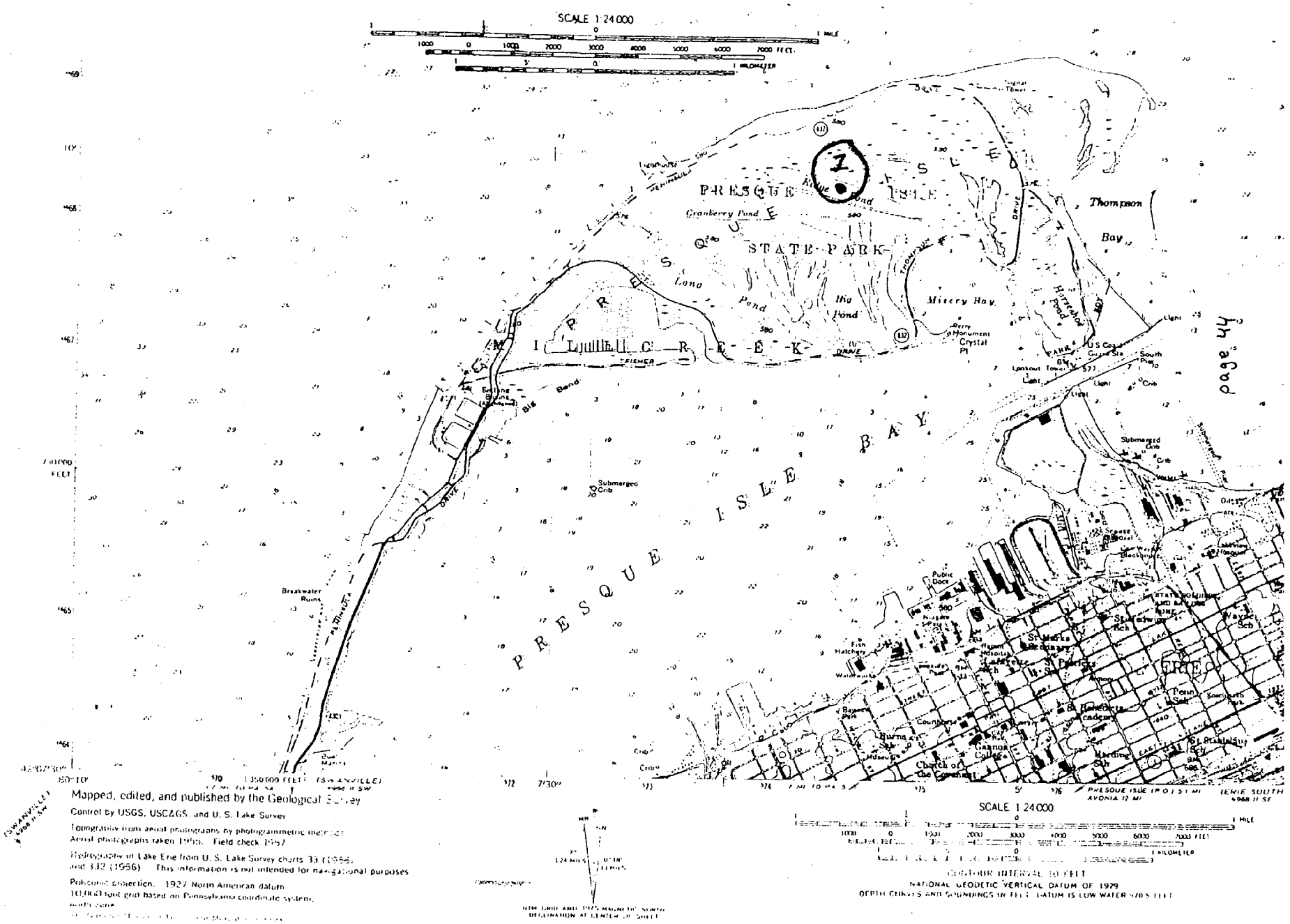
Myriophyllum verticillatum L.

1. 2 October 1987 JKB:1987:340
Common to abundant throughout pond on east of Coast Guard Road - east of east shore of Horse Shoe Pond; .67 miles and 62 degrees from Perry Monument.

Najas gracillima (A.Braun) Magnus



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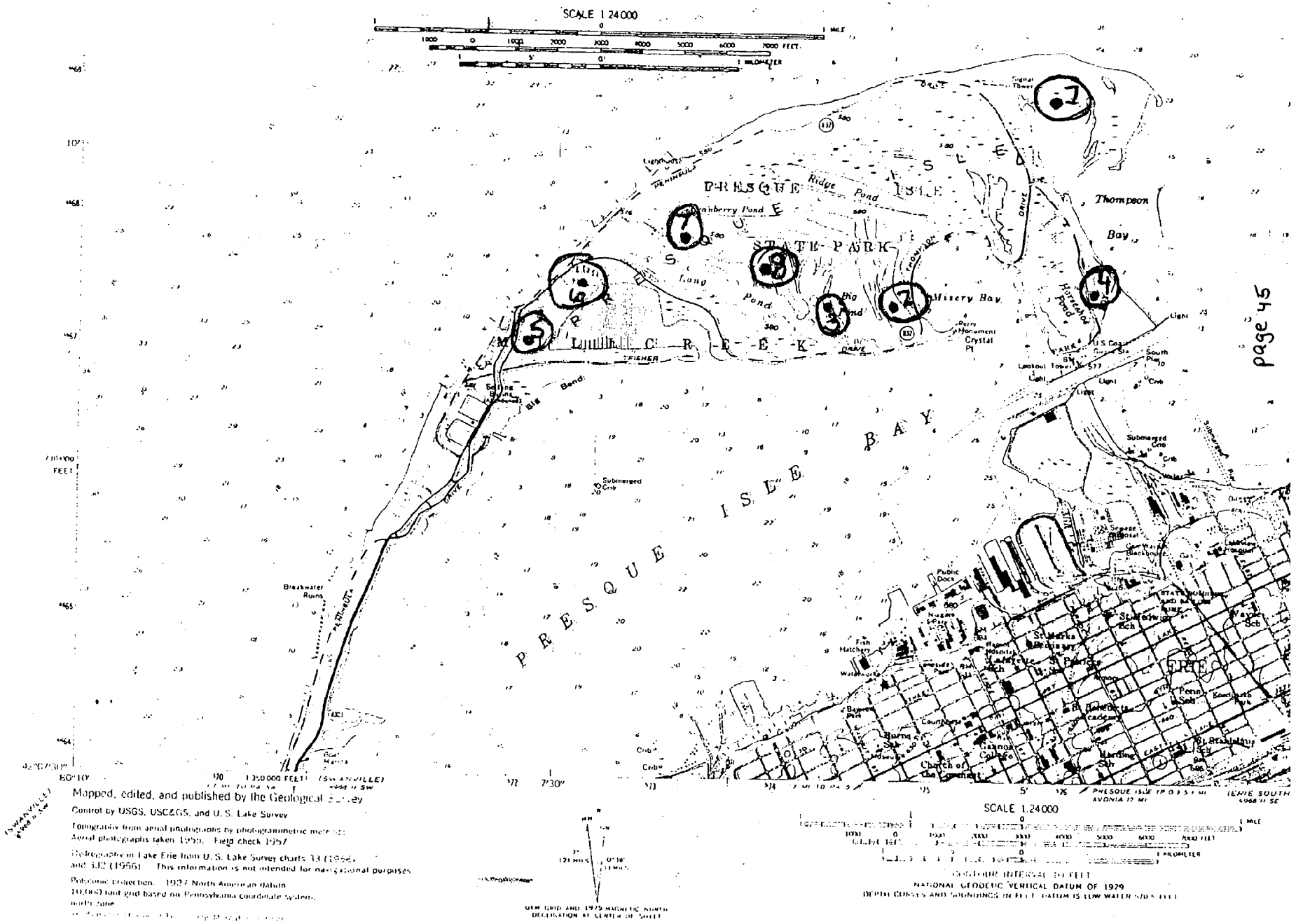
Najas gracillima (A.Braun) Magnus

1. 29 July 1987 JKB:1987:204
   Locally abundant within open waters of Nuphar pond within Ridge Pond.

Pilea fontana (Lunell) Rydb.



Pilea fontana (Lunell) Rydb.

1. 23 September 1987 JKB:1987:325
   Common within Populus-Calamagrostis canadensis savannah along north shore Thompson Bay; 24 degrees and 1.2 miles from Perry Monument.

2. 23 September 1987
   Occasional through Calamagrostis canadensis-Carex stricta marshes between Big Pond and Grave Yard Pond; .25 miles and 288 degrees from Perry Monument.

3. 23 September 1987
   Locally common within Calamagrostis-Carex meadow on open flats west of west shore of Big Pond.

4. 2 October 1987
   Locally common on mudflats along west shore of pond located east of Coast Guard Road; 51 miles and 65 degrees from Perry Monument.

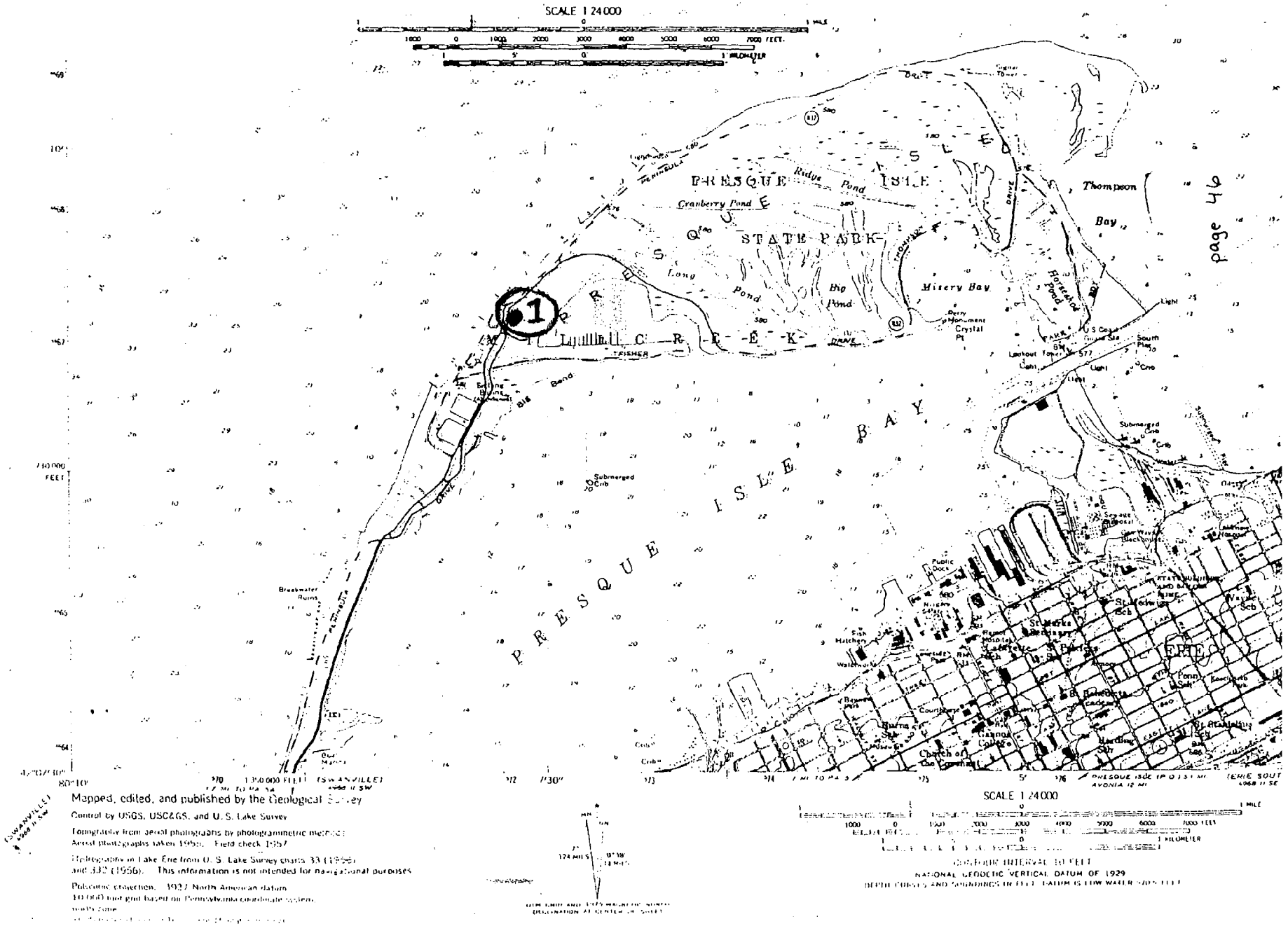
5. 7 October 1987
   Local a few plants on moist flats; 269 degrees and 1.9 miles from Perry Monument.

6. 9 October 1987
   Occasional to common, scattered within Calamagrostis - Sparganium - Carex stricta flats north and south of Duck Marsh Pond; 1.7 mile and 276 degrees from Perry Monument.

7. 15 October 1987
   Occasional along north shore of "Pond of the Woods" east of Maintenance Building; 180 degrees and .33 mile from Light House.

8. 17 October 1987
   Occasional on open sparsely vegetated mud flats within Carex stricta-Calamagrostis emergent marsh; .95 miles and 289 degrees from Perry Monument.

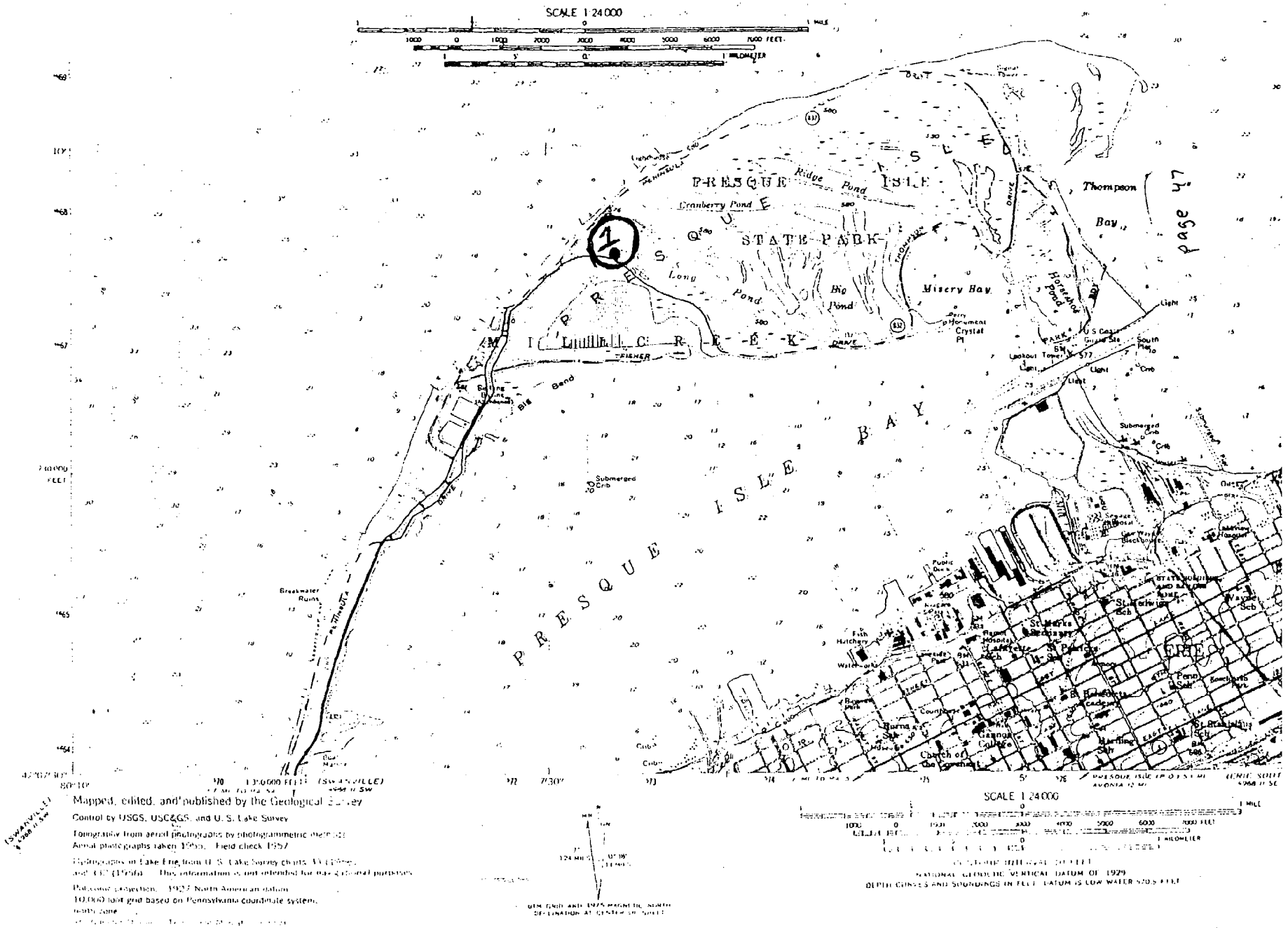
Opuntia humifusa (Raf.)Raf.



Opuntia humifusa

1. 10 October 1987
   Local a few small plants on eroding, open, west facing sand embankment east of bike trail about .25 miles north of West Fisher Drive; 1.98 miles and 271 degrees from Perry Monument.

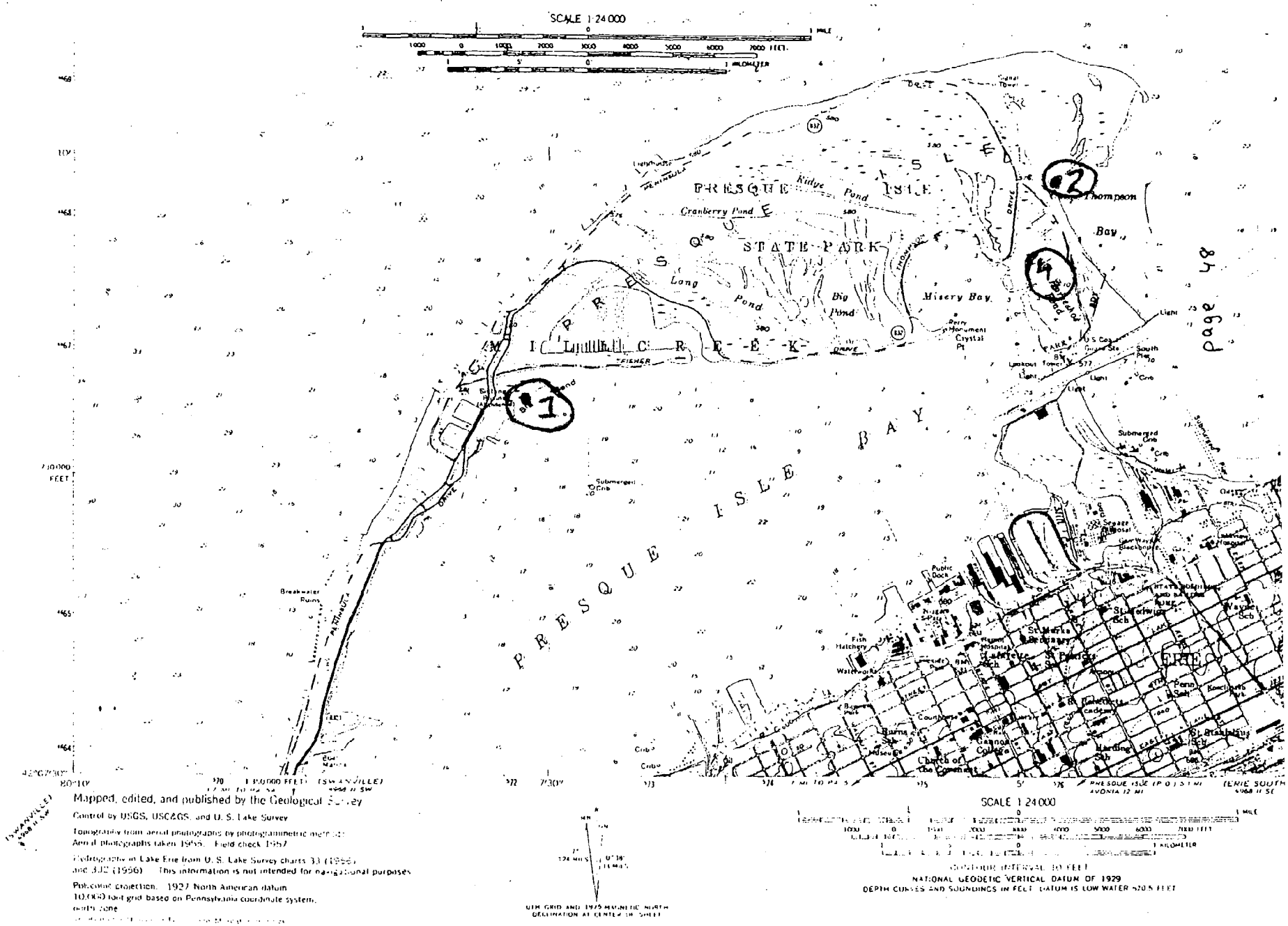
Polygonum amphibium L.
var. stipulaceum Coleman



Polygonum amphibium L.
var. stipulaceum Coleman

1. 9 July 1985 JKB:1985:202
Occasional within marshes within open water; 1.55 miles and 282 degrees from Perry Monument.

Potamogeton richardsonii (Benn.) Rydb.



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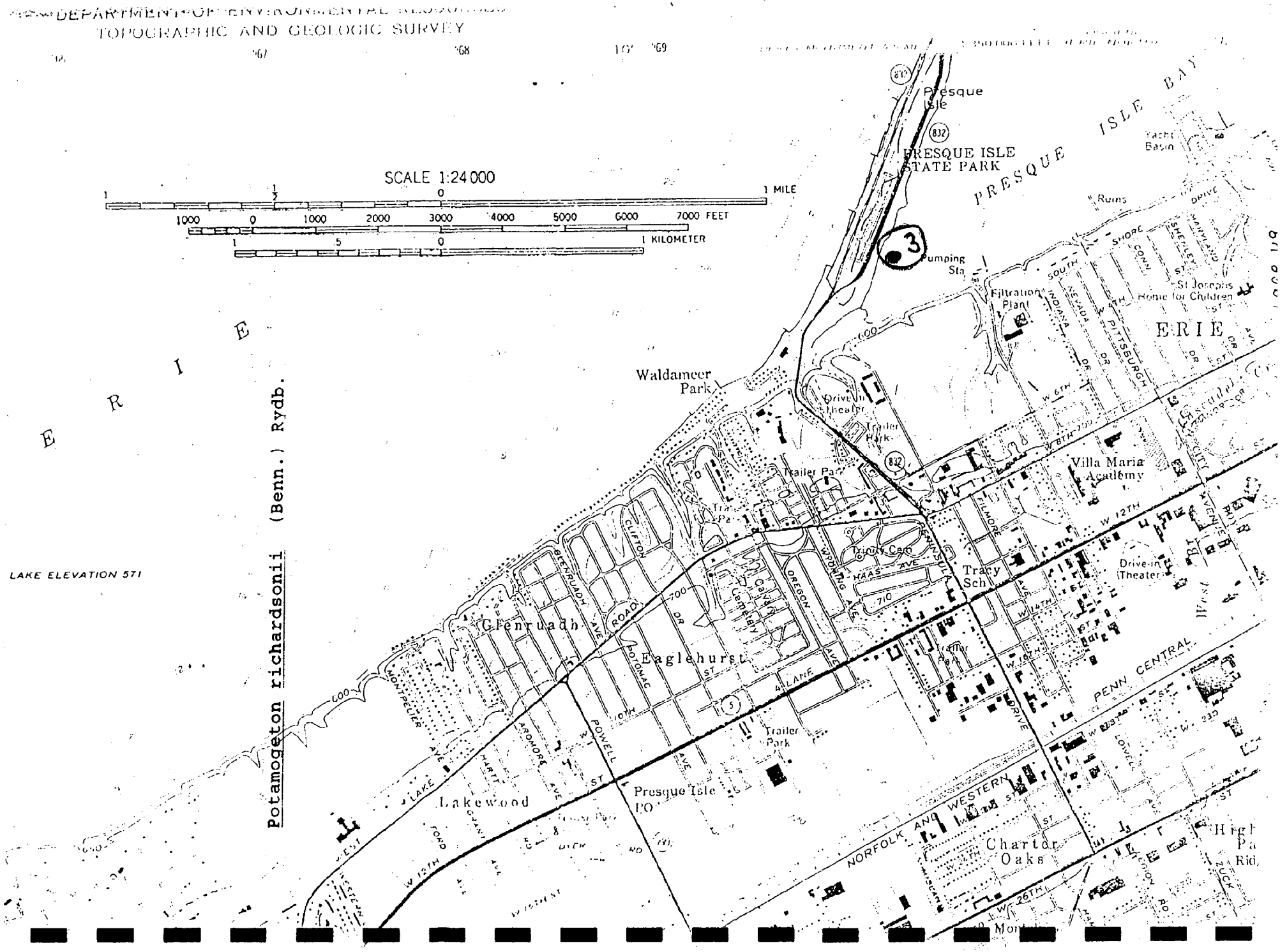
Potamogeton richardsonii (Benn.) Rydb.

1. 24 June 1987
   Local and rare single plant observed in open clear shallow waters about .6 meter deep just west of barrier along Bay Shore: about 2 miles and 260 degrees from Perry Monument.

2. 6 August 1987 JKB:1987:228
   Locally common in Nymphaea odorata pond on southwest side of sand spit on south west shore of Thompson Bay west of Beach 11; 36 degrees and .81 mile from Perry Monument.

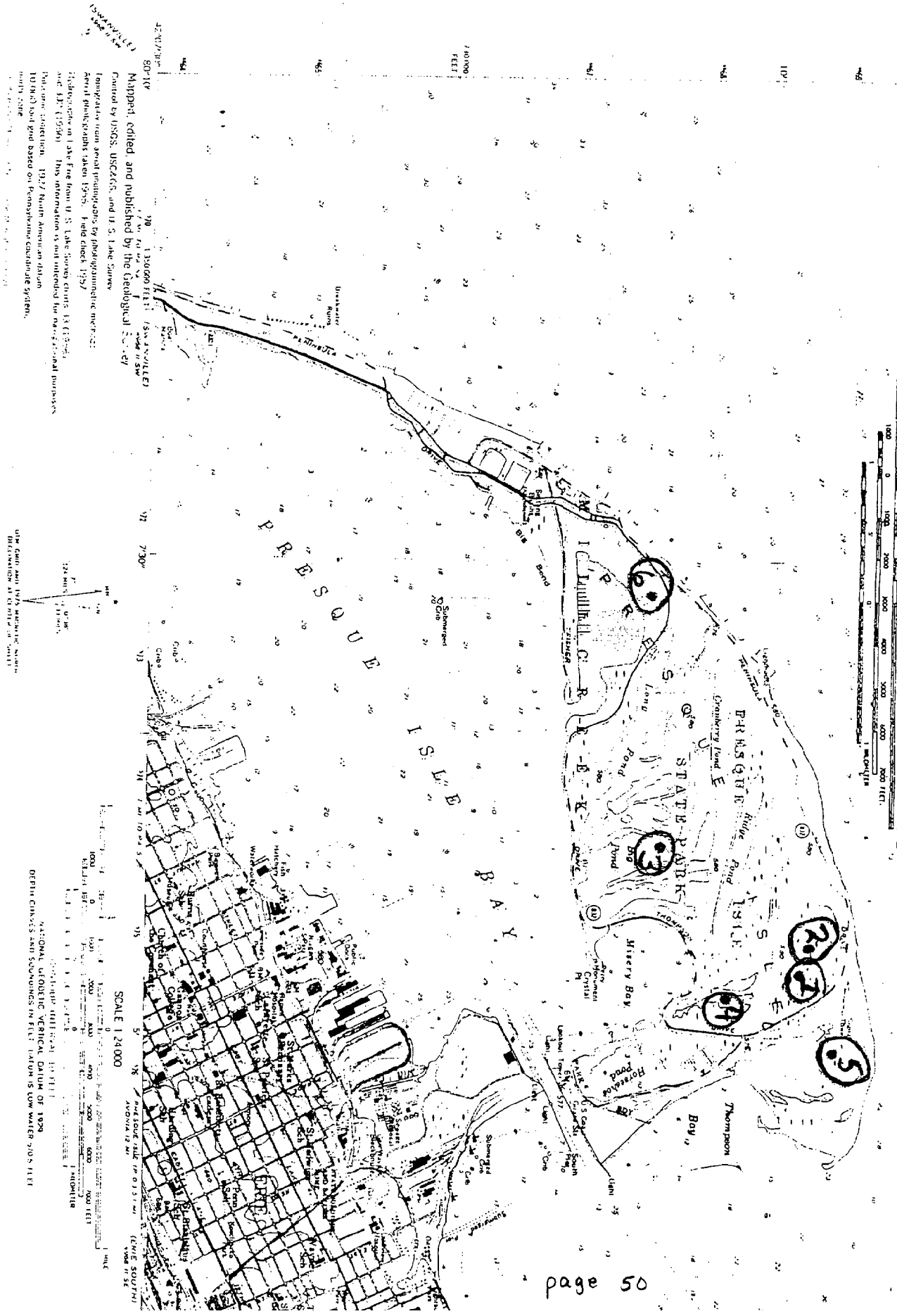
4. 2 October 1987
   Occasional within Vallisneria americana beds along east shore of Horse Shoe Pond; .6 mile and 70 degrees from Perry Monument.


DEPARTMENT OF ENVIRONMENTAL RESOURCES
TOPOGRAPHIC AND GEOLOGIC SURVEY
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
Presque Isle
PRESQUE ISLE STATE PARK
PRESQUE ISLE BAY
Boat Basin
Ruins
Pumping Sta
Filtration Plant
St Joseph's Home for Children
ERIE
Waldameer Park
Drive-In Theater
Trailer Park
Villa Maria Academy
Trinity Cem
Tracy Sch
Drive-In Theater
Glenruadh
Eaglehurst
Trailer Park
Presque Isle P.O.
Lakewood
Charter Oaks
PENN CENTRAL
NORFOLK AND WESTERN
Potamogeton richardsonii (Benn.) Rydb.
LAKE ELEVATION 571

Potamogeton richardsonii (Benn.)Rydb.

3. 2 October 1987
   Occasional in shallow clear water along shore of Presque Isle just north of Park boundary.

Potamogeton zosteriformis Fern.



Potamogeton zosteriformis Fern.

1. 21 May 1987
   South Twin Pond:Occasional within open waters of pond; growing with Potamogeton amplifolius-Potamogeton natans; 11 degrees and .9 mile from Perry Monument.

2. 17 June 1987
   Occasional to common in "North Twin Pond";6 degrees and .96 mile from Perry Monument.

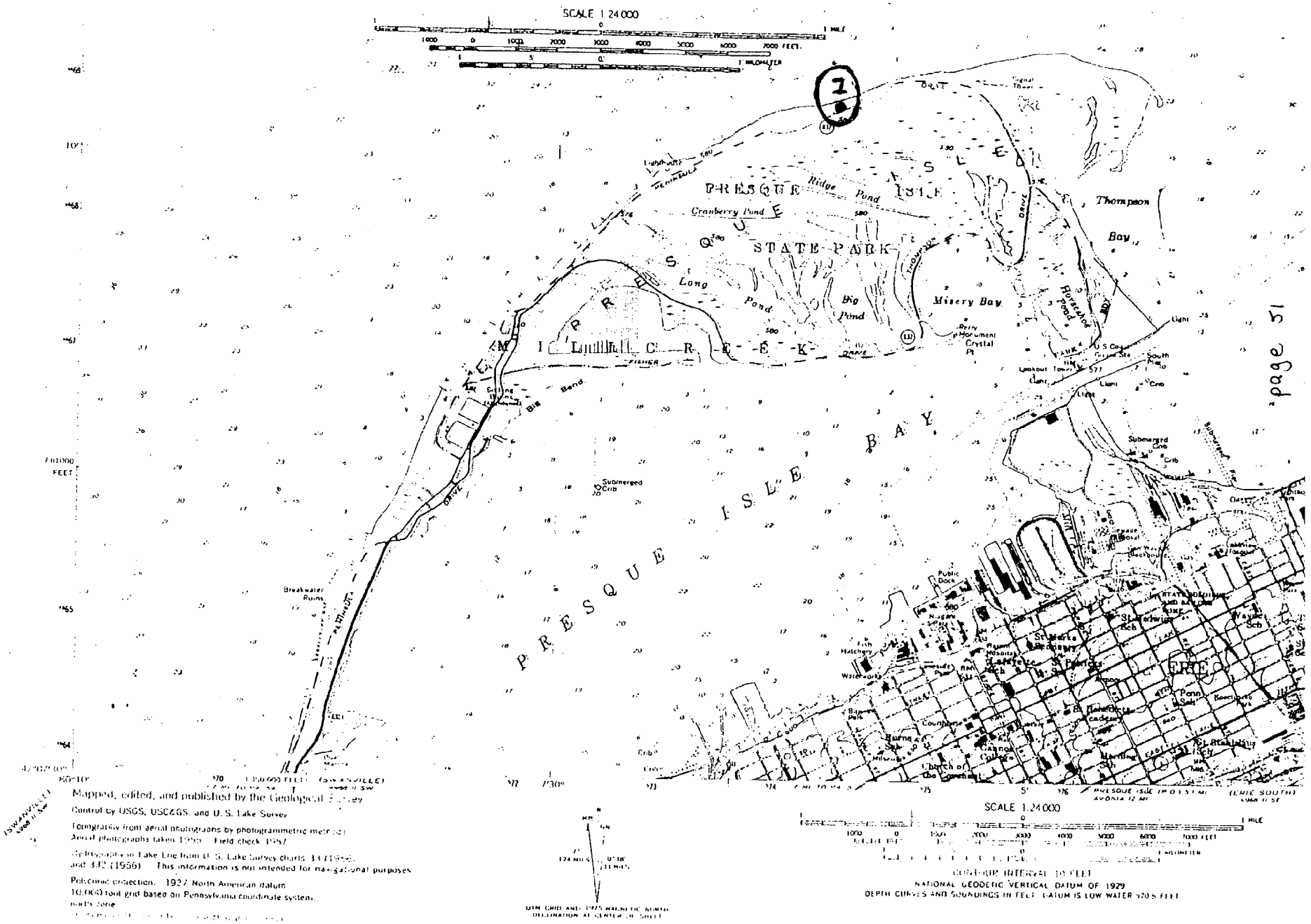
3. 16 June 1987
   Occasional to common throughout Grave Yard-Big Pond-Long-Pond system in shallow to deep open waters.

4. 29 July 1987
   Occasional to common throughout open Nuphar advena-Nymphaea odorata ponds within eastern basin of Niagara pond; .6 miles and 17 degrees from Perry Monument.

5. 6 August 1987
   Occasional in open waters of Frog Pond - east of Signal Tower Foundation; 1.2 miles and 23 degrees from Perry Monument.

6. 9 October 1987
   Occasional within open waters of Nuphar-Nymphaea Duck Marsh Pond; 1.7 miles and 278 degrees from Perry Monument.

Potentilla paradox Nutt. ex Torr. & Gray



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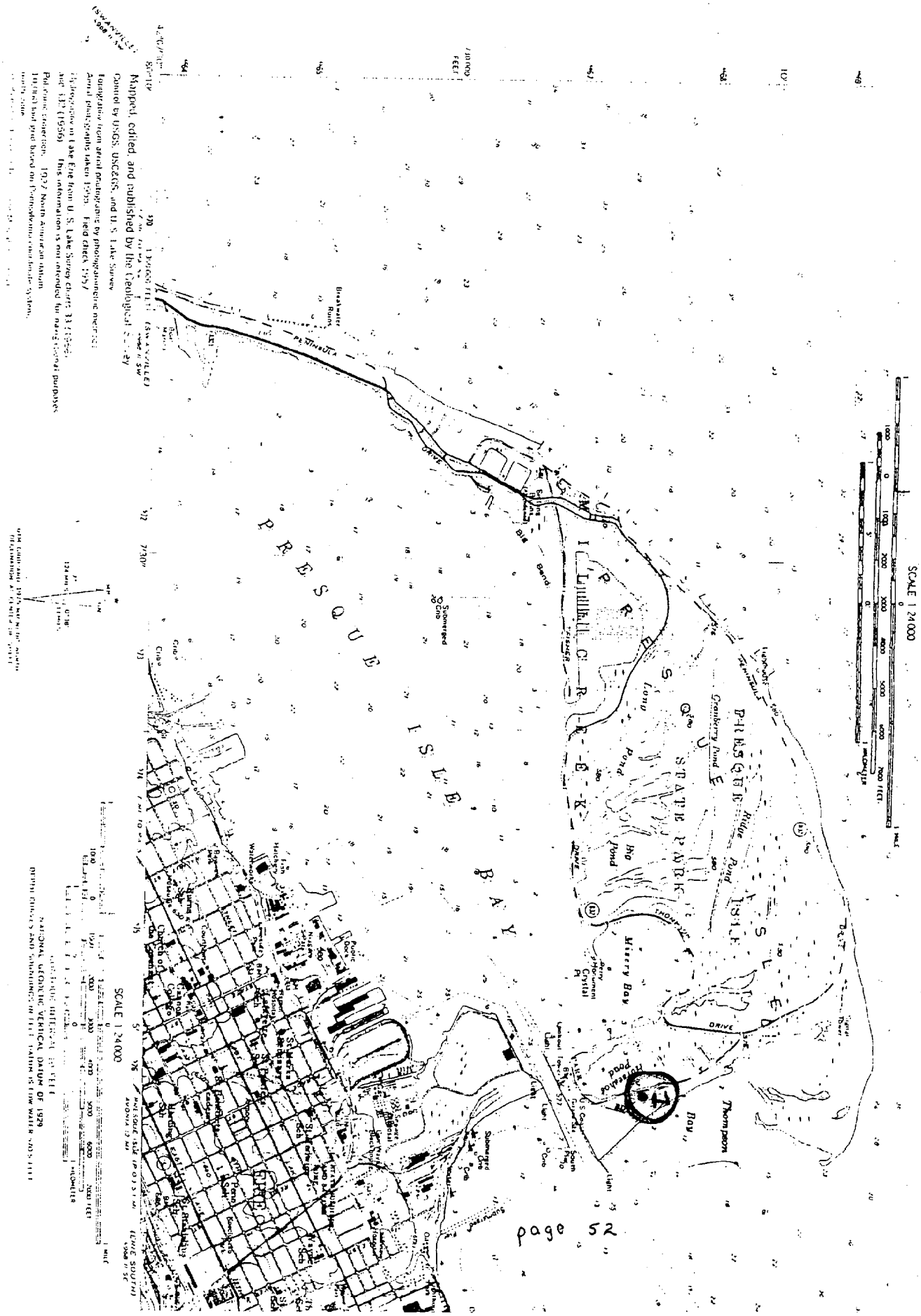
Potentilla paradoxa Nutt. ex Torr. & Gray

1. 10 October 1987
   Local, three plants observed on sparsely vegetated moist sand flat; .83 miles and 67 degrees from Light House.

Ptelea trifoliata L.



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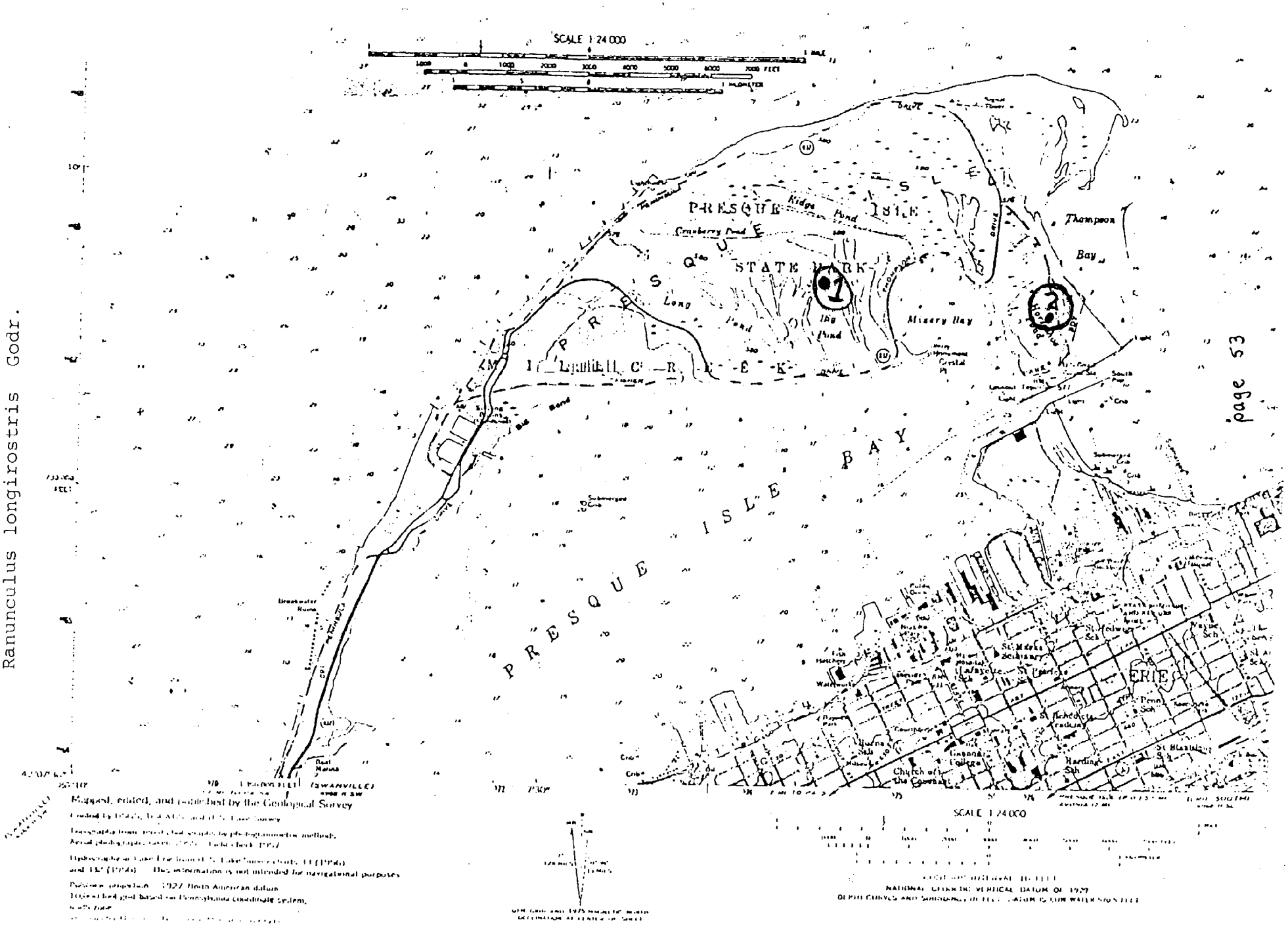
Ptelea trifoliata L.

1. 2 October 1987
   Local Populus deltoides savannah on sand ridge along east side of Coast Guard Road east of east shore of Horse Shoe Pond; .67 miles and 60 degrees from Perry Monument.

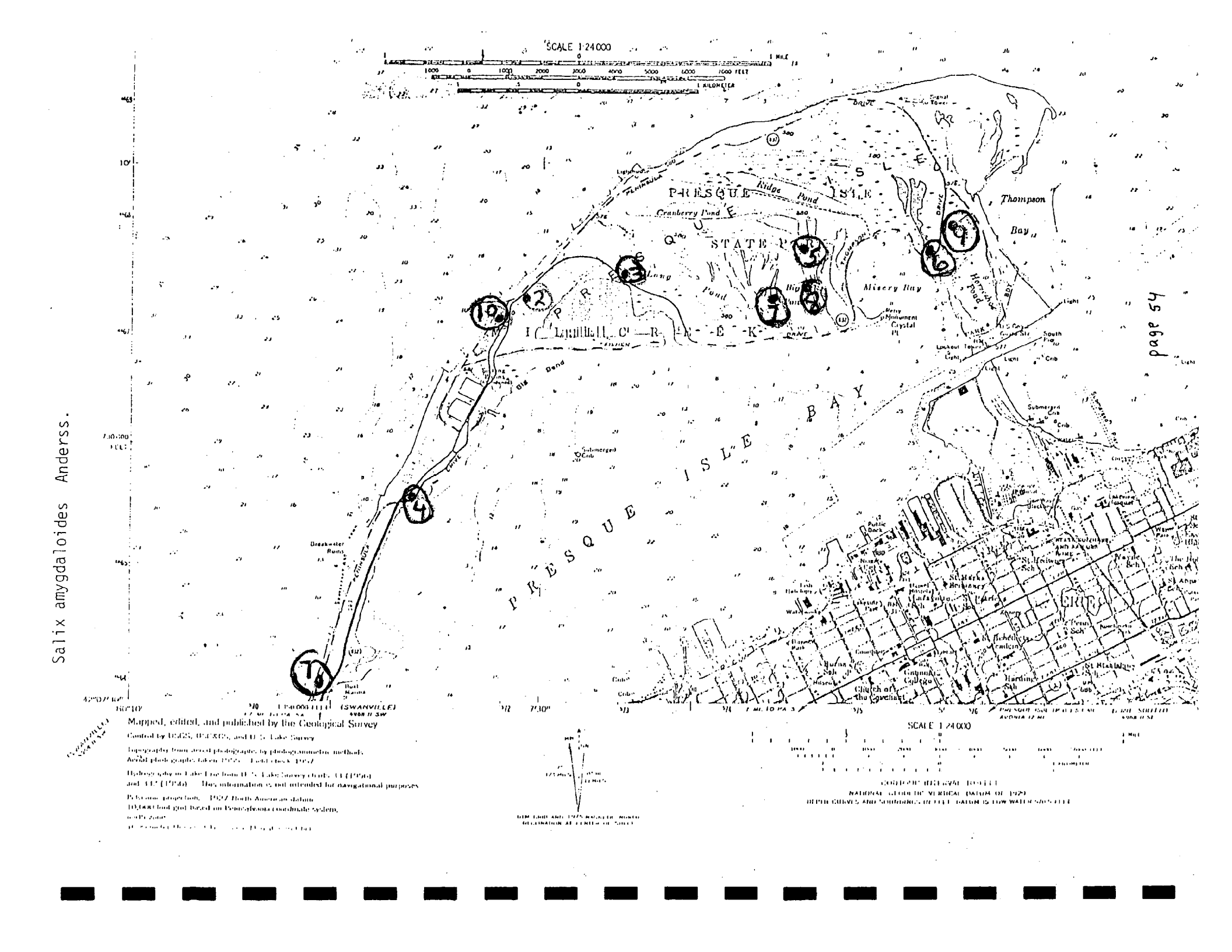
Ranunculus longirostris Godr.



Ranunculus longirostris Godr.

1. 30 September 1987 JKB:1987:336
   Rare-single fragment observed in shallow waters along northeast shore of Big Pond just south of channel between Big Pond and Grave Yard Pond; .55 miles and 303 degrees from Perry Monument.

2. 2 October 1987
   Occasional to common in shallow waters along east shore of Horse Shoe Pond; .6 mile and 72 degrees from Perry Monument.



Salix amygdaloides Anderss.

Salix amygdaloides Anders.

1. 30 June 1987 JKB:1987:130
   Observed with Charles Bier and Joe Balczon; rare single tree, blown over along edge of shore; 272 degrees and .55 mile from Perry Monument.

2. 2 July 1987 JKB:1987:139
   Rare, single tree along edge of shore; 2 miles and 270 degrees from Perry Monument.

3. 2 July 1987 JKB:1987:140
   Local and rare; three along shore of marsh on east side of filled trail through marsh; one tree has fruits and all specimens from site were collected from fruiting tree; 1.42 and 280 degrees from Perry Monument.

4. 15 July 1987
   Local, single tree just NW of Junction of northbound two lanes of PA 832 and cross-over road; many apparent hybrids between Salix amygdaloides and Salix nigra widely scattered on marsh edges with area; 248 degrees and 2.7 miles from Perry Monument.

5. 16 July 1987
   Local single large diameter tree, apparently dying along shore edge of marsh on west side of channel mouth to Boat Horse Shoe Pond; .6 mile and 312 degrees from Perry Monument.

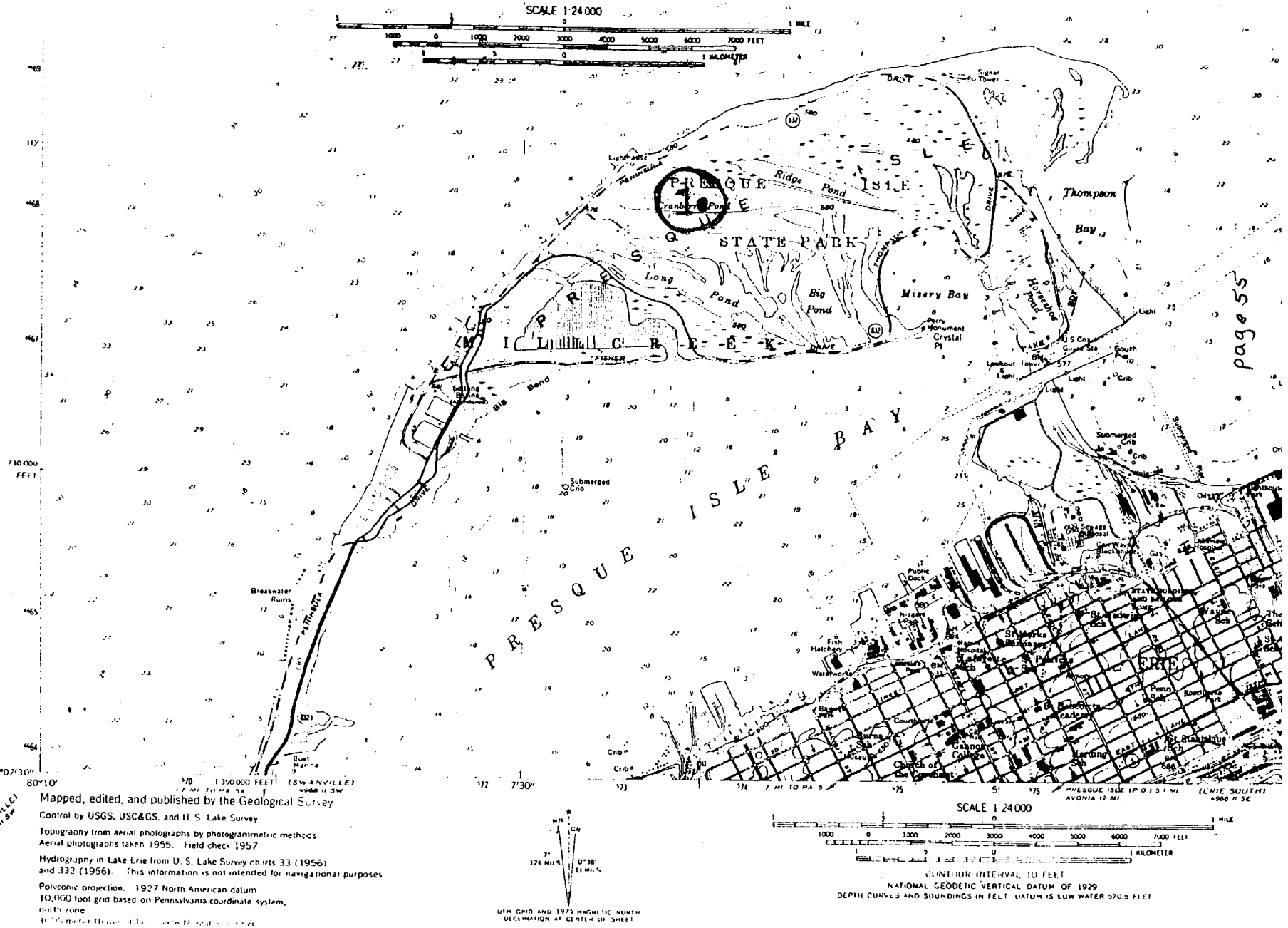
6. 29 July 1987
   Local two small trees on shore flats on south side of PA Rt. 832 due south of southernmost tip of Niagara Pond.

7. 29 July 1987
   Occasional along woods edges on west side of south bound lane of PA 832 between Lily Pond and Beach 2; 336 degrees and 3.55 mile from Perry Monument.

8. 6 August 1987
   Occasional, growing with Salix nigra along east central shore of Big Pond.

9. 6 August 1987
   Rare, single tree growing on shallow near middle of Espar Pond; .6 mile and 37 degrees from Perry Monument.

10. 17 October 1987
    Local afew tree with Salix nigra-Cephalanthus-Cornus shrub swamp; 2.05 miles and 268 degrees.



Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and U. S. Lake Survey

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1955. Field check 1957

Hydrography in Lake Erie from U. S. Lake Survey charts 33 (1956) and 332 (1956). This information is not intended for navigational purposes

Polyconic projection. 1927 North American datum
10,000 foot grid based on Pennsylvania coordinate system, north zone

UTM GRID AND 1975 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

Salix gracilis Anderss.

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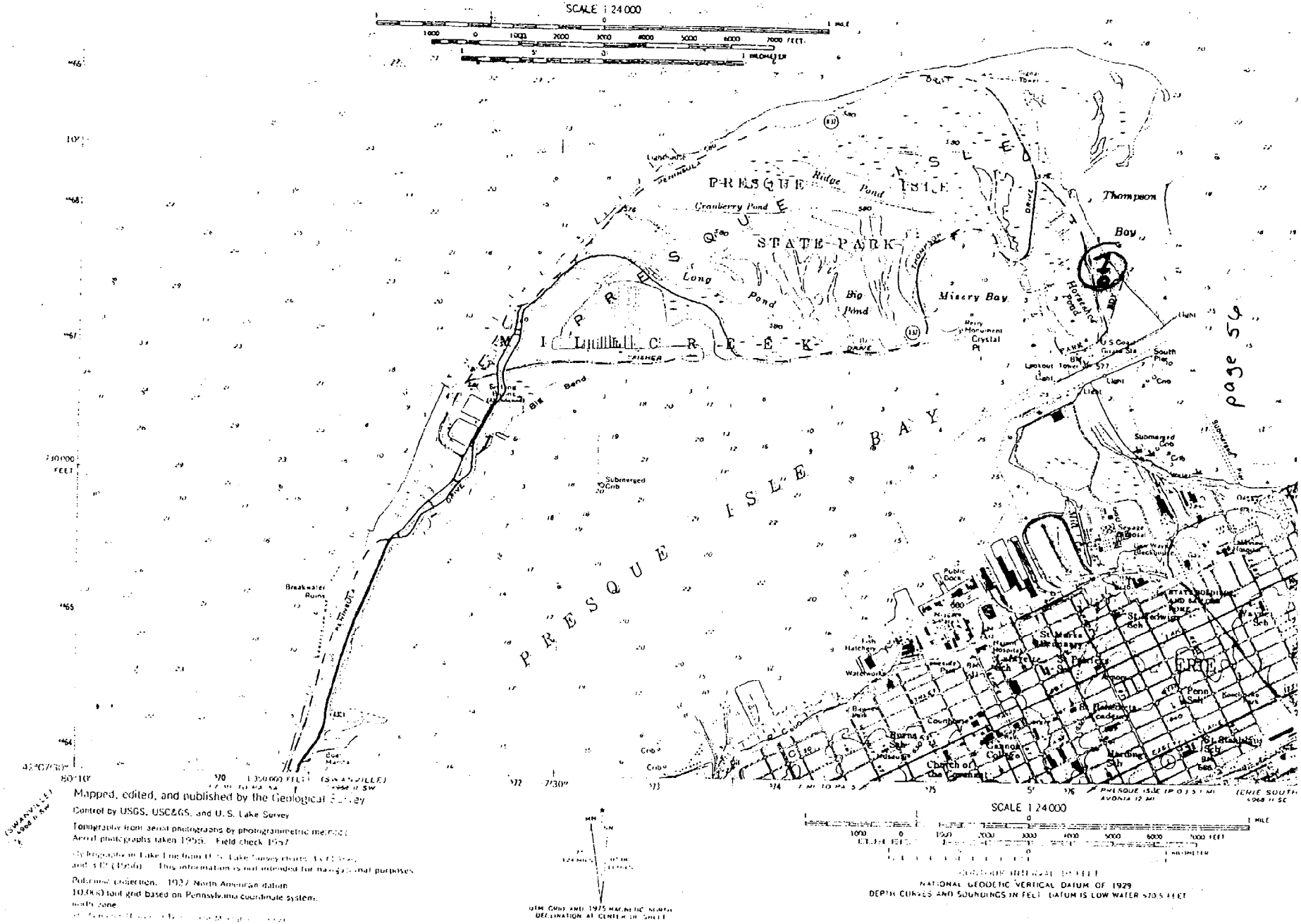
Salix gracilis. Anderss.

1. 23 May 1986 JKB:1986:060
Local and uncommon growing in one meter depth near middle of pond; 1.15 miles and 300 degrees from Perry Monument.

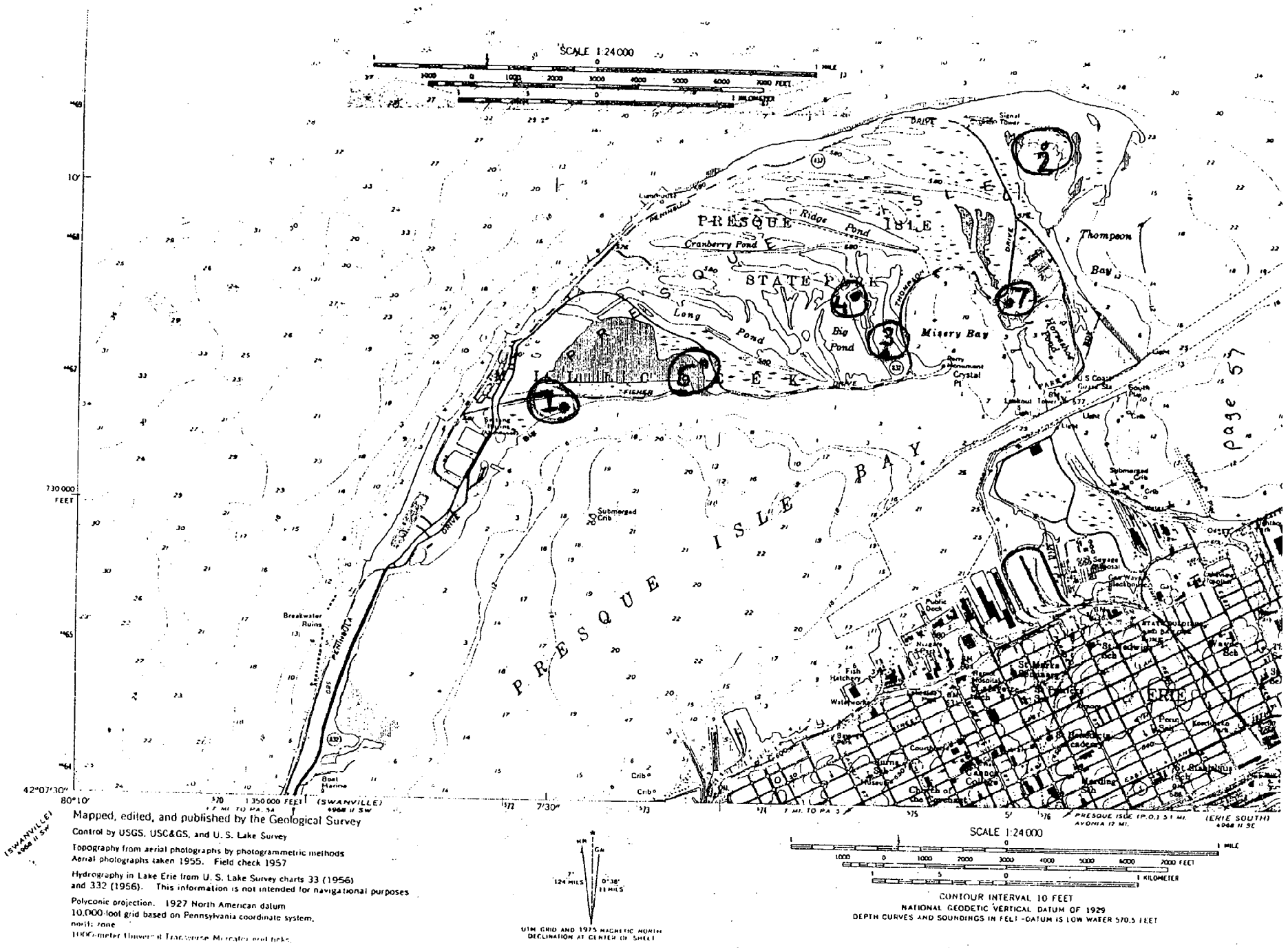
Scirpus acutus (Muhl.) ex Bigelow



Scirpus acutus (Muhl.) ex Bigelow

1. 2 October 1987
   Local, single clone about 2 meters across in open waters of pond east of Coast Guard Road and east of east shore of Horse Shoe Pond; 71 degrees and .65 mile from Perry Monument.

Scirpus fluviatilis



Scirpus fluviatilis

1. 24 June 1987
   Large clone about 20 meters across just west of barrier beach along Big Bend; a large clones of Typha X glauca is growing just east of this Scirpus fluviatilis stand; 263 degrees and 1.8 miles from Perry Moument.

2. 23 September 1987
   Occasional to locally common along northern shore of Thompson Bay south of Frog Pond; 1.15 miles and 23 degrees from Perry Monument.

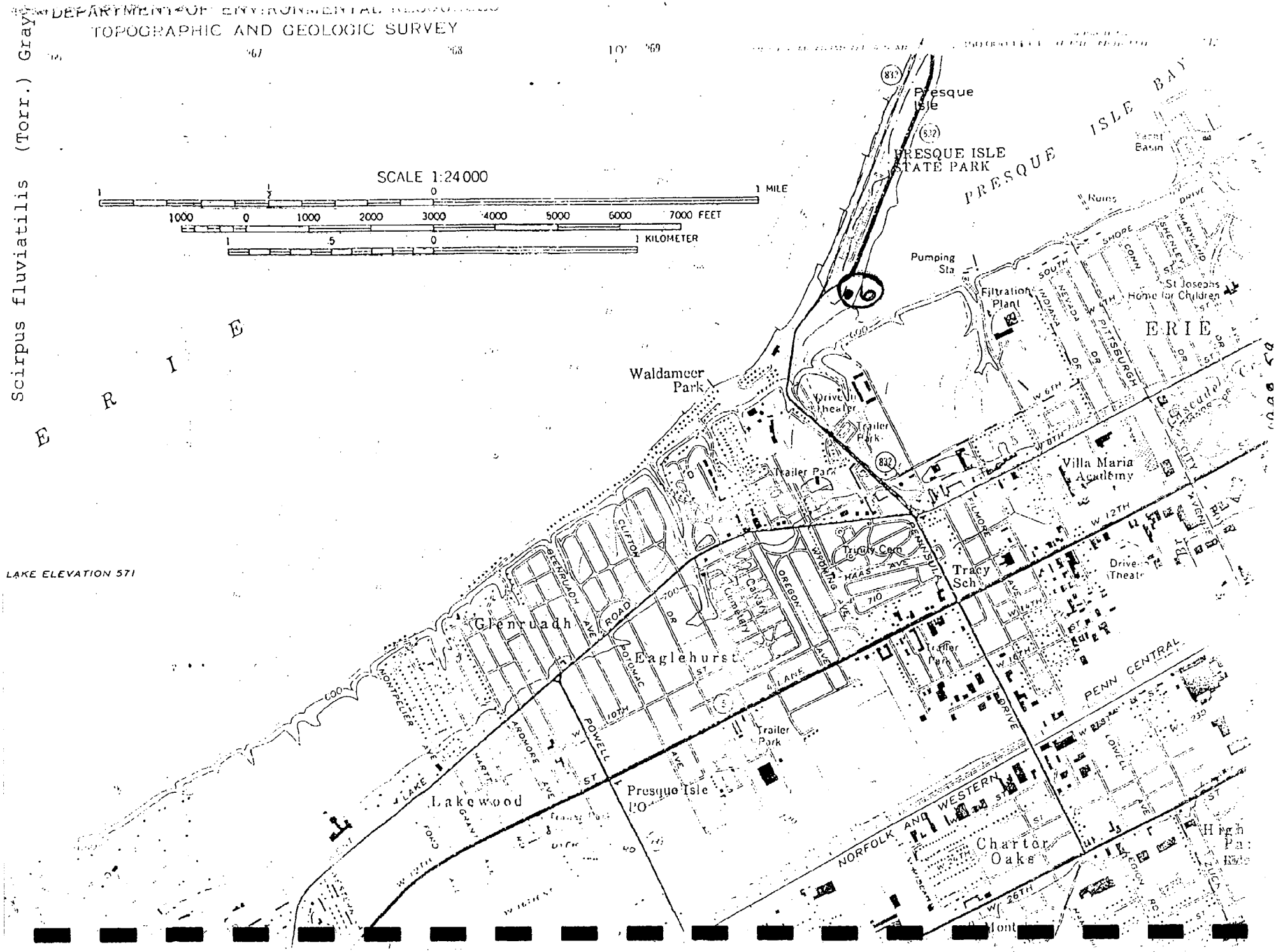
3. 23 September 1987
   Occasional in Calamagrostis-Carex stricta-Carex aquatilis marsh flats; .25 mile due west (270 degrees) from Perry Monument.

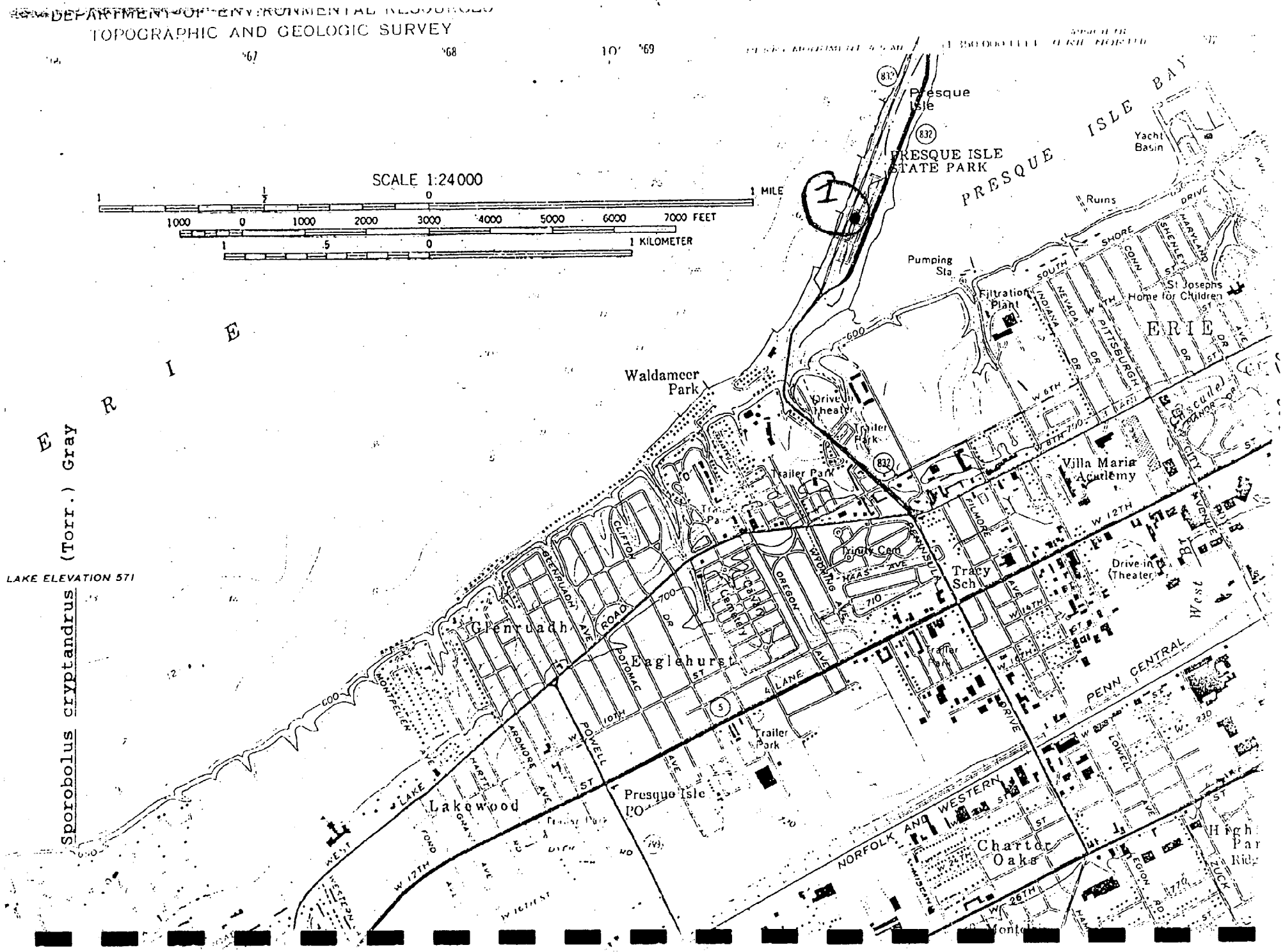
4. 30 September 1987
   Local small clone growing in Calamagrostis along shore edge along northeast shore of Big Pond just south of channel; .55 mile and 305 degrees from Perry Monument.

5. 30 September 1987
   Local small clone in open Calamagrostis-Carex stricta meadows south of PA 832 about .5 mile east of bridge over Long Pond-Marina Lake chanel.

6. 2 October 1987
   Local, small clone in Calamagrostis canadensis opening within cottonwood forest along shore of Presque Isle Bay just north of Park boundary; 229 degrees and 4.35 mile from Perry Monument.

7. 9 October 1987
   Local small clone growing with Typha X glauca on northeast shoreline of Misery Bay .1 mile north of Horseshoe Pond inlet; .4 mile and 49 degrees fromPerry Monument.

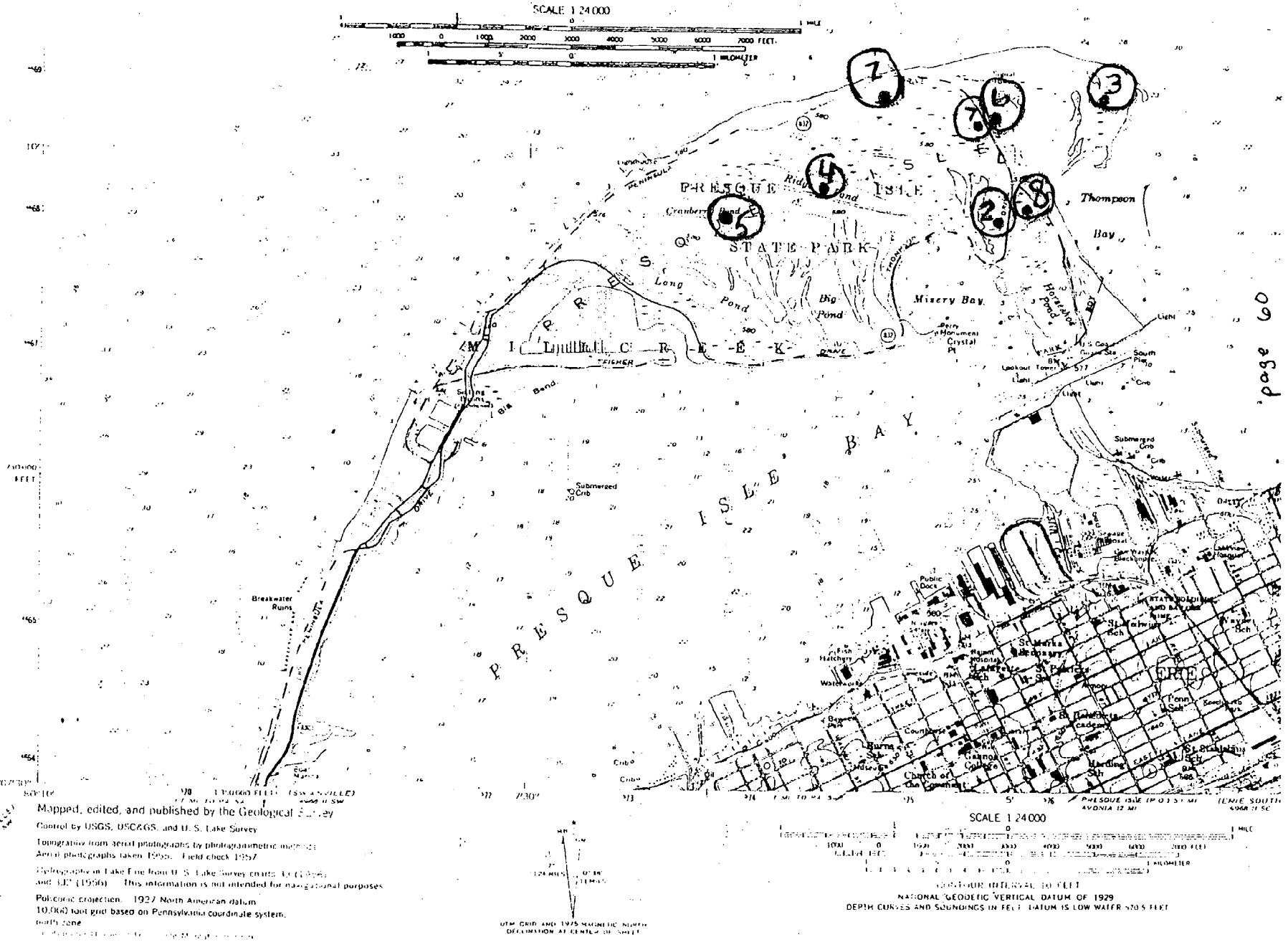

DEPARTMENT OF ENVIRONMENTAL RESOURCES
TOPOGRAPHIC AND GEOLOGIC SURVEY
Scirpus fluviatilis (Torr.) Gray
SCALE 1:24000
1 MILE
7000 FEET
1 KILOMETER
LAKE ELEVATION 571
Presque Isle
PRESQUE ISLE STATE PARK
PRESQUE ISLE BAY
Pumping Sta
Filtration Plant
St Josephs Home for Children
ERIE
Waldameer Park
Drive-In Theater
Trailer Park
Villa Maria Academy
Tracy Sch
Trinity Cem
Glenruadh
Eaglehurst
Lakewood
Presque Isle PO
Charter Oaks
PENN CENTRAL
NORFOLK AND WESTERN
Cemetery
Trailer Park
Drive-In Theater
GLENRUADH AVE
ROAD
POTOMAC AVE
POWELL AVE
10TH ST
CLIFTON
OREGON
WYOMING AVE
PENNSYLVANIA AVE
HAAS
W 12TH
W 16TH
W 26TH
PITTSBURGH
DRIVE
LAKE
ARDMORE AVE
MONTPELIER AVE
FORD
710
700
600


DEPARTMENT OF ENVIRONMENTAL RESOURCES
TOPOGRAPHIC AND GEOLOGIC SURVEY
SCALE 1:24000
1 MILE
7000 FEET
1 KILOMETER
Presque Isle
PRESQUE ISLE STATE PARK
PRESQUE ISLE BAY
Yacht Basin
Ruins
Pumping Sta.
Filtration Plant
St Josephs Home for Children
ERIE
Waldameer Park
Drive-in Theater
Trailer Park
Villa Maria Academy
Tracy Sch
Drive-in (Theater)
Trinity Cem
Glenruadh
Eaglehurst
Lakewood
Presque Isle PO
Trailer Park
Charter Oak
PENN CENTRAL
NORFOLK AND WESTERN
LAKE ELEVATION 571
Sporobolus cryptandrus (Torr.) Gray

Sporobolus cryptandrus (Torr.)Gray

1. 10 September 1987
   Locally common in open, frequently trampled bare level sands adjacent to Beach 1 restrooms; 232 degrees and 4.15 mile from Perry Monument.

Utricularia gibba L.



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Utricularia gibba L.

1. 19 May 1987
   Large mats jsut coming into bloom on Scirpus cyperinus muds flats; 348 degrees and 1.1 mile from Signal Tower Foundation.

2. 19 May 1987
   Occasional on dryong mud flats along east shore of Niagara Basin just west of PA 832; 25 degrees and .5 mile from Perry Monument.

3. 16 July 1987
   Occasional to common on drying shore flats on ponds throughout region from Budny Beach to eastern sections of Gull Point.

4. 29 July 1987
   Ridge Pond: local on floating, peaty Nuphar rhizome mats within open pond.

5. 29 July 1987
   Cranberry Pond: local on floating, peaty Nuphar mats in open pond.

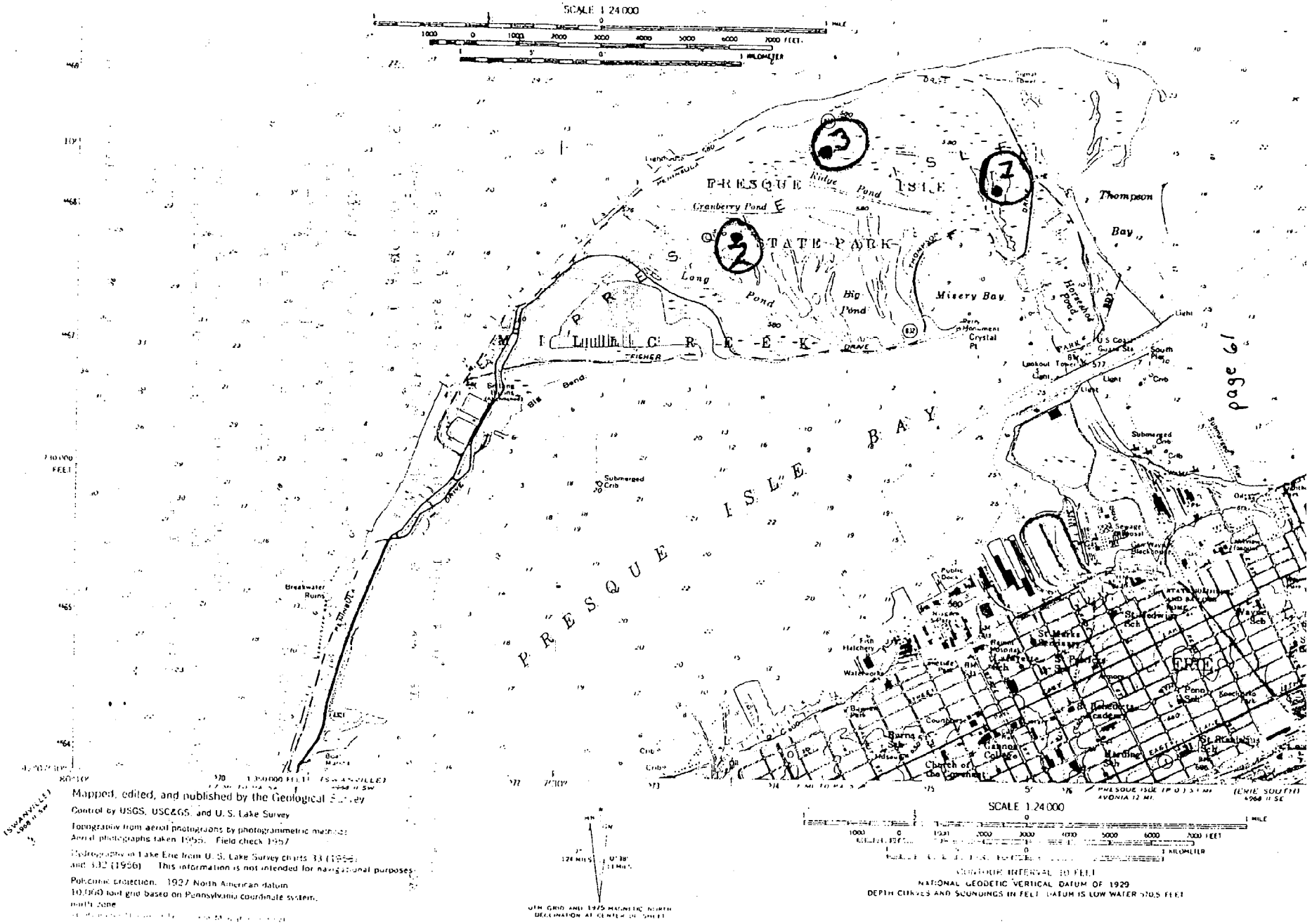
6. 30 July 1987
   Occasional to common on drying mud flats; .95 miles and 11 degrees from Perry Monument.

7. 30 July 1987
   Occasional to common throughout areas on drying mud flats; .95 miles and 13 degrees from Perry Monument.

8. 6 August 1987
   Common on drying sparsely vegetated peaty flats along shore edges of pond just east of PA 832 and just Northeast of Coast Guard Road; .67 mile and 37 degrees from Perry Monument.

9. 6 August 1987
   Locally common on shore edges of Frog pond; just east of Signal Tower Foundation; 20 degrees and 1.2 mile from Perry Monument.

Utricularia intermedia Hayne



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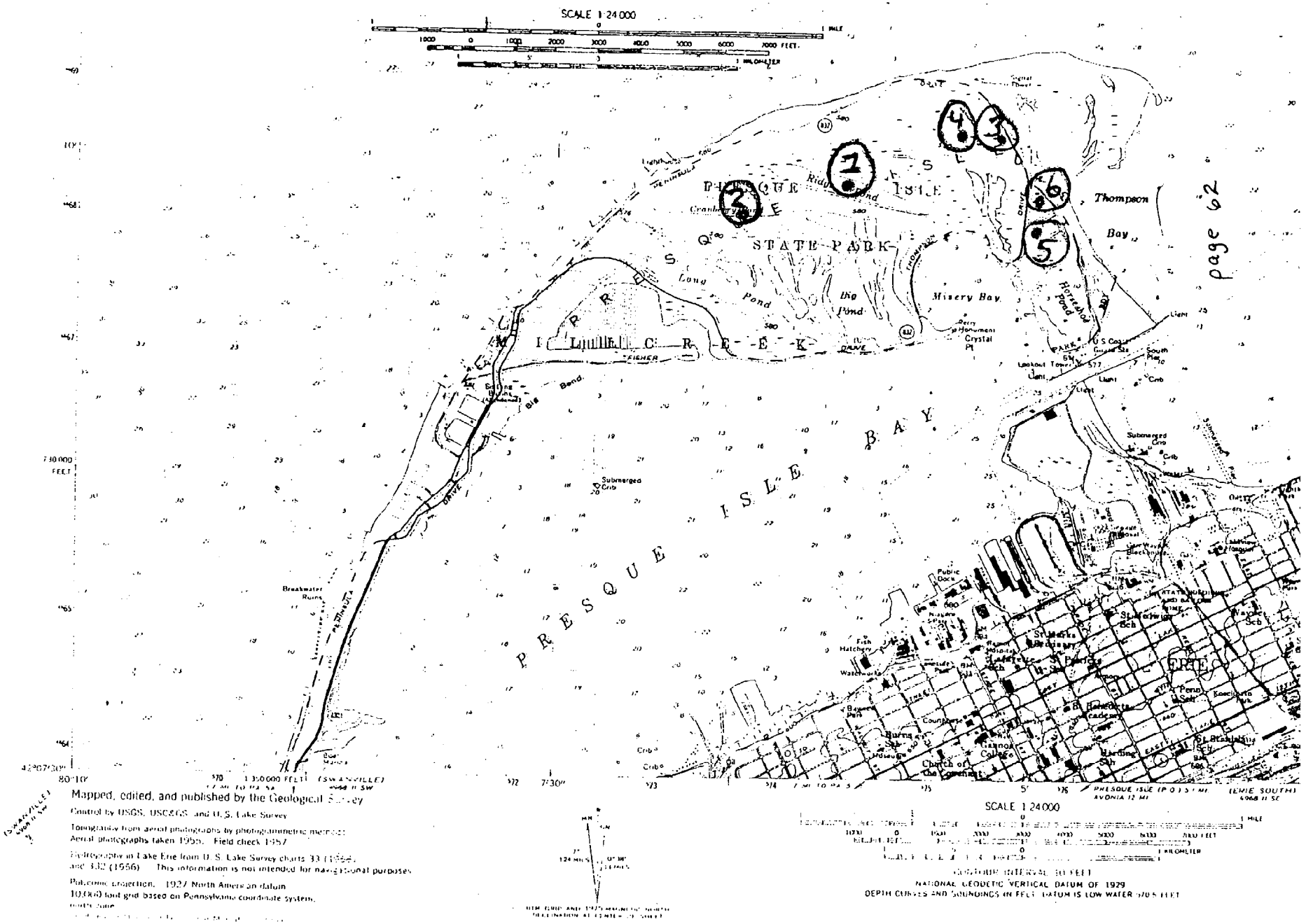
Utricularia intermedia Hayne

1. JKB:1987:205
   Local and rare; a few plants free floating in open waters of Nuphar-Nymphaea ponds within Niagara Basin; .65 mile and 15 degrees from Perry Monument.

2. 17 October 1987 JKB:1987:357
   Local a few plants on drying mud flats within mixed emergent wetland type- Cephalanthus- Decodon- Carex stricta- Carex aquatilis-Sparganium americanum- Bidens cernua; 1.15 miles and 303 degrees fromPerry Monument.

3. 17 October 1987
   Occasional in shalow (6") waters at western end of Yellow Bass Pond Basin and north of Ridge Pond; 1.05 miles and 319 degrees from Perry Monument.

Utricularia minor L.



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Utricularia minor L.

1. 29 July 1987
   Occasional in open waters of Ridge Pond.

2. 30 July 1987
   Common in open waters of Nuphar pond in eastern basin of Cranberry Pond.

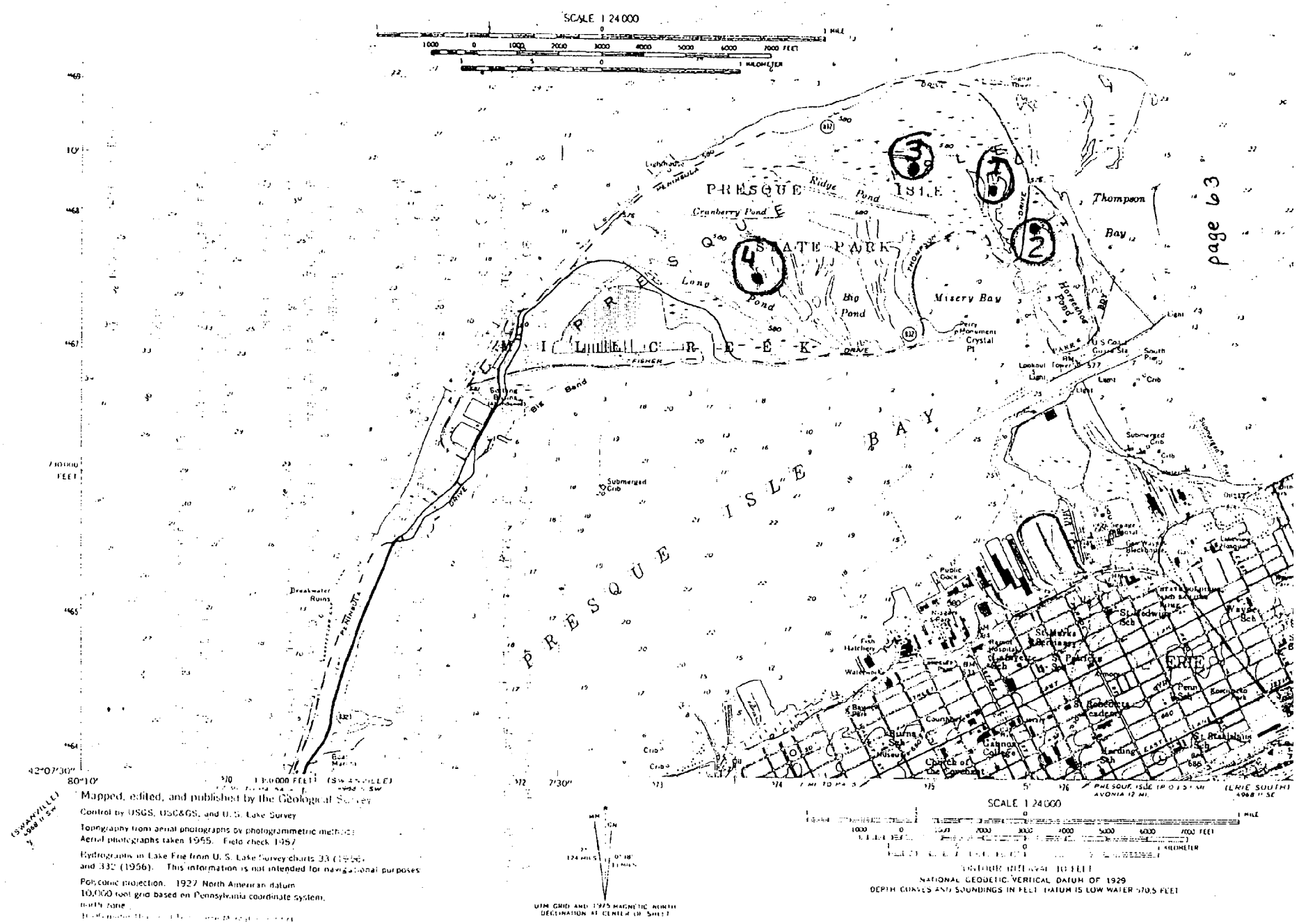
3. 30 July 1987 JKB:1987:209
   Occasional to common within open waters of South Twin Pond; .9 mile and 11 degrees from Perry Monument.

4. 30 July 1987
   Occasional in open waters of North Twin Pond.
   .96 mile and 6 degrees from Perry Monument.

5. 6 August 1987
   Common in Elspar Pond; .6 mile and 35 degrees from Perry Monument.

6. 6 August 1987
   Common in pond just east of PA 832 and just NE of Coast Guard Road; .7 mile and 30 degrees from Perry Monument.

Zizania aquatica L.



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Zizania aquatica L.

1. 5 August 1987
   Common in Nuphar marshes adjacent to Carex stricta- Carex aquatilis marshes along northern basin of Niagara Pond; .7 mile and 14 degrees from Perry Monument.

2. 6 August 1987
   Locally common in northwest corner of Elspar Pond just south of Coast Guard Road; 35 degrees and .6 mile from Perry Monument.

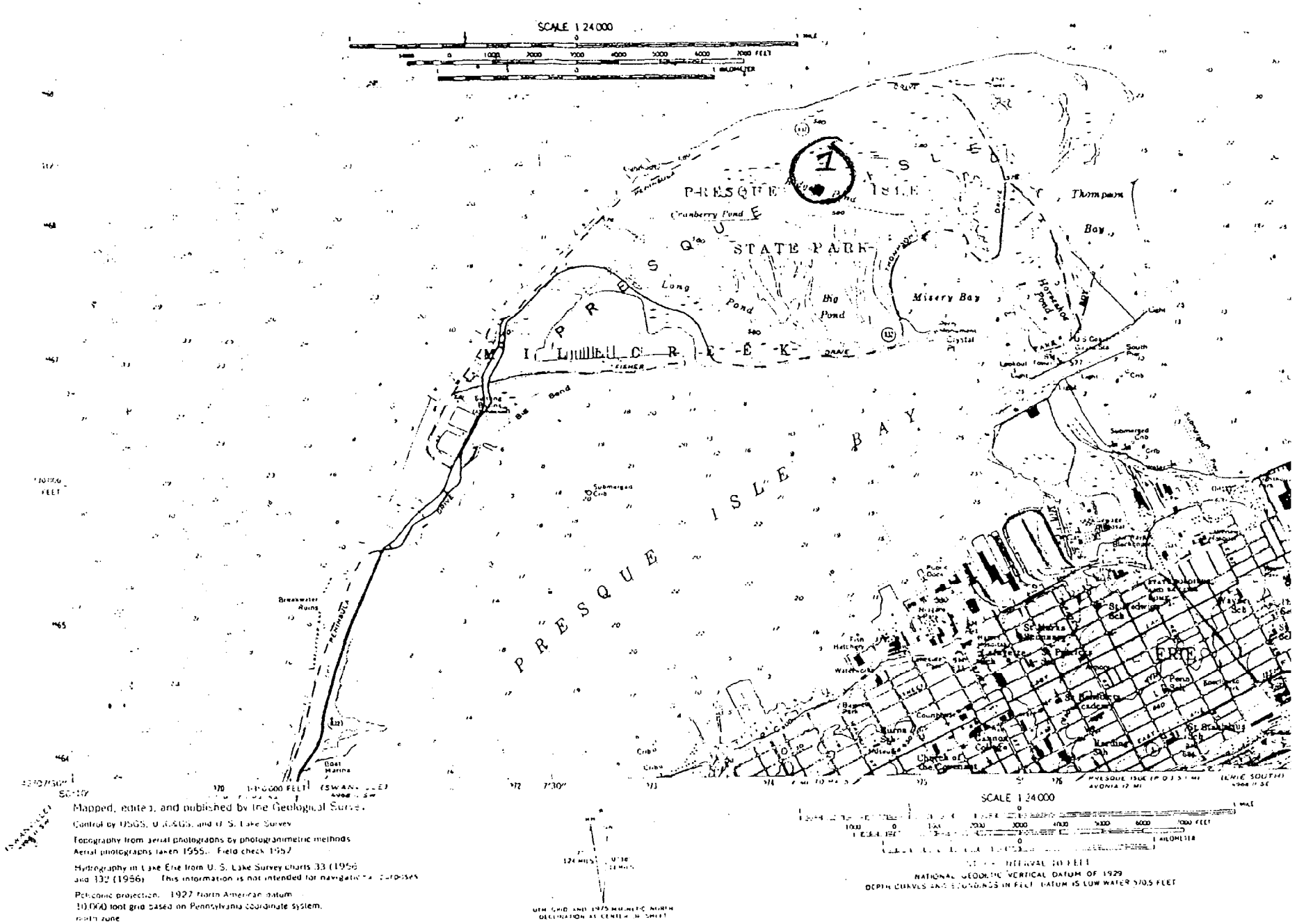
3. 9 September 1987
   Local, a few plants in Decodon clones along northeast shore of Yellow Bass Pond; .85 miles and 340 degrees from Perry Monument.

4. 15 October 1987
   Common on muddy flats with Nuphar-Pontederia-Sparganium-eurycarpum; .98 mile and 285 degrees from Perry Monument.

APPENDIX ONE

DELETION NOTE

Myriophyllum exalbescens Fern ***Deletion Note



Myriophyllum exalbescens Fern. (Deletion Note)

1. 29 July 1987
   There is no Myriophyllum exalbescens in Ridge Pond as reported in 1986. The 1986 report was based upon leaf characteristics only. Myriophyllum heterophyllum is the only water milfoil within Ridge Pond. Also, no Myriophyllum spicatum was observed in Ridge Pond.

APPENDIX TWO

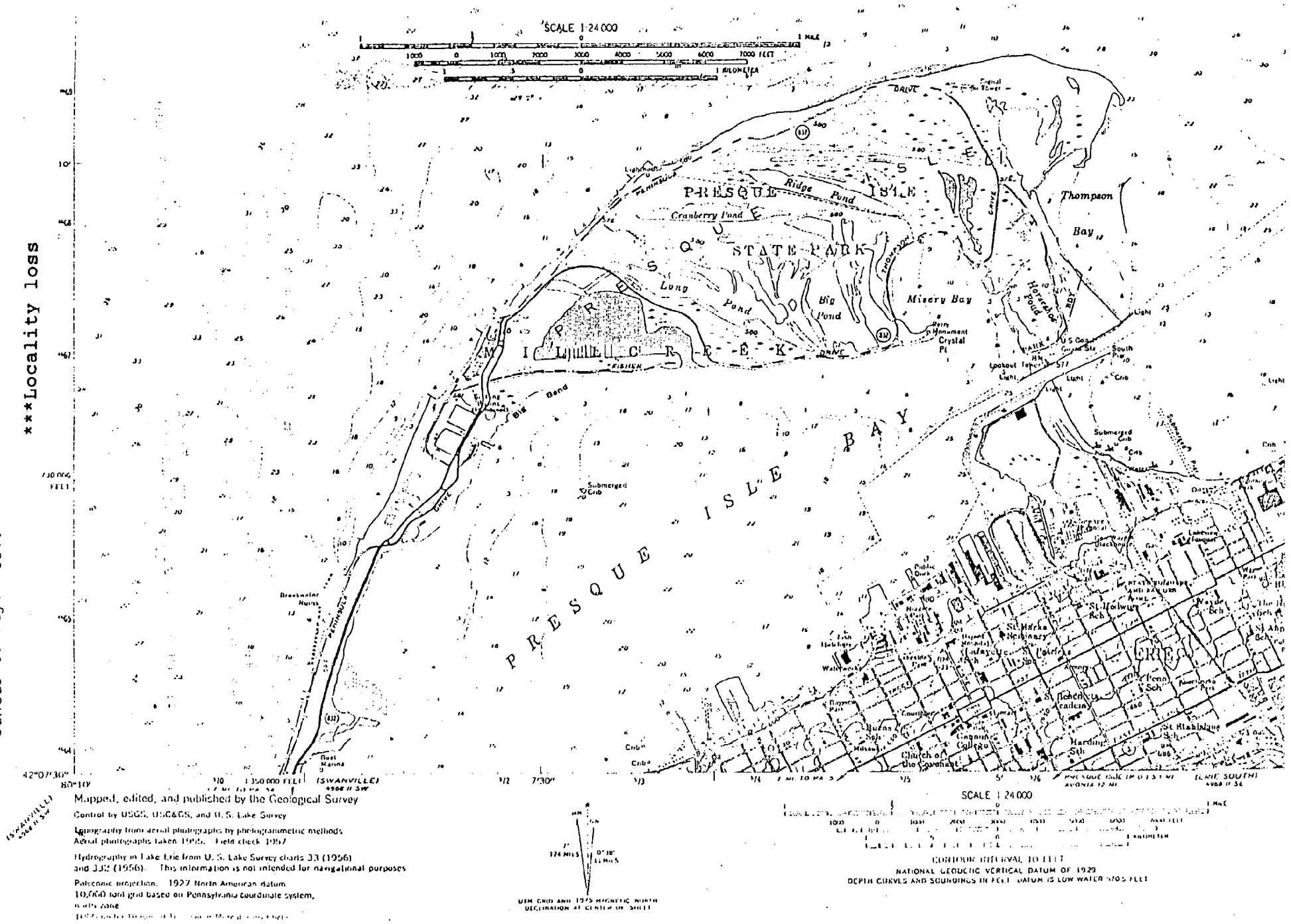
LOCALITY LOSS

Juncus alpinus Vill.

***Locality loss

Juncus alpinus - Vill. Report on loss of a previously reported locality

1. Locality no. 4 within the 1985 Presque Isle Rare Plant Report has been covered by winter drift sands; location reported in 1985 occurred about .4 miles and 65 degrees from Light House.



***Locality loss

Juncus torreyi Cov.

Juncus torreyi Cov. Report on loss of a previously reported locality

1. Locality no. 3 within the 1985 Presque Isle Rare Plant Report has been covered by winter drift beach sands; location reported in 1985 occurred about .4 miles and 65 degrees from Light House.

APPENDIX THREE

EXTIRPATION NOTE

Geranium bicknellii (Britt.)

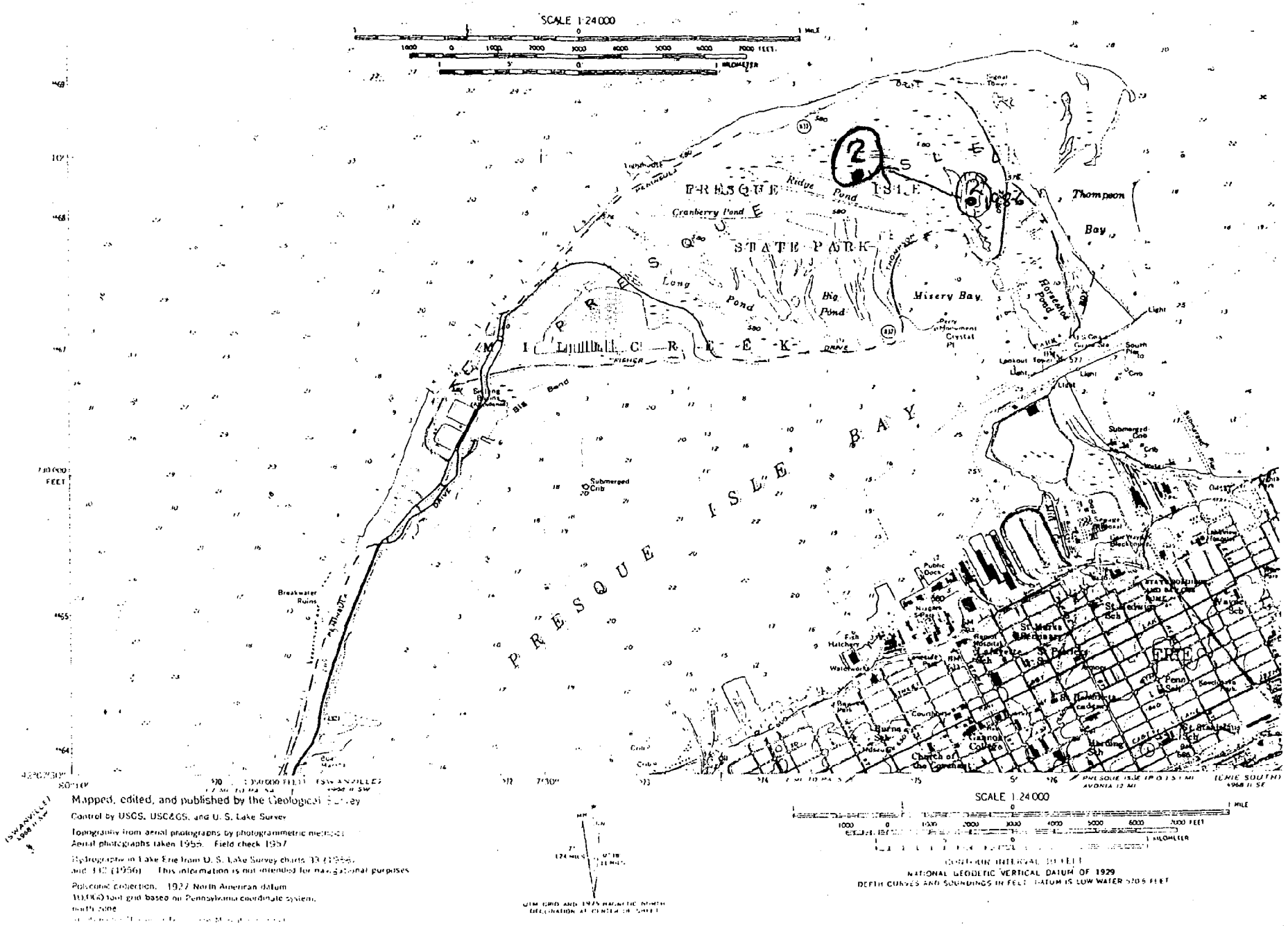
Germanium bicknellii (Britt.)

1. 6 August 1987
1986 population extirpated: site now covered by dense growth Rubus allegheniensis. Superintendent Eugene Giza instructed maintenance to mow site in response to request by museum; site was mowed in late October. Site is 2.28 miles and 252 degrees from Perry Monument.

APPENDIX FOUR

CORRECTION NOTES

Utricularia intermedia Hayne *** Correction Note



Utricularia intermedia Hayne Correction Note for "No. 2" of 1986 Report

2. 20 august 1986
Occasional in drying mudflats along southern basin of Yellow Bass Pond just north of ridge between Ridge Pond and Yellow Bass Pond; .77 miles and 336 degrees from Perry Monument.

Utricularia minor L. *** Correction Note

Utricularia minor L. Correction Note for "No. 1" of 1986 Appendix Report

1. 27 September 1985 JKB:1985:392
Occasional in drying mud flats forming abundant winter terraces growing with Utricularia intermedia located within Yellow Bass Pond basin just north of ridge between Ridge Pond and Yellow Bass Pond; .77 mile and 336 degrees from Perry Monument.

APPENDIX FIVE

RULES AND REGULATIONS

RULES AND REGULATIONS

Title 25—ENVIRONMENTAL RESOURCES

PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CH. 82]

Conservation of Pennsylvania Native Wild Plants

By this order the Environmental Quality Board (EQB) adopts 25 Pa. Code Chapter 82, which relates to the conservation and management of Pennsylvania native wild plants. This order was adopted by the EQB at its meeting of October 20, 1987. Notice of proposed rulemaking was published at 15 Pa.B. 1659 (May 4, 1985). The final regulatory changes are set forth in Annex A hereto. The final changes are summarized in this preamble, as are significant comments received during the public comment period.

A. *Effective Date*

These regulations will become effective January 1, 1988.

B. *Contact Persons*

For further information, contact Richard R. Thorpe, State Forester, Bureau of Forestry, 100 Evangelical Press Building, P. O. Box 1467, Harrisburg, Pa. 17120, (717) 787-2703, or Justina M. Wasicek, Assistant Counsel, Bureau of Regulatory Counsel, Room 505 Executive House, P. O. Box 2357, Harrisburg, Pa. 17120, (717) 787-7060.

C. *Statutory Authority*

These regulations are promulgated under the authority of the act of June 23, 1982 (P. L. 597, No. 170) (32 P. S. §§ 5301—5314), known as the Wild Resource Conservation Act.

D. *Background*

The Wild Resource Conservation Act was enacted in 1982 to establish means for conserving and managing certain species of plants and animals. The act established a Wild Resource Conservation Board, the membership of which is comprised of the Secretary of the Department of Environmental Resources, the Executive Director of the Fish Commission, the Executive Director of the Game Commission, the majority and minority Chairpersons of the House Conservation Committee and the majority and minority chairpersons of the Senate Environmental Resources Committee.

The Board has the authority to administer the Wild Resource Conservation Fund. The monies in that fund derive from voluntary contributions, made principally by taxpayers through a designation on their individual State income tax return forms. The Fund also contains the proceeds from certain items sold by the Wild Resource Conservation Board, from license and permit fees, from fines and from any legislative appropriations that may be made. General Fund monies are not to be used for the purposes of the Wild Resource Conservation Act (32 P. S. § 5313).

The Wild Resource Conservation Act requires the Department of Environmental Resources to:

(1) conduct investigations of wild plants, with the cooperation of taxonomists, biologists, botanists and other interested persons (32 P. S. § 5307(a));

(2) determine measures to manage wild plants in order to provide for continued existence of the plants (32 P. S. § 5307(a));

(3) establish a classification procedure for wild plants (32 P. S. § 5307(b));

(4) establish criteria for, promote and designate private wild plant sanctuaries (32 P. S. § 5307(d) and (e));

(5) issue wild plant management permits to remove, collect or transplant threatened or endangered plant species (32 P. S. § 5308(a) and (e));

(6) designate public wild plant sanctuaries when deemed necessary (32 P. S. § 5310); and

(7) enforce the provisions of the Wild Resource Conservation Act (32 P. S. § 5311).

Section 7(c) of the Wild Resource Conservation Act (32 P. S. § 5307(c)) specifically requires the EQB to promulgate regulations for the management of wild plants. By statute, these regulations are to set limitations relating to the taking, possession, transportation, export, processing, sale and shipment of wild plants, insofar as they may be deemed necessary to manage wild plants. Public notice, opportunity for comment and public hearings also are required by section 7(c) of the act.

In addition, section 9 of the act specifically requires the EQB to promulgate regulations over the digging, harvesting, sale and exploitation of vulnerable plant species (32 P. S. § 5309). One of the vulnerable plant species is ginseng, which is widely collected in Pennsylvania. Ginseng cannot be exported from the United States unless the state of its origin has been approved for ginseng export by the United States Fish and Wildlife Service, in accordance with 50 CFR 23.51, 23.15 *et al.*

Criteria used by the United States Fish and Wildlife Service to approve State ginseng harvests for export in the 1985-1987 seasons are discussed at 50 Fed. Reg. 39691—39696 (Sept. 30, 1985), as amended, 50 Fed. Reg. 42027 (Oct. 17, 1985). The State ginseng certification program proposed in Chapter 82 has been formulated with these criteria in mind. Therefore, the regulations on vulnerable plants not only satisfy the mandate of section 9 of the Wild Resource Conservation Act, but also give the Commonwealth a basis for seeking Federal approval of its ginseng harvests for export.

Generally, in drafting Chapter 82, the Department has relied upon comments and studies by the Pennsylvania Rare Plant Committee. This committee is composed of representatives from government agencies, conservation and environmental organizations, the academic community, industry and other interested persons. The Department also has utilized information from research conducted by the Western Pennsylvania Conservancy, the Nature Conservancy and the Morris Arboretum.

E. *Summary and Purpose of Regulations*

These regulations are being promulgated to satisfy the mandates in the Wild Resource Conservation Act as discussed in Part D of this preamble. The regulations

provide for different means of managing wild plants, which are discussed in terms of their function as follows:

1. *General Provisions*

Subchapter A defines the terms used throughout the regulations.

2. *Classification of Wild Plants*

In Subchapter B, the Department of Environmental Resources has formulated 11 classifications for native wild plants in Pennsylvania. Nine of these classifications were required by statute to be established (32 P. S. § 5307(b)). The act requires that the Department's classification procedure "should include but may not be limited to" the listed nine categories.

Sections 82.11—82.21 establish the classifications of wild plant species, and list the plant species contained within each classification. The species have been designated after study by the Department and by interested taxonomists, biologists, botanists and other interested persons, as directed by the act (32 P. S. § 5307(a)).

3. *Wild Plant Management Permits*

Section 8 of the act (32 P. S. § 5308) requires the Department to issue wild plant management permits. Subchapter D is promulgated in response to this mandate.

The regulations establish a procedure whereby persons can obtain a permit to remove, collect or transplant endangered or threatened plants. Written consent of the landowner is required in order to obtain a permit. These permits may be issued for certain academic activities, such as for the purpose of conducting botanical or taxonomic studies. The permit also may be issued to allow persons to transplant threatened or endangered species from lands that will be mined or otherwise developed into public or private wild plant sanctuaries. The major purpose of Subchapter D is to permit responsible persons to transplant wild plants into sanctuaries in order to protect them or to enhance the size of the plant population, or to permit responsible persons to study the plants.

The regulations also require the permittee to report the results of the permitted activity. These reports indicate potential problems of which the Department should be made aware for use in making subsequent management decisions. The reports will indicate problems in transporting plants to certain habitats, and will demonstrate the vulnerability of certain species to certain transplanting techniques. The reports also will provide the Department with additional knowledge regarding the plants. A nominal fee of $5 is required to be submitted with each application in order to help defray the administrative expenses of issuing the permit.

4. *Vulnerable Plant Regulations*

Although section 7(c) of the act (32 P. S. § 5307(c)) authorizes broad regulation on the management of all wild plants, section 9 (32 P. S. § 5309) provides specifically that plant species classified as vulnerable must be subjected to regulations regarding the digging, harvesting, sale and exploitation of those plants.

Section 9 of the act provides that the regulations shall consider the growing cycle, establish harvest seasons and provide for the commercial licensing of persons who will export vulnerable plants or buy them with the intent to sell them within the Commonwealth. Subchapter E responds to these statutory mandates.

The only plants classified by the Department as vulnerable are ginseng and golden-seal. Ginseng is the primary focus of the vulnerable plant regulations, since it is grown and widely collected in Pennsylvania. It is also regulated by the United States Fish and Wildlife Service, at 50 CFR 23.51 and 23.15 *et al.* The United States Fish and Wildlife Service approves ginseng harvested in certain states for export. The United States Fish and Wildlife Service has required states to have a ginseng certification program before it has approved harvests in those states for export. No ginseng may be exported legally without such approval.

The regulations set forth in Subchapter E are intended to establish a basic program that satisfies the mandates of the act (32 P. S. § 5309) and that also establishes a State certification program for Pennsylvania ginseng. An established certification program is a prerequisite if the Commonwealth decides to seek approval of its ginseng for export.

Subchapter E establishes an application process for a commercial license, criteria for issuance of the license and grounds for revocation of that license. The subchapter also establishes conditions for the harvest and possession of ginseng and other plants classified as vulnerable.

The regulations in this subchapter provide that all persons who deal in vulnerable plants must be licensed. If a person wishes to export ginseng from Pennsylvania, that person must apply for State certification of the ginseng. Also, under section 9 of the act, the regulations require commercial license holders to maintain transaction records. These records may be inspected by the Department. Periodic reports of the transactions are required. A fee of $50 must be submitted with a commercial license application, under the authority to set a license fee contained in section 9(a)(3) of the act (32 P. S. § 5309(a)(3)).

5. *Wild Plant Sanctuaries*

Subchapter F is promulgated under the authority of section 7 of the act (32 P. S. § 5307). Section 7 of the act requires the Department "to establish criteria for and promote a cooperative Statewide system of private wild plant sanctuaries." Subchapter F establishes an application process for designation as a private wild plant sanctuary, criteria for the designation and grounds for revocation of the designation. An application process for private wild plant sanctuary designation, and revocation of the designation for good cause, are authorized specifically by statute (32 P. S. § 5307(e) and (g)). A landowner may request withdrawal of the designation of private sanctuary at any time, as provided by 32 P. S. § 5307(f) and the regulations.

6. *Unlawful Conduct and Penalties*

Subchapter C contains the general restrictions on conduct relating to wild plants, as set forth in the act and the regulations.

The penalties listed in Subchapter G reiterate the penalties established by section 11 of the act (32 P. S. § 5311).

F. *Public Comments*

Notice of proposed rulemaking was published at 15 Pa.B. 1659 (May 4, 1985) and included a 6-week comment period. Public hearings were held on June 4, 1985, in Philadelphia, and on June 6, 1985, in Erie. The Department has prepared a Comment and Response

Document summarizing and responding to each comment received by the EQB during the comment period. This document is available upon request to the contact persons identified in Part B. The major substantive comments, and the Department's responses, are summarized as follows.

Certain commentators were concerned that a private wild plant sanctuary designation might be construed to affect the contractual rights of access in the land. Since the act does not prohibit alterations to the sanctuary by persons having an interest in the land, the Department accepted the comment and changed § 82.83(a) to make it clear that all persons with an interest in the land must concur in the application for private sanctuary designation.

Certain comments were received calling for tax credit incentives, greater penalties for violations and penalties for conduct affecting threatened and rare species as well as endangered species. The Department did not incorporate these changes because these measures either conflicted with, or were not authorized by, the provisions of the enabling legislation.

One commentator disagreed with the classification of species based upon their populations within the Commonwealth. The classifications were not changed, however, because the Wild Resource Conservation Act defines certain classifications in the context of their existence within Pennsylvania, and the intent of the act appears to be to manage the plants in accordance with their viability within the Commonwealth.

One commentator felt that more stringent requirements should be established for the issuance of a commercial license. The Department did not change these requirements, however, since it felt that licensing was the best means of regulating the exploitation of vulnerable species, and safeguards exist in that the Department may revoke a license for good cause.

Comments were made regarding activities affecting vulnerable plant species, that is, golden-seal and ginseng.

A commentator suggested that an exception to the vulnerable plant harvest seasons and conditions should be made for scientific collecting purposes. The Department did not incorporate this comment because the act requires that a season be established for digging and harvesting vulnerable plants, and scientific collecting may be conducted during that season.

A comment was made that the scientific name for ginseng should be stated in the regulations. The Department agrees and has identified ginseng as *Panax quinquefolius* L. in § 82.2 (relating to definitions).

Another commentator recommended that the definition of "wild plant" should include the variety, which refers to a subset of a species. The Department agreed and has revised § 82.2 accordingly.

Several comments were evaluated in the context of the United States Fish and Wildlife Service criteria for a state ginseng certification program. One commentator disagreed with the inclusion of ginseng as a vulnerable plant species. Others supported the regulation of ginseng. Before the United States Fish and Wildlife Service will permit export, the Service requires a statewide program of licensing and regulating persons purchasing or selling ginseng collected or grown in the state. If ginseng is not regulated as a vulnerable plant species, the Commonwealth will be unable to apply for certification of the program, and Pennsylvania ginseng dealers and growers will be unable to seek approval to export their ginseng. It appears to be of greater public benefit to include ginseng as a vulnerable plant species.

The comment was made that it is impractical to require harvesters to list the dates of harvest of vulnerable plants. The revised Management Authority criteria published by the Service at 50 Fed. Reg. 39691 no longer require the dealer transaction records to include the harvest date of the plants. The Department agreed with the comment and has revised § 82.65 accordingly.

Another commentator opposed the requirement that a commercial licensee must count one sample pound of plants per transaction. Since the Service's Scientific Authority Criteria require the state records to indicate the number of roots per pound, § 82.65(a)(9) has remained unchanged. One commentator objected to listing harvesters' names and addresses on annual reports; revised Service Criteria now requires that this information may be kept in the dealers' transaction forms rather than the reports. The regulations have been changed accordingly.

An inquiry was made regarding the meaning of § 82.65(c)(9), now found in § 82.65(c)(10), regarding whether this referred to out-of-State ginseng. Since this section applies only to Pennsylvania Vulnerable plants, § 82.65(c)(10) contemplates Pennsylvania ginseng only.

One commentator suggested that the regulations limit ginseng harvest in areas that have been over-collected in order to prevent a rapid population decline. The Department did not think it necessary to establish a specific limitation for one species, or for one area, since it proposes species classification based on plant population and distribution of the species throughout the Commonwealth.

A commentator suggested that § 82.70(f) be revised. The Department did not agree, since it is necessary to the integrity of the ginseng certificate that the application be complete and that a representative sample support the information in the application.

The comment was made that the harvest season for vulnerable plants should begin on August 1 rather than August 15. The Department agreed and has revised § 82.69(a)(1) to commence the harvest season on August 1 and to permit harvest only when the seeds are mature. Accordingly, the Department also has revised § 82.69(b) to prohibit possession of green ginseng roots between April 1 and August 1 of a calendar year.

One commentator stated that it would be difficult to comply with the requirement in § 82.70(d)(6) and (7) that the ginseng certificate indicate the dates and counties of collection. The Department agreed with this comment and has revised § 82.70 to require that the certificate indicate only the harvest year and the state of origin.

Another commentator suggested that hauling ginseng to be weighed for certification would be time consuming, inconvenient and dangerous. The Department did not revise § 82.70 however, since § 82.70(d)(8) permits the licensee to obtain a weigh slip from a Commonwealth certified weigh station or scale, and because the United States Fish and Wildlife Service's Management Authority Criteria require the documentation of the weight of the roots in various aspects of a certified state program.

A commentator suggested that golden-seal be deleted from the classification of vulnerable species. The Department did not agree, as there is no evidence to support the deletion.

Additional comments were made to regulations other than those pertaining to vulnerable plants. The comment was made that there should be an exemption for possession of specimens collected prior to the act. The Department agreed and has revised § 82.41(b) to allow lawful continued possession of Pennsylvania Endangered and Threatened plant species specimens that were obtained prior to the effective date of the act.

Another commentator suggested that the requirements for a wild plant management permit were burdensome, that it was unnecessary to list individual species to be affected and that geographic locations should be more generally described. The Department disagreed, since these permits are required only for activities that affect endangered or threatened species. The Departmnent feels that very specific information is necessary to determine whether a permit should be issued for activities that affect the limited populations of these plant species.

A commentator stated that advance written consent of the landowner should not be necessary for obtaining a wild plant management permit. The Department did not revise the regulations, however, because section 5308(e) of the act requires consent of the landowner for taxonomic and botanical activities which are conducted on Pennsylvania endangered and threatened plants.

Another commentator suggested that endangered and threatened plants should be transplanted only if they were threatened with destruction. The Department did not change the regulations, because the act provides persons with the opportunity to apply for a permit in order to enhance their numbers, to restore a natural range or protect the plants if they are threatened with development activities. The Department will exercise its discretion in determining whether the activity will benefit the species and implement the goals of the act.

A comment was received that the taxonomic source used to generate plant species nomenclature should be cited in the regulations. The Department agrees and has added § 82.3 to define the nomenclature used to identify plant species taxonomy.

G. *Summary of Revisions to Proposed Rulemaking*

1. Revisions were made to the lists of plant species in each classification, based upon updated field information, additional research and review by Departmental staff, comments obtained from members of the general public and the Rare Plant Committee and testimony at the public hearings. These revisions are summarized as follows.

a. *Section 82.11. Pennsylvania Extirpated.* Sixty-two species were classified as Pennsylvania Extirpated in the proposed rulemaking; 119 species are in the final rulemaking. Five species were added to the list, which were not classified in the proposed rulemaking. These species had not been considered in the initial review of literature. Upon consideration, field surveys did not find the plants to still exist in any historically known location, and their habitats appear to have disappeared.

Fifty-five species were added as follows. Three species were reclassified from Pennsylvania Endangered, five were reclassified from Pennsylvania Threatened, 28 species were reclassified from Pennsylvania Rare and 19 species were reclassified from Tentatively Undetermined. These species were reclassified as Pennsylvania Extirpated, because extensive field investigations, conducte since the proposed rulemaking, failed to reverify histor cally documented locations or to locate these species i other appropriate habitats.

Three species were subtracted from the list by reclass fying them from Pennsylvania Extirpated to Pennsylva nia Endangered, because they were reverified durin 1986 field survey investigations.

b. *Section 82.12. Pennsylvania Endangered.* Twenty five species were contained in this classification a proposed rulemaking; 135 species are in the fina rulemaking.

Ten species were added to the list which had not bee previously classified at proposed rulemaking. Literatur sources that had not been reviewed at the time of th initial survey documented locations of these species Subsequent field surveys showed that most sites ha been altered or destroyed, and that the current natura range of these species was such that very few plan locations currently exist in Pennsylvania.

Three species were added by reclassifying them fron Pennsylvania Extirpated to Pennsylvania Endangered because they were reverified during the 1986 fiel investigations.

One hundred three species were added to this classifi cation as follows. Thirty plant species were reclassifie from Pennsylvania Threatened, 49 species were reclassi fied from Pennsylvania Rare and 24 species were reclas sified from Tentatively Undetermined. These reclassifica tions are based upon field investigations conducted afte proposed rulemaking that surveyed historically docu mented locations and appropriate habitats not previ ously documented. The surveys revealed that many o the locations no longer support the habitat required fo species survival, and that a reclassification to Pennsylva nia Endangered was justified for these species.

Six species were subtracted from this classification a follows. Three species were reclassified to Pennsylvani Threatened, and three species were reclassified to Penn sylvania Extirpated.

c. *Section 82.13. Pennsylvania Threatened.* Proposed rulemaking listed 44 species in this classification; fina rulemaking lists 36 species.

Seven species that were not previously classified were added to the Pennsylvania Threatened classification These species were not listed in the proposed list because the literature sources documenting their loca tions had not been considered. Since proposed rulemak ing, these literature sources have been reviewed and surveys have been undertaken. Field investigation reverified species at a few locations, but many areas no longer contain habitat to support the plants.

Eight species were added by reclassifying them from Pennsylvania Rare, and 11 species were added by reclassifying them from Tentatively Undetermined. Field investigations conducted after proposed rulemaking showed that many historically documented locations and other sites no longer support the required habitat for these species.

Three species were added by reclassifying them from Pennsylvania Endangered. Field investigations in 1986 showed that these species were not at present risk of extirpation in the Commonwealth.

Thirty-seven species were subtracted from the list as follows. Thirty species were reclassified from Pennsylvania Threatened to Pennsylvania Endangered, five species were reclassified from Pennsylvania Threatened to Pennsylvania Extirpated, one species was reclassified from Pennsylvania Threatened to Pennsylvania Rare and one additional species was subtracted from Subchapter B because it was discovered not to occur naturally in Pennsylvania.

d. *Section 82.14. Pennsylvania Rare.* One hundred fifty-eight species were listed in this classification in the proposed rulemaking; 83 species are listed in the final rulemaking.

Two species that were not classified previously were added to the list, because additional literature sources and commentators have demonstrated that these species are properly classified as Pennsylvania Rare.

One species was added by reclassifying it from Pennsylvania Threatened to Pennsylvania Rare because during field investigations, more populations were discovered to justify this change in classification.

Fourteen species were added by reclassifying them from Tentatively Undetermined to Pennsylvania Rare, because information was gathered in subsequent research to indicate that these species existed only in 20—28 known locations in Pennsylvania, and because they satisfied other parameters for the Pennsylvania Rare classification.

One species was deleted from this classification and from Subchapter B, because subsequent field investigations revealed that the species was secure in its natural range in the Commonwealth.

Six species were subtracted from the list by reclassifying them from Pennsylvania Rare to Tentatively Undetermined.

Twenty-eight species were subtracted from the list by reclassifying them to Pennsylvania Extirpated, 49 species were reclassified to Pennsylvania Endangered and eight species were reclassified to Pennsylvania Threatened.

e. *Section 82.21. Tentatively Undetermined.* Proposed rulemaking listed 115 species in this classification; final rulemaking lists 146 species.

Six species were added by reclassifying them from Pennsylvania Rare. Species in this group were either misidentified in the past or are the subject of current controversy among professional botanists concerning identification of the species. Until identification is resolved, the species have been reclassified as Tentatively Undetermined.

One species was deleted from the list and from Subchapter B, because additional research has indicated that it is secure within its natural range in Pennsylvania. One species was deleted because a typographical error caused it to appear in the lists both as Tentatively Undetermined and as Pennsylvania Extirpated. It is actually extirpated and is classified as such in the final rulemaking.

Eight species were deleted from the list and from Subchapter B either because taxonomic conclusions have changed since the proposed rulemaking, or because it was determined that some specimens collected and deposited in historical records were misidentified.

Fourteen species were subtracted from the list by reclassifying them to Pennsylvania Rare, 11 species were reclassified to Pennsylvania Threatened, 24 species were reclassified to Pennsylvania Endangered and 19 species were reclassified to Pennsylvania Extirpated.

One hundred three species were added to the list from species that had not been classified in proposed rulemaking. Locations of these species are documented in literature that was not considered during the initial review prior to proposed rulemaking. These species are classified as Tentatively Undetermined, due to the lack of field investigation to verify the historical records.

f. *Reference document.* A list of the particular species affected by the changes described in this part of the preamble is entitled "Summary of Reclassification of Plant Species listed within Subchapter B from Proposed to Final Rulemaking." This document is available for inspection and copying from the Department.

2. The Department also made a revision by adding § 82.72 (relating to possession of unsold ginseng). This provision states that a licensee may not export ginseng in excess of the amount certified to be in his possession on March 31 of the year after harvest. This was added because it is required by the revised Management Authority Criteria published by the United States Fish and Wildlife Service at 50 Fed. Reg. 39691 (Sept. 30, 1985).

Additionally, the weighing procedures for ginseng to be exported, contained in § 82.70, were clarified. Section 82.65(c)(12) also was revised to require the dealer report form to show identification numbers of State ginseng certificates used to export ginseng. Finally, the dealer reports in § 82.65(c) were changed from annual to quarterly reports, in accordance with the revised requirements of the Management Authority Criteria.

3. Section 82.83(a) was revised in response to public comment and to the statement of the Independent Regulatory Review Commission. This revision and other revisions are described in Part F of this preamble.

H. *Benefits and Costs*

Executive Order 1982-2 requires a statement of the benefits of a regulation, as well as the costs which may be imposed. It also requires a statement of the need for, and a description of, any forms, reports or other paperwork required as a result of the regulation. These will be detailed separately for the Commonwealth, political subdivisions and the private sector.

Commonwealth

a. Paperwork requirements.

The Department must review permit applications and issue permits for wild plant management activities, such as transplanting and study, as required by 32 P. S. § 5308. The Department also will be reviewing reports of the results of this activity, which will assist the Department in making more detailed decisions regarding management of wild plants, such as the feasibility of transplanting plants successfully to various kinds of habitats.

Applications for designation as private wild plant sanctuaries will be reviewed and designations will be made, under 32 P. S. § 5307.

The Department will review commercial license applications from persons dealing in vulnerable plants and will issue commercial licenses, as required by 32 P. S. § 5309. The Department will review transaction records and reports of transactions, in order to maintain the integrity of the certification program for ginseng and

other vulnerable plants. In addition, the Department will issue ginseng certificates for which the dealer may apply if he seeks to export ginseng from Pennsylvania.

These reports and forms are necessary to implement the requirements of the act and to maintain the integrity of the licenses, certificates and permits issued under the act.

b. Fiscal impact.

The money received from permit and license fees, or from any fines and penalties, will be paid into the Wild Resource Conservation Fund. The Wild Resource Conservation Board will allocate monies from the Fund to the Department to pay the Department's costs in administering the Wild Resource Conservation Act. The expected total program costs for Fiscal Year 1987-88 will be $77,948.91.

Political Subdivisions

a. Paperwork and fiscal impact.

These regulations should have no fiscal impact upon any political subdivisions. No paperwork will be required.

Private Sector

a. Paperwork and fiscal impact.

Persons seeking a wild plant management permit must submit an application to the Department, and must file a report of the results of their activities. A nominal fee of $5 is to be submitted with the application.

Persons seeking to be commercially licensed to deal in vulnerable plants, under 32 P. S. § 5309, must submit an application for the license along with a fee of $50. Commercial licensees must keep transaction records, as required by 32 P. S. § 5309, and must submit periodic reports of these transactions to the Department. If a person wants certification of ginseng, in order to seek to export it legally from Pennsylvania, then that person must apply for a ginseng certificate.

The United States Fish and Wildlife Service has indicated that state certification of ginseng is a necessary prerequisite to obtaining approval to export Pennsylvania ginseng. These application forms and reports are necessary to implement the requirements of the act and to maintain the integrity of the licenses and certificates issued under that act. Fees for commercial licenses of dealers in vulnerable plants are specifically authorized by 32 P. S. § 5309.

The private persons who obtain wild plant management permits will benefit from their studies of the plants, or from their desired preservation of certain plant species.

Persons who obtain certification of their ginseng will benefit by being able to export their ginseng from Pennsylvania, if the State certification program is approved by the United States Fish and Wildlife Service.

I. *Sunset Date*

The Department will evaluate the need for and efficacy of these regulations, on an ongoing basis, as the regulations are implemented by the Department. These regulations provide ongoing services to persons who wish to study or preserve certain plant species. They also provide persons with the opportunity to seek Federal approval for the legal export of ginseng. Therefore, no sunset date has been proposed for these regulations.

J. *Regulatory Review Act*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), a copy of the proposed regulations was submitted to the Independent Regulatory Review Commission, and the Chairpersons of the Senate Environmental Resources Committee and the House Conservation Committee. In addition to the proposed regulations, the Commission and the Committees were provided with a copy of a detailed Regulatory Analysis Form prepared by the Department in compliance with Executive Order 1982-2.

On April 29, 1985, the House Conservation Committee approved the regulations. On May 8, 1985, the Senate Environmental Resources Committee disapproved the regulations. On May 16, 1985, the Independent Regulatory Review Commission approved the regulations subject to the inclusion of a proposed amendment regarding property interests, which has been incorporated in § 82.83(a).

The various oversight requirements of the Regulatory Review Act have been fulfilled by the review of the notice of proposed rulemaking, and no additional review of the final order adopting the regulations and changes made to the document is required by the Regulatory Review Act.

K. *Findings*

The EQB finds:

(1) that public notice of the intention to adopt these regulations was given in accordance with sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1201 and 1202) and the regulations promulgated thereunder, 1 Pa. Code §§ 7.1 and 7.2.

(2) that a public comment period was provided as required by law, and that all comments received were considered.

(3) that modifications to the proposed text do not enlarge the original purpose or the scope of the proposed regulations.

(4) that these regulations are necessary and appropriate to the administration and enforcement of the act.

L. *Order*

The EQB, acting in accordance with the authorizing statutes, hereby orders:

(A) The regulations of the Department of Environmental Resources, 25 Pa. Code Chapter 82, are hereby amended by adding §§ 82.1—82.3, 82.11—82.21, 82.31—82.35, 82.41—82.50, 82.61—82.72, 82.81—82.89 and 82.91 to read as set forth in Annex A hereto.

(*Editor's Note*: Sections 82.3 and 82.72 were not included in the proposal at 15 Pa.B. 1659 (May 4, 1985). The proposal to add § 82.4 has been withdrawn.)

(B) The Chairperson of the EQB shall submit this order and Annex A hereto to the offices of the General Counsel and the Attorney General for approval and review as to legality and form, as required by law.

(C) The Chairperson of the EQB shall certify this order and Annex A hereto, and shall deposit the same

with the Legislative Reference Bureau, as required by law.

(D) This order shall take effect January 1, 1988.

By the Environmental Quality Board

ARTHUR A. DAVIS,
Chairperson

Fiscal Note: 7-118 Final. (1) Wild Resource Conservation Fund; (2) $5,000; (3) $5,000; $3,000; $3,000; $3,000; $3,000; (4) 1984-85: $45,376; 1985-86: $71,131; 1986-87: $66,767; (7) NA; (8) recommends adoption. The regulations establish a procedure for removing and collecting endangered plants through a permit process. It would cost approximately $1,200 annually to process these permits. The Department would charge a $5 fee and with 50 per year expected, would produce $250 annually in additional revenue. Persons who deal in or export vulnerable plants would be required to obtain a $50 commercial license. Processing costs would be $3,800 annually with revenues approaching $3,750 based on an estimated 75 permits.

INDEPENDENT REGULATORY REVIEW COMMISSION

In Re: IRRC Regulation 7-118—Environmental Quality Board—Conservation of Pennsylvania Native Wild Plants

Public Meeting of
May 16, 1985

Order

On April 22, 1985, the Independent Regulatory Review Commission received these proposed regulations from the Environmental Quality Board (EQB). Chapter 82 of Title 25 will relate to the conservation and management of Pennsylvania native wild plants. This proposal is made under the authority contained in the act of June 23, 1982 (P. L. 597, No. 170) (32 P. S. §§ 5301—5314), known as the Wild Resource Conservation Act and was published at 15 Pa.B. 1659 (May 4, 1985) with a 30-day comment period.

These regulations are proposed to satisfy the requirements of the Wild Resource Conservation Act by providing for different means of managing wild plants. These regulations will do the following:

1. Define the terms used throughout the regulations.

2. Specify 11 classifications for native wild plants in Pennsylvania.

3. Stipulate that no person shall disturb, pick or take wild plants from State parks and State forest lands, unless they obtain a permit and comply with the rules and regulations governing State parks and State forest lands. They further provide that no person, other than the landowner, any person having a bona fide interest in the affected land or Bureau of Forestry personnel in the performance of their official duties, shall disturb, pick, take or possess plants classified as Pennsylvania Vulnerable.

4. Propose to establish a procedure whereby persons can obtain a permit to remove, collect or transplant endangered or threatened plants into sanctuaries in order to protect them or to enhance the size of the plant population, or to permit responsible persons to study the plants. Written consent of the landowner is required in order to obtain a permit which costs $5.

5. Consider the growing cycle, establish harvest seasons and provide for the commercial licensing of persons who will export vulnerable plants or buy them with the intent to sell them within the Commonwealth. Even though there are two plants classified as vulnerable, ginseng and golden-seal, the regulations focus primarily on ginseng. The regulations are intended to establish a basic program that would establish a State certification program for Pennsylvania ginseng and satisfy the mandates of the act. All persons who deal in vulnerable plants must be licensed. If a person wishes to export ginseng from Pennsylvania that person must apply for State certification of the ginseng. A fee of $50 is proposed and must be submitted with a commercial license application.

6. Establish an application process for designation of areas as private wild plant sanctuaries, criteria for the designation and grounds for revocation of the designation.

On April 29, 1985, the House Conservation Committee met and approved the regulations. The Senate Environmental Resources Committee met and disapproved the regulations on May 8, 1985. Written comments suggesting revisions to § 82.83(a) were received from the Keystone Bituminous Coal Association, and comments in support of the regulation were received from several individuals and environmental groups.

We have reviewed the proposed regulations and find that, for the most part, they are in the public interest. The potential benefits from maintaining as many native wild plants as possible within the Commonwealth are valuable to persons who enjoy the plants and those who wish to expand the body of scientific knowledge regarding these plants.

The $5 fee for a Wild Plant Management Permit is minimal, and while it does not cover all of the administrative costs, the permit provides protection for plant species in danger of becoming extinct by controlling the taking, collection and transplanting of these plants. If the certification program is approved, there are potential monetary benefits for ginseng pickers and dealers. The commercial license cost of $50 is estimated to cover the administrative costs of issuing the license and is not excessive.

We concur with the written comments from the Keystone Bituminous Coal Association concerning § 82.83(a) which relates to private wild plant sanctuaries. As drafted, this section assumes that the surface landowner is the only party with an interest in the property in question. However, there are some instances where this would be false—for example, the case of a mineral owner retaining deed rights of access and use of the property, or the case of a public utility which has acquired the right to use certain properties. We feel that this issue can be addressed by amending the regulation to require that applications for private wild plant sanctuary designations must be concurred with by all parties who have a property interest in the land. By memo dated May 13, 1985, the Department has agreed to recommend that the EQB amend the proposed regulation as suggested by Keystone.

These regulations should have no net adverse impact on the Commonwealth, local governments or the general public. Therefore, we approve these proposed regulations as published at 15 Pa.B. 1659 subject to the inclusion of the amendment discussed above.

The Commission reserves the right to review these regulations if they are substantially amended prior to final publication.

IRVIN G. ZIMMERMAN,
Chairperson

Annex A

TITLE 25. ENVIRONMENTAL RESOURCES

PART I. DEPARTMENT OF ENVIRONMENTAL RESOURCES

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE I. LAND RESOURCES

CHAPTER 82. CONSERVATION OF PENNSYLVANIA NATIVE WILD PLANTS

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Subchapter G. PENALTIES

82.91. Penalties.

Subchapter A. GENERAL PROVISIONS

§ 82.1. Scope.

This chapter establishes a plant classification system, creates permit and license procedures and regulates other activities related to this Commonwealth's native wild plant management. This chapter applies to vulnerable plants, to naturally occurring wild plants native this Commonwealth and to activities and persons associated with them.

§ 82.2. Definitions.

The following words and terms, when used in th chapter, have the following meanings, unless the conte clearly indicates otherwise:

Act—The Wild Resource Conservation Act (32 P. §§ 5301—5314).

Department—The Department of Environmental R sources of the Commonwealth.

Disjunct—A subclassification of plant species, which composed of plant species that are significantly sep rated from their main area of distribution. The Disjun subclassification is contained within the larger classific tion of Pennsylvania Rare.

Endemic—A subclassification of plant species, which composed of plant species that have limited ranges ar that are confined to a specialized habitat. The subclass fication of Endemic is contained within the larg classification of Pennsylvania Rare.

Ginseng—The plant species identified as *Panax quinquefolius* L.

Limit of Range—A subclassification of plant specie which is composed of plant species that are uncommc in this Commonwealth because they are at or near th periphery of their natural distribution. Within the mai body of their distribution, these species may or may nc be common. The subclassification of Limit of Range contained within the larger classification of Pennsylvani Rare.

Naturally occurring—Plant species whose natura range occurs in this Commonwealth.

Pennsylvania Endangered—A classification of plar species which are in danger of extinction throughou most or all of their natural range within this Commor wealth, if critical habitat is not maintained or if th species is greatly exploited by man. This classificatio also includes populations of plant species that have bee classified as Pennsylvania Extirpated, but which subse quently are found to exist in this Commonwealth.

Pennsylvania Extirpated—A classification of plant spe cies believed by the Department to be extinct within thi Commonwealth. The plants may or may not exis outside this Commonwealth. If plant species classified a Pennsylvania Extirpated are found to exist, the specie automatically will be considered to be classified a Pennsylvania Endangered.

Pennsylvania Rare—A classification of plant specie which are uncommon within this Commonwealth. Th species of native wild plants classified as Disjunct Endemic, Limit of Range and Restricted are include within the Pennsylvania Rare classification.

Pennsylvania Threatened—A classification of plan species which may become endangered throughout mos or all of their natural range within this Commonwealth if critical habitat is not maintained to prevent thei further decline in this Commonwealth, or if the species i greatly exploited by man.

Pennsylvania Vulnerable—A classification of plant spe cies which are in danger of population decline within thi Commonwealth because of their beauty, economic value

use as a cultivar or other factors which indicate that persons may seek to remove these species from their native habitats.

Restricted—A subclassification of plant species, which is composed of species that are found in specialized habitats or in habitats infrequent within this Commonwealth, although the species may be common outside of the State. The subclassification of Restricted is contained within the larger classification of Pennsylvania Rare.

Special Concern Population—A classification that is composed of colonies, groups or single individuals of a plant species that the Department has determined to be a unique occurrence deserving protection. Among the factors that may be used to classify a plant population within this category are the existence of unusual geographic locations, unisexual populations or extraordinarily diverse plant populations.

Tentatively Undetermined—A classification of plant species which are believed to be in danger of population decline, but which cannot presently be included within another classification due to taxonomic uncertainties, limited evidence within historical records or insufficient data.

Unlisted—Plant species which are native to this Commonwealth, presently capable of sustaining their populations successfully, not in need of protection currently and currently not included in classifications under this chapter.

Wild plants—Naturally occurring native flora, except those commonly considered an agricultural commodity, including green and nongreen species or subspecies, variety or a part, product, seed or progeny thereof.

§ 82.3. Classified plant taxonomy.

Nomenclature used to identify species taxonomy contained within Subchapter B is according to Kartesz, J. T. and Rosemarie Kartesz, 1980 *A Synonymized Checklist of the Flora of the U. S., Canada, and Greenland*, unless a different taxonomic source is indicated immediately following the scientific name.

Subchapter B. CLASSIFIED PLANTS

§ 82.11. Pennsylvania Extirpated.

Plant species classified as Pennsylvania Extirpated are as follows:

Scientific Name	*Common Name*
Aeschynomene virginica (L.) BSP	Sensitive Joint-Vetch
Agalinus decemloba (Greene) Pennell	Blue-Ridge False-Foxglove
Agrostis altissima (Walt.) Tuckerm.	Tall Bentgrass
Alopecurus carolinianus Walt.	Tufted Foxtail
Arctostaphylos uva-ursi (L.) Spreng.	Bearberry Manzanita
Asclepias rubra L.	Red Milkweed
Aster solidagineus Michx.	Narrow-Leaved White-Topped Aster
Astragalus neglectus (Torr. & Gray) Sheldon	Cooper's Milk-Vetch
Berberis canadensis P. Mill	American Barberry
Buchnera americana L.	Blue Hearts
Carex adusta Boott	Crowded Sedge
Carex aenea Fern.	Fernald's Hay Sedge
Carex alopecoidea Tuckerm.	Foxtail Sedge
Carex backii Boott	Rocky Mountain Sedge
Carex barrattii Schw. & Torr.	Barratt's Sedge
Carex chordorrhiza Ehrh. ex L.f.	Creeping Sedge
Carex hyalinolepis Steud.	Shore-Line Sedge
Carex mitchelliana M. A. Curtis	Mitchell's Sedge
Carex nigra (L.) Reich.	Black Sedge
Carex sartwellii Dewey	Sartwell's Sedge
Chamaecyparis thyoides (L.) B.S.P.	Atlantic White Cedar
Commelina erecta L.	Slender Day-Flower
Commelina virginica L.	Virginia Day-Flower
Coreopsis rosea Nutt.	Pink Tickseed
Crassula aquatica (L.) Schoenl.	Water Pigmy-Weed
Crotonopsis elliptica Willd.	Elliptical Rushfoil
Cyperus polystachyos Rottb.	Many-Spiked Flatsedge
Cypripedium candidum Muhl. ex Willd.	Small White Lady's-Slipper
Dichanthelium acuminatum var. *densiflorum* (Rand. & Redf.) Gould & Clark	Acuminate Dichanthelium
Dichanthelium leibergii (Vasey) Freckmann	Leiberg's Dichanthelium
Distichlis spicata (L.) Greene	Sea-Shore Salt-Grass
Draba reptans (Lam.) Fern.	Carolina Whitlow-Grass
Elatine americana (Pursh) Arn.	Long-Stemmed Water-Wort
Eleocharis compressa Sulliv. (Fernald, M. L., Gray's Manual of Botany, Eighth edition)	Flat-Stemmed Spike-Rush
Eleocharis tenuis var. *verrucosa* Svenson	Slender Spike-Rush
Eleocharis tricostata Torr.	Three-Ribbed Spike-Rush
Eleocharis tuberculosa (Michx.) R. & S.	Long-Tubercled Spike-Rush
Elodea schweinitzii (Planch.) Caspary	Schweinitz's Waterweed

Scientific Name	*Common Name*
Equisetum variegatum Schleich. ex Weber & C. Mohr	Variegated Horsetail
Erianthus giganteus (Walt.) Muhl.	Sugar Cane Plumegrass
Eriocaulon parkeri B. L. Robins.	Parker's Pipewort
Eryngium aquaticum L.	Marsh Eryngo
Eupatorium leucolepis (DC.) Torr & Gray	White-Bracted Thoroughwort
Euphorbia obtusata Pursh	Blunt-Leaved Spurge
Froelichia floridana (Nutt.) Moq.	Florida Cotton-Weed
Galactia regularis (L.) B.S.P.	Eastern Milk-Pea
Galactia volubilis (L.) Britt.	Downey Milk-Pea
Gentiana catesbaei Walt.	Elliott's Gentian
Gymnocarpium robertianum (Hoff.) Newm.	Limestone Oak Fern
Helianthus angustifolius L.	Swamp Sunflower
Hordeum pusillum Nutt.	Little Barley
Hottonia inflata Ell.	American Featherfoil
Hypericum adpressum Raf. ex Bart.	Creeping St. John's-Wort
Hypericum denticulatum Walt.	Coppery St. John's-Wort
Hypericum gymnanthum Engelm. & Gray	Clasping-Leaved St. John's-Wort
Hypericum stans (Michx.) P. Adams & Robson	St. Peter's-Wort
Ilex glabra (L.) Gray	Ink-Berry
Itea virginica L.	Virginia Willow
Juncus greenei Oakes & Tuckerm.	Greene's Rush
Juncus longii Fern.	Long's Rush
Koeleria cristata (L.) Pers.	Junegrass
Leiophyllum buxifolium (Berg.) Ell.	Sand-Myrtle
Lespedeza stuevei Nutt.	Tall Bush Clover
Limosella australis R.Br.	Awl-Shaped Mudwort
Linum sulcatum Riddell	Grooved-Yellow Flax
Lobelia nuttallii R. & S.	Nuttall's Lobelia
Ludwigia polycarpa Short & Peter	False Loosestrife Seedbox
Ludwigia sphaerocarpa Ell.	Spherical-Fruited Seedbox
Lycopodium sabinifolium Willd.	Fir Clubmoss
Lycopodium selago L.	Mountain Clubmoss
Matelea carolinensis (Jacq.) Woods.	Carolina Milkvine
Micranthemum micranthemoides (Nutt.) Wettst.	Nuttall's Mud-Flower
Mitella nuda L.	Naked Bishop's-Cap
Muhlenbergia capillaris (Lam.) Trin.	Short Muhly
Myriophyllum heterophyllum Michx.	Broad-Leaved Water-Milfoil
Onosmodium virginianum (L.) A. DC.	Virginia False-Gromwell
Phoradendron serotinum (Raf.) M. C. Johnston	Christmas Mistletoe
Platanthera cristata (Michx.) Lindl.	Crested Yellow Orchid
Platanthera dilatata (Pursh) Lindl. ex Beck	Leafy White Orchid
Platanthera leucophaea (Nutt.) Lindl.	Prairie White-Fringed Orchid
Polygala lutea L.	Yellow Milkwort
Populus heterophylla L.	Swamp Cottonwood
Potamogeton alpinus Balbis	Northern Pondweed
Potamogeton friesii Rupr.	Fries' Pondweed
Potamogeton obtusifolius Mert. & Koch	Blunt-Leaved Pondweed
Potamogeton praelongus Wulfen	White-Stemmed Pondweed
Potamogeton vaseyi Robbins	Vasey's Pondweed
Prenanthes racemosa Michx.	Glaucous Rattlesnake-Root
Proserpinaca pectinata Lam.	Comb-Leaved Mermaid-Weed
Prunus maritima Marsh.	Beach Plum
Ptilimnium capillaceum (Michx.) Raf.	Mock Bishop-Weed
Ranunculus hederaceus L.	Long-Stalked Crowfoot
Rhododendron calendulaceum (Michx.) Torr.	Flame Azalea
Rhynchospora fusca (L.) Ait.f.	Brown Beaked-Rush
Rhynchospora gracilenta Gray	Beaked-Rush
Ruellia carolinensis (Walt. ex J. F. Gmel.) Steud.	Carolina Petunia
Sabatia campanulata (L.) Torr.	Slender Marsh Pink
Sabatia stellaris Pursh	Sea Pink
Sagittaria stagnorum Small	An Arrow-Head
Scirpus heterochaetus Chase	Slender Bullrush
Scleria minor (Britt.) W. Stone	Minor Nutrush
Scleria reticularis Michx. var. *pubescens* Britt.	Reticulated Nutrush
Scutellaria serrata Andr.	Showy Skullcap
Sisyrinchium arenicola Bickn.	Sand Blue-Eyed Grass
Smilax pseudo-china L.	Long-Stalked Greenbrier
Solidago curtisii T. & G.	Curtis's Golden-Rod

Scientific Name	*Common Name*
Sparganium minimum (Hartm.) Fries	Small Bur-Reed
Spiraea virginiana Britt.	Virginia Spiraea
Spiranthes magnicamporum Sheviak	Ladies'-Tresses
Spiranthes vernalis Engelm. & Gray	Spring Ladies'-Tresses
Strophostyles leiosperma (P. & G.) Piper	Slick-Seeded Wild-Bean
Thalictrum steeleanum Boivin	Steele's Meadow-Rue
Trifolium reflexum L.	Buffalo Clover
Triglochin maritima L.	Sea-side Arrowgrass
Triglochin palustre L.	Marsh Arrowgrass
Utricularia fibrosa Walt.	Fibrous Bladderwort
Utricularia inflata Walt.	Floating Bladderwort
Utricularia resupinata B. D. Greene	Northeastern Bladderwort
Vitis rupestris Scheele	Sand Grape

§ 82.12. Pennsylvania Endangered.

Plant species classified as Pennsylvania Endangered are as follows:

Scientific Name	*Common Name*
Aconitum reclinatum Gray	White Monkshood
Alnus viridis (Chaix) DC. ssp. *crispa* (Ait.) Turrill	Mountain Alder
Amelanchier bartramiana (Tausch) M. Roemer	Oblong-Fruited Serviceberry
Anemone cylindrica Gray	Long-Fruited Anemone
Arabis missouriensis Greene	Missouri Rock-Cress
Arethusa bulbosa L.	Swamp-Pink
Arnica acualis (Walt.) B.S.P.	Leopard's-Bane
Artemisia campestris ssp. *caudata* (Michx.) Hall & Clements	Beach Wormwood
Asplenium resiliens Kunze	Black-Stemmed Spleenwort
Aster spectabilis Ait.	Low Showy Aster
Carex alata Torr.	Broad-Winged Sedge
Carex aurea Nutt.	Golden-Fruited Sedge
Carex bebbii (Bailey) Fern.	Bebb's Sedge
Carex bullata Schk.	Bull Sedge
Carex careyana Dewey	Carey's Sedge
Carex collinsii Nutt.	Collin's Sedge
Carex complanata Torr. & Hook.	Hirsute Sedge
Carex crinita var. *brevicrinis*	Short Hair Sedge
Carex diandra Schrank	Lesser Panicled Sedge
Carex eburnea Boott	Ebony Sedge
Carex formosa Dewey	Handsome Sedge
Carex garberi Fern.	Elk Sedge
Carex geyeri Boott	Geyer's Sedge
Carex polymorpha Muhl.	Variable Sedge
Carex pseudocyperus L.	Cyperus-Like Sedge
Carex viridula Michx.	Green Sedge
Cerastium arvense (L.) var. *villosissimum* Pennell	Mouse-Ear Chickweed
Chasmanthium laxum (L.) Yates	Slender Sea-Oats
Chrysogonum virginianum L.	Green-and-Gold
Clematis viorna L.	Vase-Vine Leather-Flower
Clethra acuminata Michx.	Mountain Pepper-Bush
Cryptogramma stelleri (S.G.Gmel.) Prantl.	Slender Rock-Brake
Cymophyllus fraseri (Andr.) Mackenzie	Fraser's Sedge
Cyperus engelmannii Steud.	Engelmann's Flatsedge
Cyperus houghtonii Torr.	Houghton's Flatsedge
Cyperus refractus Engelm. ex Steud.	Reflexed Flatsedge
Cyperus retrorsus Chapm.	Retrorse Flatsedge
Cypripedium parviflorum Salisb.	Small Yellow Lady's-Slipper
Delphinium exaltatum Ait.	Tall Larkspur
Desmodium humifusum (Muhl.) Beck	Trailing Tick Trefoil
Diarrhena americana Beauv.	American Beakgrain
Dicentra eximia (Ker-Gwal.) Torr.	Wild Bleeding-Hearts
Dodecatheon meadia L.	Common Shooting-Star
Echinochloa walteri (Pursh) Heller	Walter's Barnyard-Grass
Eleocharis elliptica Kunth	Slender Spike-Rush
Eleocharis obtusa var. *peasei* Svenson	Wright's Spike-Rush
Eleocharis parvula (Roemer & Schultes) Link	Little-Spike Spike-Rush
Eleocharis pauciflora var. *fernaldii* Svens.	Few-Flowered Rush
Eleocharis quadrangulata (Michx.) R. & S.	Four-Angled Spike-Rush
Eleocharis rostellata Torr.	Beaked Spike-Rush

Scientific Name	*Common Name*
Eriophorum tenellum Nutt.	Rough Cotton-Grass
Euphorbia ipecacuanhae L.	Wild Ipecac
Euphorbia purpurea (Raf.) Fern.	Glade Spurge
Festuca paradoxa Desv.	Cluster Fescue
Fimbristylis puberula (Michx.) Vahl	Hairy Fimbry
Galium labradoricum (Wieg.) Wieg.	Labrador Marsh Bedstraw
Gaylussacia dumosa (Andr.) Torr. & Gray	Dwarf Huckleberry
Glyceria obtusa (Muhl.) Trin.	Blunt Manna-Grass
Gymnopogon ambiguus (Michx.) B.S.P.	Broad-Leaved Beardgrass
Hemicarpha micrantha (Vahl) Britt.	Common Hemicarpha
Hierochloe odorata (L.) Beauv.	Vanilla Sweet-Grass
Iris cristata Soland.	Crested Dwarf Iris
Iris prismatica Pursh	Slender Blue Iris
Isotria medeoloides (Pursh) Raf.	Small-Whorled Pogonia
Juncus dichotomus Ell.	Forked Rush
Juncus gymnocarpus Cov.	Coville's Rush
Juncus militaris Bigel.	Bayonet Rush
Ligusticum canadense (L.) Britt.	Nondo Lovage
Listera australis Lindl.	Southern Twayblade
Listera cordata (L.) R.Br.	Heart-Leaved Twayblade
Listera smallii Wieg.	Kidney-Leaved Twayblade
Lithospermum caroliniense (Walt. ex J. F., Gmel.) MacM.	Hispid Gromwell
Lobelia kalmii L.	Brook Lobelia
Lonicera oblongifolia (Goldie) Hook.	Swamp Fly Honeysuckle
Lycopodium porophilum Lloyd & Underwood	Rock Clubmoss
Lythrum hyssopifolia L.	Hyssop Loosestrife
Marshallia grandiflora Beadle & F. E. Boynton	Large-Flowered Marshallia
Megalodonta beckii (Torr. ex Spreng.) Greene	Beck's Water-Marigold
Montia chamissoi (Ledeb. ex Spreng.) Greene	Chamisso's Miner's-Lettuce
Myriophyllum exalbescens Fern.	Northern Water-Milfoil
Nelumbo lutea (Willd.) Pers.	American Lotus
Onosmodium hispidissimum Mackenzie	False Gromwell
Pachistima canbyi Gray	Canby's Mountain-Lover
Panicum amarum Ell. var. *amarulum* (A. S. Hitchc. & Chase) P. G. Palmer	Southern Sea-Beach Panic-Grass
Phlox subulata L. ssp. *brittonii* (Small) Wherry	Moss Pink
Poa autumnalis Muhl. ex Ell.	Autumn Bluegrass
Poa paludigena Fern. & Wieg.	Bog Bluegrass
Polemonium vanbruntiae Britt.	Jacob's-Ladder
Polygala curtissii Gray	Curtis's Milkwort
Polygala incarnata L.	Pink Milkwort
Populus balsamifera L.	Balsam Poplar
Potamogeton hillii Morong	Hill's Pondweed
Potamogeton pulcher Tuckerm.	Spotted Pondweed
Potamogeton richardsonii (Benn.) Rydb.	Red-Head Pondweed
Potamogeton tennesseensis Fern.	Tennessee Pondweed
Potentilla fruticosa L.	Shrubby Cinquefoil
Potentilla paradoxa Nutt. ex Torr. & Gray	Bushy Cinquefoil
Potentilla tridentata (Soland) Ait.	Three-Toothed Cinquefoil
Prunus nigra Ait.	Canada Plum
Pycnanthemum pycnanthemoides (Leavenw.) Fern.	Southern Mountain-Mint
Quercus falcata Michx.	Spanish Oak
Quercus phellos L.	Willow Oak
Quercus shumardii Buckl.	Shumard's Oak
Rhexia mariana L.	Maryland Meadow-Beauty
Rhynchospora capillacea Torr.	Capillary Beaked-Rush
Ribes missouriense Nutt. ex Torr. & Gray	Missouri Gooseberry
Ruellia humilis Nutt.	Fringed-Leaved Petunia
Sagittaria calycina Engelm. var. *spongiosa* Engelm.	Arrow-Head
Salix amygdaloides Anderss.	Peach-Leaved Willow
Salix serissima (Bailey) Fern.	Autumn Willow
Scheuchzeria palustris L.	Pod-Grass
Scirpus acutus Muhl. ex Bigelow	Hard-Stemmed Bullrush
Scirpus ancistrochaetus Schuyler	Northeastern Bullrush
Scirpus smithii Gray	Smith's Bullrush
Scirpus torreyi Olney	Torrey's Bullrush
Scleria verticillata Muhl. ex Willd.	Whorled Nutrush
Sedum rosea (L.) Scop.	Roseroot Stonecrop

Scientific Name	*Common Name*
Senecio antennariifolius Britt.	Cat's-Paw Ragwort
Sheperdia canadensis (L.) Nutt.	Canada Buffalo-Berry
Sida hermaphrodita (L.) Rusby	Sida
Solidago spathulata ssp. *randii* var. *racemosa* (Greene) Gleason	Sticky Golden-Rod
Spiranthes ovalis Lindl.	October Ladies'-Tresses
Spiranthes romanzoffiana Cham.	Hooded Ladies'-Tresses
Sporobolus clandestinus (Biehler) A. S. Hitchc.	Rough Dropseed
Sporobolus heterolepis (Gray) Gray	Prairie Dropseed
Stachys nuttallii Shuttlw. ex Benth	Nuttall's Hedge-Nettle
Taenida montana (Mackenzie) Cronq.	Mountain Pimpernel
Tomanthera auriculata (Michx.) Raf.	Eared False-Foxglove
Trichostema setaceum Houtt.	Blue-Curls
Trifolium virginicum Small	Kate's Mountain Clover
Triphora trianthophora (Sw.) Rydb.	Nodding Pogonia
Triplasis purpurea (Walt.) Chapm.	Purple Sandgrass
Trollius laxus Salisb.	Spreading Globe-Flower
Viola brittoniana Pollard	Coast Violet
Vitis novae-angliae Fern.	A Grape

§ 82.13. Pennsylvania Threatened.

Plant species classified as Pennsylvania Threatened are as follows:

Scientific Name	*Common Name*
Ammophila breviligulata Fern.	American Beachgrass
Aristida purpurascens Poir	Arrow-Feather Three-Awned Grass
Asplenium bradleyi D. C. Eat.	Bradley's Spleenwort
Aster depauperatus (Porter) Fern.	Serpentine Aster
Bidens bidentoides (Nutt.) Britt.	Swamp Beggar-Ticks
Carex aquatilis Wahlenb.	Water Sedge
Carex flava L.	Yellow Sedge
Carex paupercula Michx.	Bog Sedge
Carex schweinitzii Dewey ex Schwein.	Schweinitz's Sedge
Carex sterilis Willd.	Atlantic Sedge
Carex tetanica Schk.	Wood's Sedge
Carex wiegandii Mackenzie	Wiegand's Sedge
Chamaesyce polygonifolia (L.) Small	Small Sea-Side Spurge
Cladium mariscoides (Muhl.) Torr.	Twig Rush
Cyperus diandrus Torr.	Umbrella Flatsedge
Cypripedium reginae Walt.	Showy Lady's-Slipper
Dodecatheon amethystinum (Fassett) Fassett	Jeweled Shooting-Star
Eleocharis intermedia Schultes	Matted Spike-Rush
Erigenia bulbosa (Michx.) Nutt.	Harbinger-of-Spring
Eriophorum viridicarinatum (Engelm) Fern.	Thin-Leaved Cotton-Grass
Gaylussacia brachycera (Michx.) Gray	Box Huckleberry
Helianthemum bicknellii Fern.	Bicknell's Hoary Rockrose
Heteranthera multiflora	Mud-Plantain
Hypericum majus (Gray) Britt.	Larger Canadian St. John's-Wort
Iris verna L.	Dwarf Iris
Juncus alpinus Vill.	Richardson's Rush
Juncus torreyi Cov.	Torrey's Rush
Lathyrus japonicus Willd. var. *glaber* (Ser.) Fern.	Beach Peavine
Oenothera argillicola Mackenzie	Shale-Barren Evening-Primrose
Potamogeton confervoides Reichenb.	Tuckerman's Pondweed
Potamogeton zosteriformis Fern.	Flat-Stemmed Pondweed
Potentilla anserina L.	Silverweed
Salix candida Flugge ex Willd.	Hoary Willow
Spiraea betulifolia Pall. ssp. *corymbosa* (Raf.) Taylor & MacBryde	Dwarf Spiraea
Talinum teretifolium Pursh	Round-Leaved Fame-Flower
Viola appalachiensis Henry	Appalachian Blue Violet

§ 82.14. Pennsylvania Rare.

Plant species classified as Pennsylvania Rare are as follows:

Scientific Name	*Common Name*
Aconitum uncinatum L.	Blue Monkshood
Alisma plantago-aquatica L. var. *americana* Schultes & Schultes	Broad-Leaved Water-Plantain

Scientific Name	*Common Name*
Amaranthus cannabinus (L.) Sauer	Waterhemp Ragweed
Ammannia coccinea Rottb.	Scarlet Ammannia
Andromeda polifolia L.	Bog-Rosemary
Aplectrum hyemale (Muhl. ex Willd.) Nutt.	Puttyroot
Aster ericoides L.	White Heath Aster
Baccharis halimifolia L.	Eastern Baccharis
Boltonia asteroides (L.) L'Her.	Aster-like Boltonia
Bouteloua curtipendula (Michx.) Torr.	Tall Gramma
Cakile edentula (Bigel.) Hook.	American Sea-Rocket
Camassia scilloides (Raf.) Cory	Wild Hyacinth
Carex bicknellii Britt.	Bicknell's Sedge
Carex oligosperma Michx.	Few-Seeded Sedge
Castanea pumila (L.) P. Mill	Allegheny Chinkapin
Cimicifuga americana Michx.	Mountain Bugbane
Cirsium horridulum Michx.	Horrible Thistle
Collinsia verna Nutt.	Spring Blue-Eyed Mary
Cyperus schweinitzii Torr.	Schweinitz's Flatsedge
Cyperus tenuifolius (Steud.) Dandy	Thin-Leaved Flatsedge
Desmodium sessilifolium (Torr.) Torr. & Gray	Sessile-Leaved Tick-Trefoil
Dichanthelium scoparium (Lam.) Gould	Velvety Dichanthelium
Dichanthelium xanthophysum (Gray) Freckmann	Slender Dichanthelium
Digitaria cognatum (Schultes) Pilger	Fall Witch-Grass
Dryopteris campyloptera (Kunze) Clarkson	Mountain Wood Fern
Eleocharis robbinsii Oakes	Robbins' Spike-Rush
Fimbristylis annua (All.) R. & S.	Annual Fimbry
Gaultheria hispidula (L.) Muhl. ex Bigelow	Creeping Snowberry
Goodyera tesselata Lodd.	Checkered Rattlesnake-Plantain
Hibiscus laevis All.	Showy Hibiscus
Ilex opaca Ait.	American Holly
Iodanthus pinnatifidus (Michx.) Steud.	Purple Rocket
Juncus balticus Willd.	Baltic Rush
Juncus brachycephalus (Engelm.) Buch.	Small-Headed Rush
Juncus filiformis L.	Thread Rush
Ledum groenlandicum Oeder	Common Labrador-Tea
Lobelia dortmanna L.	Water Lobelia
Lobelia puberula Michx.	Downy Lobelia
Lupinus perennis L.	Lupine
Luzula bulbosa (Wood) Rydb.	Common Wood-Rush
Lygodium palmatum (Bernh.) Sw.	Hartford Fern
Lyonia mariana (L.) D. Don	Stagger-Bush
Magnolia tripetala (L.) L.	Umbrella Magnolia
Monarda punctata L.	Spotted Bee-Balm
Muhlenbergia uniflora (Muhl.) Fern.	Fall Dropseed Muhly
Myrica gale L.	Sweet Bayberry
Myrica heterophylla Raf.	Evergreen Bayberry
Myriophyllum farwellii Morong.	Farwell's Water-Milfoil
Myriophyllum tenellum Bigel.	Slender Water-Milfoil
Nymphoides cordata (Ell.) Fern.	Floating-Heart
Opuntia humifusa (Raf.) Raf.	Prickly-Pear Cactus
Oryzopsis pungens (Torr. ex Spreng.) A. S. Hitchc.	Slender Mountain-Ricegrass
Parnassia glauca Raf.	Carolina Grass-of-Parnassus
Phyllanthus caroliniensis Walt.	Carolina Leaf-Flower
Pilea fontana (Lunnell) Rydb.	Lesser Clearweed
Polygala cruciata L.	Cross-Leaved Milkwort
Polygonum ramosissimum Michx.	Bushy Knotweed
Polystichum braunii (Spenner) Fee	Braun's Holly Fern
Ptelea trifoliata L.	Common Hop-Tree
Pycnanthemum torrei Benth.	Torrey's Mountain-Mint
Pyrularia pubera Michx.	Buffalo-Nut
Ranunculus micranthus (Gray) Nutt. ex Torr. & Gray	Small-Flowered Crowfoot
Rhododendron atlanticum (Ashe) Rehd.	Dwarf Azalea
Rotala ramosior (L.) Koehne	Tooth-Cup
Rumex hastatulus Baldw. ex Ell.	Heart-Winged Sorrell
Sagittaria subulata (L.) Buch.	Subulata Arrow-Head
Scirpus fluviatilis (Torr.) Gray	River Bullrush
Scleria pauciflora Muhl. ex Willd.	Few Flowered Nutrush
Sedum telephioides Michx.	Allegheny Stonecrop
Senecio anonymus Wood	Plain Ragwort
Senecio plattensis Nutt.	Prairie Ragwort

Scientific Name	*Common Name*
Sisyrinchium atlanticum Bickn.	Eastern Blue-Eyed Grass
Solidago erecta Pursh	Slender Golden-Rod
Solidago roanensis Porter	Tennessee Golden-Rod
Sporobolus cryptandrus (Torr.) Gray	Sand Dropseed
Stachys hyssopifolia Michx.	Hyssop Hedge-Nettle
Thalictrum coriaceum (Britt.) Small	Thick-Leaved Meadow-Rue
Tipularia discolor (Pursh) Nutt.	Cranefly Orchid
Trautvetteria caroliniensis (Walt.) Vail	Carolina Tassel-Rue
Trillium nivale Riddell	Snow Trillium
Utricularia purpurea Walt.	Purple Bladderwort
Viola renifolia Gray	Kidney-Leaved White Violet
Zizania aquatica L.	Indian Wild Rice

§ 82.15. Pennsylvania Vulnerable.

Plant species classified as Pennsylvania Vulnerable are as follows:

Scientific Name	*Common Name*
Hydrastis canadensis L.	Golden-Seal
Panax quinquefolius L.	Ginseng

§ 82.16. Disjunct.

Plant species subclassified as Disjunct are contained within the larger classification of Pennsylvania Rare. As of January 1, 1988, no plant species have been listed solely within the subclassification of Disjunct.

§ 82.17. Endemic.

Plant species subclassified as Endemic are contained within the larger classification of Pennsylvania Rare. As of January 1, 1988, no plant species have been listed solely within the subclassification of Endemic.

§ 82.18. Restricted.

Plant species subclassified as Restricted are contained within the larger classification of Pennsylvania Rare. As of January 1, 1988, no plant species have been listed solely within the subclassification of Restricted.

§ 82.19. Limit of Range.

Plant species subclassified as Limit of Range are contained within the larger classification of Pennsylvania Rare. As of January 1, 1988, no plant species have been listed solely within the subclassification of Limit of Range.

§ 82.20. Special Concern Population.

As of January 1, 1988, no plant species have been listed solely within the classification of Special Concern Population.

§ 82.21. Tentatively Undetermined.

Plant species classified as Tentatively Undetermined are as follows:

Scientific Name	*Common Name*
Agalinis fasciculata (Ell.) Raf.	Fascicled False-Foxglove
Agalinis obtusifolia Raf.	False-Foxglove
Agalinis paupercula (Gray) Britt.	Small-Flowered False-Foxglove
Agrimonia microcarpa Wallr.	Small-Fruited Agrimony
Ambrosia psilostachya DC.	Naked-Spiked Ambrosia
Amelanchier humilis Wieg.	Low Serviceberry
Amelanchier obovalis (Michx.) Ashe	Coastal Juneberry
Amelanchier sanguinea (Pursh) DC.	Roundleaf Serviceberry
Antennaria solitaria Rydb.	Single-Headed Pussy-Toes
Arabis hirsuta (L.) Scop.	Western Hairy Rock-Cress
Arceuthobium pusillum M. E. Peck	Dwarf Mistletoe
Aristida curtissii (Gray) Nash	Poverty Grass
Aristolochia macrophylla Lam.	Pipevine
Aster firmus Nees	Firm Aster
Aster novi-belgii L.	Long-Leaved Aster
Atriplex littoralis L.	Seashore Orach
Cardamine pratensis L.	Cuckooflower
Carex atherodes Spreng.	Awned Sedge
Carex crawfordii Fern.	Crawford's Sedge
Carex cryptolepsis Mackenzie	A Sedge
Carex disperma Dewey	A Sedge
Carex longii Mackenzie	Long's Sedge
Carex meadii Dewey	Mead's Sedge
Carex mesochorea Mackenzie	Midland Sedge
Carex pauciflora Lightf.	A Sedge

Scientific Name	*Common Name*
Carex retrorsa Schwein.	Backward Sedge
Carex typhina Michx.	Cat-Tail Sedge
Cassia marilandica L.	Wild Senna
Chasmanthium latifolium (Michx.) Yates	Wild Oat
Chenopodium foggii Wahl	Fogg's Goosefoot
Chenopodium strictum Roth ssp. *glaucophyllum* (Aellen) Aellen	Goosefoot
Chrysopsis mariana (L.) Ell.	Maryland Golden-Aster
Clitoria mariana L.	Butterfly-Pea
Conioselinum chinense (L.) B.S.P.	Hemlock-Parsley
Corallorhiza wisteriana Conrad	Spring Coral-Root
Coreopsis major Walt.	Wood Tickseed
Cuscuta cephalanthii Engelm.	Button-Bush Dodder
Cuscuta corylii Engelm.	Hazel Dodder
Cuscuta polygonorum Engelm.	Smartweed Dodder
Cynanchum laeve (Michx.) Pers.	Smooth Swallow-Wort
Cynoglossum boreale Fern.	Northern Hound's-Tongue
Desmodium glabellum (Michx.) DC.	Tall Tick-Clover
Desmodium nuttallii (Schindl.) Schub.	Nuttall's Tick-Clover
Dichanthelium longiligulatum	A Panic Grass
Dichanthelium sabulorum var. *patulum* (Scribn. & Merr.) Gould & Clark	A Panic Grass
Dichanthelium scabriusculum (Ell.) Gould & Clark	A Panic Grass
Diodia virginiana L.	Larger Buttonweed
Dracocephalum parviflorum Nutt.	American Dragonhead
Elatine minima (Nutt.) Fisch. & Mey	Small Waterwort
Elephantopus carolinianus Raeusch.	Elephant's-Foot
Ellisia nyctelea L.	Ellisia
Epilobium palustre L.	Marsh Willow-Herb
Epilobium strictum Muhl.	Downey Willow-Herb
Eupatorium album L.	White Thoroughwort
Eupatorium rotundifolium L.	A Eupatorium
Euthania tenuifolia (Pursh) Greene	Grass-Leaved Golden-Rod
Frasera caroliniensis Walt.	American Columbo
Gentiana alba Muhl.	Yellow Gentian
Gentiana villosa L.	Striped Gentian
Geranium bicknellii Britt.	Cranesbill
Glyceria borealis (Nash) Batchelder	Butchelder
Hedyotis purpurea (L.) Torr. & Gray	Purple Bluet
Hydrocotyle umbellata L.	Many-Flowered Pennywort
Hydrophyllum macrophyllum Nutt.	Large-Leaved Water-Leaf
Hypericum densiflorum Pursh	Bushy St. John's-Wort
Hypericum drummondii (Grev. & Hook) Torr. & Gray	Nits-and-Lice
Juncus scirpoides Lam.	Scirpus-Like Rush
Lathyrus ochroleucus Hook.	Wild Pea
Lathyrus palustris L.	Vetchling
Lemna valdiviana Philippi	Pale Duckweed
Lespedeza capitata var. *capitata* Michx.	Round-Headed Bush-Clover
Leucothoe racemosa (L.) Gray	Swamp Dog-Hobble
Liatris scariosa (L.) Willd. var. *nieuwlandii* Lunell	Gay-Feather
Linnaea borealis L.	Twinflower
Linum intercursum Bickn.	Sandplain Wild Flax
Lithospermum latifolium Michx.	American Gromwell
Lonicera hirsuta Eat.	Hairy Honeysuckle
Lonicera villosa (Michx.) Roemer & Schultes	Mountain Fly Honeysuckle
Lycopodium appressum (Chapman) Lloyd & Underwood	A Clubmoss
Lycopus rubellus Moench	Taper-Leaved Bugle-Weed
Magnolia virginiana L.	Sweet Bay Magnolia
Malaxis brachypoda (Gray) Fern.	White Adder's-Mouth
Matelea obliqua (Jacq.) Woods.	Oblique Milkvine
Melica nitens (Scribn.) Nutt. ex Piper	Three-Flowered Melic
Menziesia pilosa (Michx.) Juss.	Minniebush
Minuartia glabra (Michx.) Mattf.	Appalachian Sandwort
Najas gracillima (A. Braum) Magnus	Bushy Naiad
Najas guadalupensis (Spreng.) Mangus	A Naiad
Najas marina L.	Holly-Leaved Naiad
Nuphar luteum (L.) Sibthorp & Sm. ssp. *pumilum* (Timm) E. O. Beal	Yellow Cowlily

Scientific Name	*Common Name*
Oenothera pilosella Raf.	Evening-Primrose
Ophioglossum vulgatum var. *pycnostichum* Fern.	Adders Tongue
Oxydendrum arboreum (L.) DC.	Sourwood
Paronychia fastigiata var. *nuttallii* (Small) Fern.	Whitlow Wort
Paronychia fastigiata var. *paleacea* Fern.	Chaffy Whitlow Wort
Parthenium intergrifolium L.	American Fever-Few
Paspalum floridanum var. *glabratum* Engelm. ex Vasey	Florida Beadgrass
Paspalum laeve var. *pilosum* Scribn.	Field Beadgrass
Paspalum setaceum Michx.	Slender Beadgrass
Passiflora lutea L.	Passion-flower
Phlox ovata L.	Mountain Phlox
Phyla lanceolata (Michx.) Greene	Lance Fog-Fruit
Physalis virginiana P. Mill.	Virginia Ground-Cherry
Platanthera hyperborea (L.) Lindl.	Leafy Northern Green Orchid
Platanthera peramoena (Gray) Gray	Purple-Fringeless Orchid
Pluchea camphorata (L.) DC.	Common Camphorweed
Polygonum careyi Olney	Smartweed
Polygonum robustius (Small) Fern.	Robust Smartweed
Potamogeton gramineus L.	Grassy Pondweed
Potamogeton strictifolius Benn.	Straight-Leafed Pondweed
Prenanthes crepidinea Michx.	Crepis Rattlesnake-Root
Prunus pumila L.	Sand Cherry
Pycnanthemum pilosum Nutt.	Hairy Mountain-Mint
Ranunculus fascicularis Muhl. ex Bigelow	Yellow Water Crowfoot
Ranunculus longirostre Godr.	White Water Crowfoot
Ranunculus trichophyllus (Chaix.) ex Vill.	White Water Crowfoot
Ratibida pinnata (Vent.) Barnh.	Gray-Headed Prairie Coneflower
Rhamnus lanceolata Pursh	Lanceolate Buckthorn
Ribes lacustre (Pers.) Poir	Swamp Currant
Ribes triste Pallas	Red Currant
Rorippa palustris (L.) Bess. var. *palustris*	Yellow Cress
Rosa virginiana P. Mill.	Virginia Rose
Ruellia strepens L.	Limestone Petunia
Salvia reflexa Hornem.	Lance-Leaved Sage
Saxifraga micranthidifolia (Haw.) Steud.	Lettuce Saxifrage
Scutellaria saxatilis Riddell	Rock Skullcap
Sisyrinchium albidum Raf.	Blue-Eyed Grass
Solidago arguta Ait. var. *harrissii* (Steele) Cronq.	Harris' Golden-Rod
Solidago purshii Porter	Pursh's Golden-Rod
Sparganium androcladum (Engelm.) Morong	Branching Bur-Reed
Spiranthes tuberosa Raf.	Little Ladies'-Tresses
Spirodela punctata (Mey.) C. H. Thompson	Eastern Water-Flaxseed
Trillium flexipes Raf.	Declined Trillium
Ultricularia gibba L.	Humped Bladderwort
Utricularia intermedia Hayne	Flat-Leaved Bladderwort
Utricularia minor L.	Lesser Bladderwort
Uvularia puberula Michx.	Mountain Bellwort
Vernonia glauca (L.) Willd.	Tawney Ironweed
Veronica catenata Pennell	Pennell's Speedwell
Viburnum nudum L.	Possum Haw Viburnum
Viola nephrophylla Greene	Northern Bog Violet
Viola pedatrifida G. Don	Prairie Violet
Viola tripartita Ell.	Three-Parted Violet
Wolffia braziliensis Weddell	Pointed Water-Meal
Wolffiella gladiata (Hegelm.) Hegelm.	Bog-Mat
Xyris montana Ries	Yellow Eyed Grass

Subchapter C. UNLAWFUL CONDUCT

§ 82.31. General restrictions regarding threatened or endangered species.

(a) No person, other than the landowner, a person having a bona fide property interest in the affected land or Bureau of Forestry personnel in the performance of their official duties, may disturb, pick, take, possess, destroy, mutilate, remove, collect or transplant plants classified as Pennsylvania Endangered or Pennsylvania Threatened, except as otherwise provided in this chapter.

(b) No person may transport with the intent to sell, sell or export plants classified as Pennsylvania Endangered or Pennsylvania Threatened.

§ 82.32. Plants in State parks and State forest lands.

No person may disturb, pick or take wild plants from State parks and State forest lands, except as provided

by this chapter, Chapter 31 (relating to general provisions), Chapter 51 (relating to general provisions) and Chapter 52 (relating to State forest picnic areas).

§ 82.33. General restrictions regarding vulnerable plants.

(a) No person, other than the landowner, a person having a bona fide interest in the affected land or Bureau of Forestry personnel in the performance of their official duties, may disturb, pick, take or possess plants classified as Pennsylvania Vulnerable, except as otherwise provided in this chapter.

(b) No person may buy, trade or barter plants classified as Pennsylvania Vulnerable, or parts thereof, with the intent to sell them within this Commonwealth, or export them from this Commonwealth, except as otherwise provided in this chapter.

§ 82.34. Restrictions regarding private wild plant sanctuaries.

No person, other than the landowner or a person having a bona fide property interest in the affected land, may willfully adversely alter or destroy the local ecosystem of a private wild plant sanctuary.

§ 82.35. Compliance with regulations.

Violation of this chapter is punishable as provided in the act and § 82.91 (relating to penalties).

Subchapter D. WILD PLANT MANAGEMENT PERMITS

§ 82.41. General requirements for a permit.

(a) No person, other than the landowner, a person having a bona fide property interest in the affected land or Bureau of Forestry personnel in the performance of their official duties, may remove, collect or transplant wild plants classified as Pennsylvania Endangered or Pennsylvania Threatened, unless the person has first applied for and obtained a wild plant management permit in writing from the Department.

(b) It is lawful to continue to possess Pennsylvania Endangered and Pennsylvania Threatened plant species that the holder has verified to the Department as being collected prior to January 1, 1988.

§ 82.42. Permit activities.

(a) The Department may issue permits to remove, collect or transplant wild plants classified as Pennsylvania Endangered or Pennsylvania Threatened, for the following activities:

(1) To conduct botanical and taxonomic studies.

(2) To transplant Pennsylvania Endangered or Pennsylvania Threatened wild plants from land areas threatened by future land development, surface mining, agricultural encroachment or other activities into public or private wild plant sanctuaries, to help assure their perpetuation as members of ecosystems.

(3) To transplant Pennsylvania Endangered or Pennsylvania Threatened wild plants into designated public and private wild plant sanctuaries to enhance their numbers or to restore their natural range.

(b) The holder of a valid wild plant management permit is permitted to disturb, pick, take and possess wild plants classified as Pennsylvania Endangered or Pennsylvania Threatened, if the activities are necessary to perform the activity for which the wild plant management permit is issued.

§ 82.43. Compliance with permit.

A holder of a wild plant management permit shall act in compliance with the terms and conditions of the permit, the requirements of the act and this chapter and other applicable State law.

§ 82.44. Permit application contents.

(a) An application for a wild plant management permit under this subchapter shall be submitted to the Department in writing, upon forms to be provided by the Department.

(b) An application for a permit shall be accompanied by information such as maps, plans, specifications and other data as the Department may require in order to determine compliance with the standards, requirements and purposes of this chapter.

(c) Information set forth in the application shall be current, presented clearly and concisely and supported by appropriate references to technical or other written material made available to the Department.

(d) An application for a wild plant management permit shall contain the following information:

(1) The name, address and phone number of the applicant.

(2) A description of the activity for which the permit is sought.

(3) The plant species to be affected by the activity.

(4) The geographic locations of the activity.

(5) Written consent of the landowner.

(6) Documentation of the applicant's botanical knowledge, experience and credentials.

(7) Wild plant management permit history, including the identification numbers of previous wild plant management permits that have been issued to the applicant.

(8) Other information the Department may require.

(e) An application for a permit shall be signed and verified by the applicant with a statement that the information contained in the application is true and correct to the best of the applicant's knowledge, information and belief.

§ 82.45. Permit fee; expiration of permit.

(a) An application for a wild plant management permit shall be accompanied by a check for $5 payable to the "Commonwealth of Pennsylvania."

(b) A wild plant management permit remains valid for 1 year following the date of permit issuance.

§ 82.46. Criteria for approval of a wild plant management permit.

No application for a wild plant management permit will be approved unless the application affirmatively demonstrates, and the Department, in writing, finds the following:

(1) Potential threats exist to harm the wild plant population's ability to perpetuate itself, and the habitat into which the plants will be transplanted is suitable or there is a justifiable need for collection of the wild plants for taxonomic and botanical studies.

(2) The applicant's botanical knowledge and experience are sufficient to enable the applicant to carry out the activity applied for on the application.

(3) The application is accurate and complete and the requirements of the act and this subchapter have been satisfied.

(4) There is no history of past or continuing violations or conduct which indicate the applicant's lack of ability or intention to comply with the act or this chapter.

(5) The proposed activity will not affect the continued existence of, or destroy or adversely modify, the critical habitat of wild plants classified as Pennsylvania Endangered or Pennsylvania Threatened.

(6) The proposed activity will perpetuate wild plants as members of ecosystems, enhance the numbers of the wild plants, restore the range of the wild plants or add to scientific knowledge.

(7) The assessment of the probable cumulative impacts of the activity indicate that the approval of the activity will be in the best interests of wild plant management.

§ 82.47. Conditions of permit.

(a) The permittee shall carry the wild plant management permit during the removal, collection or transplanting of wild plants, and shall present the permit for inspection upon request by a person authorized to enforce the act.

(b) The permittee shall report the results of the activity to the Department. The reports shall state the following:

(1) The method of specimen identification or transplanting procedure.

(2) The results of the activity.

(3) The problems encountered with the activity.

(4) The wild plant management permit number.

(c) The permittee shall submit a report of the results of transplanting activity to the Department, by October 31 next following the calendar year in which the transplanting was effected.

(d) The permittee shall submit a report of removal and collection activities performed for taxonomic studies to the Department within 60 days following the permitted activity.

§ 82.48. Reporting of new information.

The permittee shall notify the Department of changes in facts or information stated in the application. Based upon the notice, the Department may require a new permit or take other appropriate action.

§ 82.49. Transfer of permit prohibited.

A wild plant management permit is nontransferable.

§ 82.50. Revocation.

(a) The Department may revoke a wild plant management permit for good cause. Good cause includes, but is not limited to, the following factors:

(1) Failure to comply with this chapter or the act.

(2) Failure to comply with a term or condition of the permit.

(3) Changes in the circumstances described in the application for the permit which indicate that the activity no longer is in the best interests of wild plant management.

(b) A person whose permit has been revoked for the reasons listed in subsection (a)(1) and (2) is not eligible to apply for, and may not obtain, another wild plant management permit for a period of 2 years from the date of revocation.

SUBCHAPTER E. VULNERABLE PLANTS

§ 82.61. Commercial license requirements.

No person may buy, trade or barter Pennsylvania Vulnerable plants, or parts thereof, with the intent to sell them within this Commonwealth, or export these plants or parts from this Commonwealth, without first applying for and obtaining a commercial license in writing from the Department. A person may take or possess these plants if the activities are necessary to perform the licensed activity.

§ 82.62. Contents of commercial license application.

(a) An application for a license under this subchapter shall be submitted to the Department in writing, upon forms provided by the Department.

(b) An application for a commercial license shall be accompanied by information or data as the Department may require to determine compliance with the standards, requirements and purposes of the act and this chapter.

(c) Information set forth in the application shall be current and presented clearly and concisely.

(d) An application to obtain a commercial license shall contain the following information:

(1) The name, address and phone number of the applicant.

(2) The activity sought to be licensed.

(3) A brief and complete description of the applicant's business as it relates to dealing in Pennsylvania Vulnerable plants.

(4) The address where books or records describing commercial transactions of Pennsylvania Vulnerable plants will be kept.

(5) The name, address and telephone number of the person authorized to make records or inventories of Pennsylvania Vulnerable plants available for examination by the Department.

(6) If the application is in the name of a business, the form of the business—for example, corporation, firm, partnership—and the name and address of each partner, officer, director and shareholder who owns 10% or more of the shares in the business.

(7) The common and scientific names of the Pennsylvania Vulnerable plant species for which a commercial license is sought.

(8) The commercial license history, including the identification numbers of previous commercial licenses that have been issued by the Department to the applicant.

(9) Other information the Department may require.

(e) An application shall be dated and signed by the applicant. Business applications shall be signed by a partner or officer, who shall set forth his title.

(f) An application for a commercial license shall be verified by the applicant with a statement that the information in the application is true and correct to the best of the applicant's knowledge, information and belief.

§ 82.63. Criteria for license approval.

No application for a commercial license will be approved unless the application affirmatively demonstrates and the Department finds, in writing, the following:

(1) The application is accurate and complete and the requirements of the act and this chapter have been satisfied.

(2) There is no history of past or continuing violations or conduct which indicate the applicant's lack of ability or intention to comply with the act or this chapter.

§ 82.64. Commercial license fee and expiration.

(a) An application for a commercial license will be accompanied by a check payable to the "Commonwealth of Pennsylvania" in the amount of $50.

(b) A commercial license expires on June 30 of the year next following the year of its issuance.

§ 82.65. Transaction records.

(a) The holder of a commercial license issued under this subchapter shall maintain transaction records. The transaction records shall include the following information regarding Pennsylvania Vulnerable plant activities:

(1) The names and addresses of persons from whom the licensee purchased or otherwise acquired the Pennsylvania Vulnerable plants, and the dates of purchase or acquisition.

(2) The names and addresses of persons to whom Pennsylvania Vulnerable plants were deposited, traded, sold, transferred, bartered, exported or otherwise disposed of, and the dates upon which these activities occurred.

(3) The scientific and common names of the plants.

(4) The county of origin of the plants.

(5) A description of the form of the plants—for example, whole plant, root, seeds, green or dry.

(6) The year of harvest of the plants.

(7) The weight, destination and date of export for each shipment of the plants that are exported.

(8) A statement of whether the plants are wild or cultivated.

(9) The weight in pounds and ounces and estimated number of the plants per transaction. For the purposes of evaluating the number of ginseng plants per transaction, the estimated number of ginseng plants will be determined by taking a sample from each transaction of the number of gingseng roots in 1 pound.

(10) Other information the Department may require.

(b) The holder of a commercial license shall keep transaction records required to be maintained by this subchapter for a period of 5 years after the occurrence of the transactions to which the records relate. The records shall be made available to the Department upon request.

(c) The holder of a commercial license to deal in ginseng shall submit a dealer quarterly report relating to transaction records, on forms provided by the Department within 15 days of the end of each quarter of the calendar year. This dealer report shall be submitted to the Department and shall contain the following information for the quarter:

(1) The date of the report.

(2) The quarter in which transactions occurred.

(3) The name, address and phone number of the licensee.

(4) The license number and date issued.

(5) The weight in pounds and ounces of wild ginseng purchased or otherwise acquired from harvesters, by county of harvest, and a statement of whether the roots were green or dried.

(6) The average price per pound paid for wild ginseng.

(7) The weight in pounds and ounces of cultivated ginseng purchased or otherwise acquired from growers, by county of harvest, and a statement of whether the roots were green or dried.

(8) The average price per pound for cultivated ginseng.

(9) The weight in pounds and ounces of ginseng purchased or otherwise acquired from other licensees, and a statement of whether the purchased or acquired ginseng was wild or cultivated and if roots were green or dried.

(10) The number of pounds and ounces of wild ginseng and of cultivated ginseng in the licensee's possession on reporting date.

(11) The weight in pounds and ounces of ginseng sold, traded or bartered, whether the ginseng was wild or cultivated and if roots were dried or green.

(12) The identification number of State certificates used to ship ginseng from this Commonwealth.

(13) Other information the Department may require.

§ 82.66. Inspection and review.

The licensee shall make available for inspection by the Department transaction records and Pennsylvania Vulnerable plant materials to be sold, traded, bartered or exported and that are on the premises. The records shall be made available for copying by the Department.

§ 82.67. Transfer of license prohibited.

A commercial license is nontransferable.

§ 82.68. Revocation.

(a) The Department may revoke a commercial license it has issued, for good cause. Good cause includes, but is not limited to, the following factors:

(1) Failure to comply with this chapter or the act.

(2) Failure to comply with a term or condition of the license.

(b) A person whose commercial license has been revoked is not eligible to apply for, and may not obtain, another commercial license for a period of 2 years from the date of revocation.

§ 82.69. Vulnerable plant harvest seasons and conditions.

(a) No person may harvest ginseng except in compliance with applicable law, this chapter and the following restrictions:

(1) A person may harvest ginseng plants only from August 1 through November 30.

(2) Only mature ginseng plants with at least three leaves of five leaflets each may be harvested and only when the seeds are red.

(3) Persons harvesting ginseng plants shall plant the seeds from the plants in the immediate vicinity of the collection site.

(b) No person may possess harvested, green ginseng roots between April 1 and August 1 of a calendar year.

(c) No person may harvest Pennsylvania Vulnerable plants other than ginseng except in compliance with applicable law, this chapter and the following restrictions:

(1) A person may harvest the plants only if they are mature and the current year's seeds have matured.

(2) A person harvesting the plants shall plant the seeds from the plants in the immediate vicinity of the collection site.

(3) No person may harvest the plants in a way that will harm the species' ability to perpetuate itself successfully.

(d) The permitted harvesting of Pennsylvania Vulnerable plants includes picking, taking, digging, disturbing and possessing the plants if the activities are necessary to legally harvest the plants. Possession of legally taken Pennsylvania Vulnerable plants is permitted.

§ 82.70. Pennsylvania ginseng certification.

(a) No person may export Pennsylvania ginseng from this Commonwealth without first obtaining a commercial license and a Pennsylvania ginseng certificate.

(b) A Pennsylvania ginseng certificate shall be required for each export shipment of Pennsylvania ginseng.

(c) To be certified, the state of origin for wild ginseng or cultivated ginseng shall be Pennsylvania.

(d) No Pennsylvania ginseng certificate will be issued unless the licensee presents the shipment to the Department at a designated facility and presents the following information on a Pennsylvania ginseng certificate application form, available from the Department:

(1) The licensee's name and commercial license number.

(2) The date of the application.

(3) The name and address of buyer and export destination.

(4) A statement of whether the ginseng is wild or cultivated.

(5) A statement of whether the ginseng is green or dry.

(6) The year of harvest of ginseng being certified.

(7) The state of origin.

(8) The weight in pounds and ounces written numerically and in full and verified by a weigh slip from a Commonwealth certified weigh station or scale.

(9) The shipment number.

(10) Other information the Department may require.

(e) The Pennsylvania ginseng certificate application shall be verified by the licensee with a statement that the information contained in the form is true and correct to the best of the licensee's knowledge, information and belief, and that the ginseng was legally taken under this chapter and applicable law.

(f) The Department may countersign the application and issue a Pennsylvania ginseng certificate if the Department is satisfied that the information in the application is complete, and if the Department finds that a representative sample supports the information in the application.

§ 82.71. Transfer of certificate prohibited.

A Pennsylvania ginseng certificate is nontransferable.

§ 82.72. Possession of unsold ginseng.

(a) A licensee who has ginseng unsold on March 31 of the year after harvest is required to obtain a weigh slip for the unsold ginseng from a Commonwealth certified weigh station or scale and submit a copy of that slip to the Department by May 1.

(b) A licensee may not obtain a Pennsylvania ginseng certificate to export unsold ginseng in the licensee's possession in excess of the amount shown on the weigh slip.

Subchapter F. PRIVATE WILD PLANT SANCTUARIES

§ 82.81. Establishment.

The Department may designate sites as private wild plant sanctuaries upon request.

§ 82.82. Purpose.

This subchapter provides protection for this Commonwealth's native wild plants and their habitat.

§ 82.83. Application.

(a) An application for private wild plant sanctuary designation shall be concurred in by all parties with an interest in the land and submitted to the Department by the landowner on forms provided by the Department. The forms shall contain a space for the signatures of all parties with an interest in the land, indicating their approval for private wild plant sanctuary designation.

(b) An application for private wild plant sanctuary designation shall contain the following information:

(1) The name, address and phone number of applicant.

(2) The location of the area to be designated, including a copy of a U.S.G.S. 7½ minute quadrangle or part thereof with the location plotted thereon.

(3) The size of the area.

(4) A description of the area including:

(i) Classified plant species existing on the site.

(ii) Habitat description.

(5) Other current and planned uses of the area.

(6) Other information the Department may require.

(c) An application for private wild plant sanctuary designation shall be verified by the applicant with a statement that the information contained in the application is true and correct to the best of the applicant's knowledge, information and belief.

§ 82.84. Criteria for issuance of designation.

No designation of private wild plant sanctuary will be made unless the applicant demonstrates and the Department finds the following:

(1) The proposed private wild plant sanctuary will benefit and provide protection for native wild plants and their habitats.

(2) The area proposed for private wild plant sanctuary designation is relatively undisturbed.

(3) The area contains an occurrence of a classified native wild plant species, is a habitat suitable for a classified native wild plant species, or is deemed by the Department to be a unique habitat or plant community; or if designated, the area would significantly enhance efforts to protect classified native wild plants.

§ 82.85. Responsibilities.

(a) The landowner of a designated private wild plant sanctuary shall utilize the designated lands and waters in a manner consistent with the purposes of sanctuary designation.

(b) The landowner shall notify the Department, in writing, of the following:

(1) An intent to sell or transfer ownership of the land on which the designated private wild plant sanctuary is located.

(2) Threats to the designated private wild plant sanctuary or the classified native wild plants within.

(3) Significant habitat changes within the designated private wild plant sanctuary.

(4) A proposed change in land use of the designated area.

§ 82.86. Withdrawal of designation.

Designation as a private wild plant sanctuary may be withdrawn at the request of the landowner.

§ 82.87. Revocation.

The Department may revoke designation of a private wild plant sanctuary for good cause. Good cause includes, but is not limited to, the following factors:

(1) Degradation of the private wild plant sanctuary site.

(2) Failure to comply with a term or condition of the private wild plant sanctuary designation.

(3) Failure to comply with the act or this chapter.

(4) Failure to utilize the lands in a manner deemed by the Department to be consistent with the purposes of private wild plant sanctuary designation.

§ 82.88. Private wild plant sanctuary restrictions.

No person, other than the landowner or a person having a bona fide property interest in the affected land, may willfully adversely alter or destroy the local ecosystem of a private wild plant sanctuary.

§ 82.89. Transfer of private wild plant sanctuary designation prohibited.

Private wild plant sanctuary designations are nontransferable.

Subchapter G. PENALTIES

§ 82.91. Penalties.

Penalties for unlawful conduct are established by the act as follows:

(1) A person who violates a provision of the act relating to commercial licensing, or regulations issued thereunder, shall be sentenced to pay a fine of not more than $200, or have the license revoked, or both.

(2) A person found to be illegally in possession of a wild plant species or part thereof protected by this chapter, or a person who willfully destroys or mutilates an endangered plant species protected by this chapter, shall be sentenced to pay a fine of up to $100 for each plant taken or destroyed.

(3) A person who violates other provisions of the act or this chapter shall, for violation, be sentenced to pay a fine of not more than $100.

[Pa.B. Doc. No. 87-1863. Filed December 4, 1987, 9:00 a.m.]

Title 52—PUBLIC UTILITIES

PENNSYLVANIA PUBLIC UTILITY COMMISSION

[52 PA. CODE CH. 29]

Corrective Amendment to 52 Pa. Code § 29.404

The Pennsylvania Public Utility Commission has discovered a discrepancy between the agency text of 52 Pa. Code § 29.404, as deposited with the Legislative Reference Bureau, and the official text published at 14 Pa.B. 1390 (April 21, 1984) and published in the October 1984 *Pennsylvania Code Reporter* (Master Transmittal Sheet No. 119), and as currently appearing in the *Pennsylvania Code*. The official text omitted a phrase in the first sentence.

Therefore, under 45 Pa.C.S. § 901: the Pennsylvania Public Utility Commission has deposited with the Legislative Reference Bureau a corrective amendment to 52 Pa. Code § 29.404. The corrective amendment to 52 Pa. Code § 29.404 is effective as of April 21, 1984, the date the defective official text was announced.

The correct version of 52 Pa. Code § 29.404 appears in Annex A.

Annex A

TITLE 52. PUBLIC UTILITIES

PART I. PUBLIC UTILITY COMMISSION

Subpart B. CARRIERS OF PASSENGERS OR PROPERTY

CHAPTER 29. MOTOR CARRIERS OF PASSENGERS

Subchapter E. VEHICLE EQUIPMENT AND INSPECTION

§ 29.404. Unsafe operations forbidden.

A common carrier or contract carrier may not permit or require a driver to operate a vehicle revealed by inspection or operation not to comply with § 29.402 (relating to vehicle equipment requirements). If a vehicle being operated on a highway is discovered not to comply with § 29.402, it may be continued in operation to the carrier's nearest terminal, the carrier's place of business or other similar location where repairs can be effected safely; however, this operation may be conducted only if it is less hazardous to the public than permitting the vehicle to remain on the highway.

[Pa.B. Doc. No. 87-1857. Filed December 4, 1987, 9:00 a.m.]

Title 55—PUBLIC WELFARE

PART I. DEPARTMENT OF PUBLIC WELFARE

[55 PA. CODE CH. 9]

Public Information System

The Department of Public Welfare by this order adopts 55 Pa. Code Chapter 9 (relating to regulatory document information system). Notice of proposed rulemaking was published at 17 Pa.B. 3230 (August 1, 1987).

§ 5214. Appeals

(a) Any person or municipality aggrieved by an action of the department shall have the right within 30 days of the receipt of notice of such action to appeal such action to the Environmental Hearing Board, pursuant to section 1921-A of the act of April 9, 1929 (P.L. 177, No. 175),[1] known as "The Administrative Code of 1929," and the Administrative Agency Law.

(b) An appeal of any action under this act shall not act as a supersedeas. A supersedeas may be granted by the Environmental Hearing Board upon a showing by the petitioner:

(1) that irreparable harm to the petitioner or other interested parties will result if supersedeas is denied;

(2) that there is a likelihood of the petitioner's success on the merits; and

(3) that the grant of a supersedeas will not result in irreparable harm to the Commonwealth.

The hearing board may grant such a supersedeas subject to such security as it may deem proper.

1980, May 13, P.L. 122, No. 48, § 14, imd. effective.

1 71 P.S. § 510-20.

Repealed in Part

This section is repealed by Act, 1980, Oct. 15, P.L. 950, No. 164, § 504 (71 P.S. § 732-504), insofar as it is inconsistent with provisions of said act.

§ 5215. Repealer and savings clause

(a) All acts or parts of acts inconsistent herewith are hereby repealed to the extent of such inconsistency.

(b) The provisions of this act shall not affect any suit or prosecution pending or to be instituted to enforce any right or penalty or punish any offense under the authority of any act of Assembly or part thereof repealed by this act.

1980, May 13, P.L. 122, No. 48, § 15, imd. effective.

CHAPTER 104.—WILD RESOURCE CONSERVATION

Sec.		Sec.	
5301.	Short title.	5308.	Wild plant management permits.
5302.	Legislative finding; declaration of policy.	5309.	Vulnerable species.
5303.	Definitions.	5310.	Public wild plant sanctuaries.
5304.	Voluntary contribution system.	5311.	Enforcement.
5305.	Wild Resource Conservation Fund.	5312.	Limitation; termination.
5306.	Wild Resource Conservation Board.	5313.	Limitation of General Fund money.
5307.	Wild plant management.	5314.	Repeal.

Provisions constituting Chapter 104, Wild Resource Conservation, consisting of §§ 5301 to 5314, were enacted by Act 1982, June 23, P.L. 597, No. 170, §§ 1 to 14.

§ 5301. Short title

This act shall be known and may be cited as the "Wild Resource Conservation Act."

1982, June 23, P.L. 597, No. 170, § 1, effective Jan. 1, 1983.

Title of Act:

An Act providing for a voluntary contribution system to aid in the conservation of certain wild flora and fauna, establishing a special fund and providing for its administration, establishing a procedure for the protection of wild flora, estab-

lishing a permit system, imposing powers and duties on the Department of Environmental Resources and imposing penalties. 1982, June 23, P.L. 597, No. 170.

Library References

Health and Environment ⇐25.5(3).
C.J.S. Health and Environment §§ 91 et seq., 106 et seq., 129 et seq.

§ 5302. Legislative finding; declaration of policy

It is hereby determined and declared as a matter of legislative finding that there are numerous flora and fauna, including those rare or endangered, which are not commonly pursued, killed or consumed either for sport or profit, that such species are in need of more active management and that it is in the public interest to preserve and enhance such species for the benefit of all. Therefore, it is the purpose of this act to:

(1) Further provide for such species so as to enhance the constitutional rights guaranteed in section 27, Article 1 of the Constitution of the Commonwealth of Pennsylvania.

(2) Provide a means for the citizens of the Commonwealth to support the management of our wild resource by establishing a voluntary contribution system on State income tax return forms.

(3) Promote the cooperation of the Department of Environmental Resources, Pennsylvania Fish Commission and Pennsylvania Game Commission in the management of our wild resource.

(4) Establish an interagency Wild Resource Conservation Board to channel that cooperation, promote the voluntary contribution system and administer the program.

(5) Establish and promote a cooperative Statewide system of private wild plant sanctuaries in order to maintain, protect and, to the extent possible, enhance wild plant numbers.

(6) Conserve and protect wild plant species recognized as endangered, threatened or vulnerable.

(7) Conduct an investigation to determine the status of wild plants, classify wild plants indigenous to or found in the Commonwealth and provide for their protection.

(8) Create a permit procedure for persons interested in wild plant management and a commercial license procedure for persons who purchase vulnerable plants with the intent to sell all or any part thereof.

1982, June 23, P.L. 597, No. 170, § 2, effective Jan. 1, 1983.

§ 5303. Definitions

The following words and phrases when used in this act shall have, unless the context clearly indicates otherwise, the meanings given to them in this section:

"Board." The Wild Resource Conservation Board.

"Department." The Department of Environmental Resources of the Commonwealth of Pennsylvania.

"Fund." The Wild Resource Conservation Fund.

"Management." The entire range of activities that constitute a modern scientific resource program including, but not limited to, the collection and application of biological data through research, census, habitat acquisition, habitat improvement and education.

"Wild plant." Any and all naturally occurring native flora, except those commonly considered an agricultural commodity, including green and nongreen species or subspecies or any part, product, seed or offspring thereof.

"Wild resource." All fauna not commonly pursued, killed or consumed either for sport or profit, but not including any domestic fauna or any domestic fauna that has

reverted to a feral existence, and all flora not commonly considered an agricultural commodity.

1982, June 23, P.L. 597, No. 170, § 3, effective Jan. 1, 1983.

§ 5304. Voluntary contribution system

(a) The Department of Revenue shall provide a space on the face of the Pennsylvania individual income tax return form whereby an individual may voluntarily designate a contribution of any amount desired, to the Wild Resource Conservation Fund established in section 5.[1]

(b) The amount so designated by an individual on the income tax return form shall be deducted from the tax refund to which such individual is entitled and shall not constitute a charge against the income tax revenues due the Commonwealth.

(c) The Department of Revenue shall determine annually the total amount designated pursuant to this section and shall report such amount to the State Treasurer, who shall transfer such amount from the General Fund to the Wild Resource Conservation Fund. The Department of Revenue shall be reimbursed from the fund for any administrative costs incurred above and beyond the cost savings it realizes as a result of individual total refund designations.

(d) The Department of Revenue shall provide adequate information concerning the Wild Resource Conservation Fund in its instructions which accompany State income tax return forms, which shall include the listing of an address, furnished to it by the board, to which contributions may be sent by those taxpayers wishing to contribute to said fund but who do not receive refunds.

(e) This section shall apply to taxable years beginning on or after January 1, 1982.

1982, June 23, P.L. 597, No. 170, § 4, effective Jan. 1, 1983.

1 Section 5305 of this title.

Library References

Taxation ⇐1031.
C.J.S. Taxation § 1099.

§ 5305. Wild Resource Conservation Fund

(a) In order to carry out the purposes of this act, there is hereby created a special fund, which shall be known as the "Wild Resource Conservation Fund," of the treasury of the Commonwealth.

(b) All moneys received from the voluntary contribution system established in section 4 [1] and by the sale of any item authorized by section 6,[2] by the issuance of permits authorized by section 8,[3] by the issuance of licenses authorized by section 9 [4] and from all penalties and fines imposed under section 11 [5] shall be deposited in said fund.

(c) The Legislature may, from time to time, appropriate funds into the special fund for the purposes of this act.

(d) The moneys contained in said fund are continuously appropriated to the Wild Resource Conservation Board for the exclusive use of carrying out the purposes of this act.

1982, June 23, P.L. 597, No. 170, § 5, effective Jan. 1, 1983.

1 Section 5304 of this title.
2 Section 5306 of this title.
3 Section 5308 of this title.
4 Section 5309 of this title.
5 Section 5311 of this title.

Library References
States ⇐127.
C.J.S. States § 228.

§ 5306. Wild Resource Conservation Board

(a) There is hereby created a Wild Resource Conservation Board, the members of which shall consist of the Secretary of the Department of Environmental Resources, the Executive Director of the Pennsylvania Fish Commission, the Executive Director of the Pennsylvania Game Commission, the majority and minority chairmen of the House Conservation Committee and the majority and minority chairmen of the Senate Environmental Resources Committee. The chairmanship of said board shall rotate on an annual basis among the members thereof.

(b) The board shall have the power and its duty shall be to:

(1) Meet annually to determine and prioritize the management objectives deemed necessary to preserve and enhance the wild resource.

(2) Conduct a public hearing not less than 60 days prior to each annual meeting of the board, providing 30 days advance notice thereof by publication in the Pennsylvania Bulletin to which all interested persons shall be invited to make recommendations to the board.

(3) Establish, after reviewing the recommendations made at the public hearing and consulting with the professional staffs of those agencies represented on the board, management projects or programs deemed necessary to preserve and enhance the wild resource and to allocate moneys from the Wild Resource Conservation Fund to the agency or agencies selected by the board to implement said programs or projects. Prior to the issuance of an allocation for any project or program authorized herein, the board shall allocate moneys to the Department of Environmental Resources for its administrative responsibilities under sections 7, 8, 9, 10 and 11.[1]

(4) Administer the Wild Resource Conservation Fund.

(5) Establish projects or programs to promote the voluntary contribution system and to allocate moneys from the fund to implement same.

(6) Issue an annual report, to be published in the Pennsylvania Bulletin concurrently with the notice required in paragraph (2), which shall include a financial analysis and synopsis of program activities.

(c) The board shall have the right to issue for sale to the public, stamps, decals or other items of personal property intended to signify the interest of the purchaser in contributing to programs established by the board, the net proceeds of which shall be deposited in the Wild Resource Conservation Fund.

(d) The authority granted pursuant to subsection (c) shall not effect or interfere with similar authority vested by law in any agency represented on the board to sell items of personal property which promote the independent programs of those respective agencies. Said agencies shall likewise have the right to issue for sale items of personal property intended to signify the interest of the purchaser in contributing to programs established by the board, the net proceeds of which shall be deposited in the Wild Resource Conservation Fund.

(e) The board may establish an advisory committee, the members of which shall be chosen from the public and shall serve at the pleasure of the board, which shall meet to advise the board and make recommendations regarding general management objectives or specific management projects.

(f) Within two years following the effective date of this act, the board shall develop a comprehensive management plan which shall establish the management objectives and policies of the board. The board shall review said plan periodically and make revisions thereto when necessary. The board shall make the plan and any revisions thereto available for public review and comment by publication in the Pennsylvania Bulletin.

(g) The powers and duties granted pursuant to this section shall be in addition to any powers and duties granted to the Department of Environmental Resources pursuant to the act of April 9, 1929 (P.L. 177, No. 175), known as "The Administrative Code of 1929," [2] or to the Fish Commission pursuant to 30 Pa.C.S. § 101 et seq. (relating to fish), or to the Game Commission pursuant to the act of June 3, 1937 (P.L. 1225, No. 316), known as "The Game Law." [3]

1982, June 23, P.L. 597, No. 170, § 6, effective Jan. 1, 1983.

[1] Sections 5307 to 5311 of this title.
[2] 71 P.S. § 51 et seq.
[3] 34 P.S. § 1311.101 et seq.

Library References
Health and Environment ⇐25.5(9).
C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 5307. Wild plant management

(a) In addition to the powers and duties granted to it by the act of April 9, 1929 (P.L. 177, No. 175), known as "The Administrative Code of 1929," [1] the Department of Environmental Resources shall, with cooperation from taxonomists, biologists, botanists and other interested persons conduct investigations on wild plants in order to ascertain information relating to population, distribution, habitat needs, limiting factors and other biological and ecological data to classify plants and to determine management measures necessary for their continued ability to sustain themselves successfully.

(b) The department shall establish a classification procedure that should include but may not be limited to the following categories:

(1) Extirpated. Species which once occurred in Pennsylvania, but no longer are known to exist.

(2) Endangered. Species in danger of extinction throughout all or most of its range if critical habitat is not maintained, or it is greatly exploited by man.

(3) Threatened. Species likely to become endangered throughout all or most of its range if critical habitat is not maintained or it is greatly exploited by man.

(4) Disjunct. Species which are significantly separated from the main area of distribution.

(5) Endemic. Species confined to a specialized habitat and with limited ranges.

(6) Restricted. Species with epidemic distribution but found in specialized habitats or habitats infrequent in Pennsylvania.

(7) Limit of range. Species which are uncommon or rare in Pennsylvania because they are at or near the peripheral of their distribution. Within the main body of their distribution, these species may or may not be common.

(8) Vulnerable. Species which are in danger of loss because of their beauty, economic value, use as cultivar or other factors which make them prime targets for being removed from native habitats.

(9) Undetermined. Species suggested as needing protection because of their infrequent occurrence, but their status in Pennsylvania is unclear.

(c) On the basis of such determinations, the Environmental Quality Board shall issue regulations not later than two years from the effective date of this act, after public notice, after receiving data from interested persons and after holding public hearings. Such regulations so established shall set limitations relating to taking, possession, transportation, exportation, processing, sale or offer for sale, or shipment as may be deemed necessary to manage wild plants. The Environmental Quality Board may add or delete species as conditions change and may modify regulations to reflect the changing environment.

(d) The department shall establish criteria for and promote a cooperative Statewide system of private wild plant sanctuaries.

(e) Each landowner desiring "private wild plant sanctuary" designation under this act shall make application to the department on a form prepared and provided by the department.

(f) No portion of this section shall be construed to restrict withdrawal of said designation at the request of the landowner.

(g) The department may suspend or revoke any designation for violation of this act, the regulations thereunder or for other good cause.

(h) No portion of this section shall be construed to restrict entry into such sanctuaries for the purpose of hiking, hunting, fishing or any other beneficial nonmotorized outdoor activity.

(i) Except as provided in this section, it shall be unlawful for any person exclusive of the owner of the land or any person having a bona fide property interest therein, to willfully adversely alter or destroy the local ecosystem of such private wild plant sanctuary.

1982, June 23, P.L. 597, No. 170, § 7, effective Jan. 1, 1983.

1 71 P.S. § 51 et seq.

Library References
Health and Environment ⇐25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 5308. Wild plant management permits

(a) In carrying out the purposes of this act, the department shall upon application issue permits authorizing the removal, collection or transplanting of endangered or threatened plant species pursuant to regulations established by the Environmental Quality Board.

(b) Any person desiring a wild plant management permit as herein provided, shall make application to the department on a form provided by the department.

(c) It shall be lawful for a person holding a valid wild plant management permit, with the expressed permission of landowners, to transplant wild plants into private and public plant sanctuaries for the purpose of insuring their perpetuation as members of ecosystems, to enhance their numbers or to restore their natural range. All such transplants shall be in accordance with the provisions of this act.

(d) Persons holding valid wild plant management permits should make every effort possible to transplant valuable species from land areas threatened by future land development, surface mining or agricultural encroachment to public or private plant sanctuaries.

(e) The department may also grant certain permittees, for taxonomical and botanical purposes, the right to collect threatened or endangered plants defined herein subject to the rules and regulations pursuant to this act, with the expressed permission of the landowner, as long as such collections would be deemed by the department to be consistent with the intent of this act.

(f) The department may suspend or revoke any plant management permit for violation of this act or regulations thereunder, the terms or conditions of the permit or for other good cause.

(g) Any person aggrieved by a decision of the department may appeal such decisions to the Environmental Hearing Board pursuant to Title 2 of the Pennsylvania Consolidated Statutes (relating to administrative law and procedure).

1982, June 23, P.L. 597, No. 170, § 8, effective Jan. 1, 1983.

Library References
Health and Environment ⇐25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 5309. Vulnerable species

(a) Species classified as vulnerable shall be subject to the following restrictions:

(1) The Environmental Quality Board upon designation of vulnerable species shall establish regulations over the digging, harvesting, sale and exploitation of said species.

(2) The regulations shall:

(i) consider the distribution, abundance, economic value, growing and reproduction cycle;

(ii) establish seasons for the digging and harvesting of plants or plant parts; and

(iii) provide for the commercial licensing of persons who buy with the intent to sell vulnerable plants within the Commonwealth or export said plants therefrom and to require the licensees to maintain records of their transactions.

(3) The Environmental Quality Board shall establish the license fee.

1982, June 23, P.L. 597, No. 170, § 9, effective Jan. 1, 1983.

Library References
Health and Environment ⇐25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 5310. Public wild plant sanctuaries

(a) The department may, when deemed necessary to protect wild plant species afforded consideration under this act, acquire natural areas of land or aquatic habitat, or designate such areas on land previously acquired for the establishment of public wild plant sanctuaries.

(b) The department may, when deemed necessary to protect a species afforded protection under this act, acquire natural areas of land or aquatic habitat.

(c) The secretary shall utilize all existing authority vested in the department to carry out the purposes of this section.

(d) The department may allow, under such terms and conditions as may be prescribed by regulation, individuals or groups to assist in the management of designated areas for the purpose of promoting wild plants.

(e) Such areas established under this section shall be utilized whenever feasible, for scientific or educational purposes.

1982, June 23, P.L. 597, No. 170, § 10, effective Jan. 1, 1983.

Library References
Health and Environment ⇐25.5(9).

C.J.S. Health and Environment §§ 65, 66, 103, 107, 140 et seq.

§ 5311. Enforcement

(a) Except as otherwise provided it shall be unlawful for any person, exclusive of the owner of the land or any person having a bona fide property interest therein to disturb, pick, take or possess vulnerable, threatened or endangered wild plants. It shall be unlawful for any person to transport with the intent to sell, sell or export threatened or endangered wild plants. It shall be unlawful for any person to disturb, pick or take wild plants from State parks and forest lands except as provided by rules and regulations.

(b) In order to aid the department in the enforcement of this act, the following penalties shall apply:

(1) Any person who violates the provisions of this act relating to commercial licensing or regulations issued thereunder shall be sentenced to pay a fine of not more than $200 or have the license revoked or both.

(2) Any person found to be illegally in possession of any wild plant species or part thereof protected hereunder, or any person who willfully destroys or muti-

lates an endangered plant species protected hereunder shall be sentenced to pay a fine of up to $100 for each plant taken or destroyed.

(3) Any person who violates any other provision of this act or regulation issued hereunder shall, for violation, be sentenced to pay a fine of not more than $100.

(c) Any enforcement officer employed or designated by the department or any police officer of the Commonwealth or any municipality within the Commonwealth shall have authority to enforce the provisions of this section.

(d) Any person aggrieved by any order or other action of the department shall have the right of appeal to the Environmental Hearing Board, in accordance with Title 2 of the Pennsylvania Consolidated Statutes (relating to administrative law and procedure) and such further right of appeal as is provided by law in such cases.

1982, June 23, P.L. 597, No. 170, § 11, effective Jan. 1, 1983.

Library References
Health and Environment ⇐37.

C.J.S. Health and Environment §§ 48, 113, 114, 141, 143, 148, 149, 155.

§ 5312. Limitation; termination

The check-off system created by section 4 of this act[1] shall be the only such check-off allowed on Pennsylvania State income tax return forms seeking voluntary contributions from tax refunds. In the event the wild resource conservation fund shows a net loss, after the deduction of administrative cost by the Department of Revenue, for two consecutive years, and the Secretary of the Budget and the State Treasurer certify to the General Assembly that such loss has in fact occurred then the board and all of its powers and duties shall terminate and go out of existence within 60 days of the certification.

1982, June 23, P.L. 597, No. 170, § 12, effective Jan. 1, 1983.

[1] Section 5304 of this title.

§ 5313. Limitation on General Fund money

Except to complete any transfer required by section 4,[1] no moneys from the General Fund shall be used for the purposes of this act.

1982, June 23, P.L. 597, No. 170, § 13, effective Jan. 1, 1983.

[1] Section 5304 of this title.

§ 5314. Repeal

All acts or parts of acts inconsistent with the provisions of this act are hereby repealed to the extent of such inconsistency.

1982, June 23, P.L. 597, No. 170, § 14, effective Jan. 1, 1983.

APPENDIX SIX

MANAGEMENT OBJECTIVES

4700.000 MANAGEMENT OBJECTIVES

The following statewide objectives apply only to the current park system. These objectives will be adhered to as they relate to the established individual park.

4704.000 WILDLIFE STATEWIDE OBJECTIVES

To protect endangered and unique wildlife species.

To maintain a healthy, diversified native wildlife population in proper balance within the park environment.

To provide for the safety of the hunter, non-hunting park user, and adjacent landowners when delineating hunting areas.

4705.000 FISHERY STATEWIDE OBJECTIVES

To protect endangered and unique fish species.

To maintain a healthy, diversified fish population in proper balance with the environment.

4707.000 WETLANDS STATEWIDE OBJECTIVES

To protect and maintain significant wetlands.

To require Federal and State review and permit of any work intruding on wetlands.

4708.000 VEGETATIVE MANAGEMENT STATEWIDE OBJECTIVES

To protect endangered and unique plant species.

To provide for an ecological diversity of habitat.

To provide for the safety and health of the park visitor.

To control selected plant species that are considered hazardous, noxious, or nuisance to the park visitor or to a desired plant species using non-chemical means whenever possible.

To reduce losses due to insect, disease, fire, and mechanical damage by both natural and human forces.

To use non-exotic species in ornamental plantings.

To favor native species when restoring disturbed areas or providing vegetative screening.

To use only species native to the park for reforestation projects.

To use state of the art forest management practices to achieve vegetative goals.

To revegetate disturbed areas by choosing seed mixtures and trees that achieve both erosion control and wildlife objectives.

To manage the forest where the primary objective is to provide quality outdoor recreation and not for economic returns.

4709.000 WATER RESOURCE MANAGEMENT STATEWIDE OBJECTIVES

To restrict or limit activities and developments that will either reduce the quantity or impair the quality of the water in the watershed within park boundaries.

To monitor and provide comments concerning future development in the watershed future development.

To monitor and report activities or developments that will either reduce the quantity or impair the quality of water in the watershed outside the park boundary.

4711.000 NATURAL AREAS STATEWIDE OBJECTIVE

To set aside areas of unique scenic, historic, geologic or ecological value for scientific observation of natural systems.

To protect typical and unique plant and animal communities.

To protect outstanding examples of natural interest and beauty.

APPENDIX SEVEN

KEY to NATURAL COMMUNITIES MAP

Key to Natural Communities Map of Presque Isle

I. Lacustrine

A. Eastern Great Lakes Littoral Zone
(further undefined at present)

B. Eastern Great Lakes Bay
Mixed Aquatic Bed Community (bays, large ponds)

II. Palustrine

A. Great Lakes Palustrine Sandplain

1) Mixed Herbaceous Calcareous Sandplain

2) Populus deltoides - Mixed Herb Sandplain Community

3) Shrub Savannah Sandplain Community

4) Populus deltoides - Shrub Thicket Savannah Community

5) Calamagrostis canadensis - Mixed Herb Community

6) Calamagrostis canadensis - Myrica Savannah Community

7) Calamagrostis canadensis - Pine Plantation

8) Calamagrostis canadensis - Mixed Broadleaf - Pine Plantation Forest Community

9) Calamagrostis canadensis - Populus deltoides - Mixed Shrub Savannah Community

10) Calamagrostis canadensis - Mixed Forest/Shrub Savannah Community

B. Robust/Graminoid Emergent Marsh

1) Mixed Robust/Graminoid Emergent Marsh Community/ Carex spp. Marsh

2) Decodon verticillatus Marsh Community

II. Palustrine continued

C. Circumneutral Deciduous Shrub Swamp

1) Mixed Circumneutral Deciduous Shrub Swamp Community

2) Cephalanthus occidentalis - Decodon verticillatus Community

3) Mixed Broadleaf Shrub - Broadleaf Tree Swamp Savannah Community

D. Eastern Great Lakes Sandspit Ponds and Bays

1) Mixed Aquatic Bed Community

2) Non-persistent Mixed Emergent Marsh Community (Mixed Graminoid-Nuphar Community)

III. Terrestrial

A. Eastern Great Lakes Beach/Dune

1) Cakile edentula - Sporobolus cryptandrus Community (sparsely vegetated shifting sands-open beach)

2) Ammophila breviligulata Dune Community

B. Eastern Great Lakes Dry Mesic Sandplain

1) Mixed Graminoid Sandplain Community

2) Mixed Forest Sandplain Savannah/ Quercus velutina-Sassafras-Prunus serotina Savannah Community

3) Shrub Thicket Sandplain/ Populus deltoides-Myrica-Lonicera morrowi Community

4) Shrub Savannah Sandplain/ Sorgastrum nutans Community

5) Mixed Pine Planatations - cultural, not a natural community and included here only for mapping reasons. Occurs on one of the above sandplain communities.

III. Terrestrial continued

6) Mixed Forest -Pine Plantation

7) Great Lakes Broadleaf Sandplain Forest
Populus deltoides Loam Forest Community

8) *Salix fragilis-S. alba* Community

9) *Quercus-Prunus serotina-Acer rubrum* Community

Cultural/ Developed Areas (Not natural communitiee)

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