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DELAWARE EXEMPLARY NATURAL HABITATS

FINAL REPORT: TASK 3

NEOTROPICAL MIGRATORY SONGBIRD REGIONAL COASTAL CORRIDOR STUDY

Prepared by:

Delaware Natural Heritage Inventory
Department of Natural Resources & Environmental Control

June 1992

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DELAWARE EXEMPLARY NATURAL HABITATS

A SECTION OF:

A REGIONAL STUDY OF THE COASTAL ZONE HABITATS
OF CRITICAL IMPORTANCE AS CONCENTRATION AREAS
FOR NEOTROPICAL AVIAN MIGRANTS

Submitted to:

Virginia Coastal Resources Management Program
Council on the Environment
903 Ninth Street Office Building
Richmond, Virginia 23219

Prepared by:

Keith Clancy, Community Ecologist
Delaware Natural Heritage Inventory
Department of Natural Resources and Environmental Control
Division of Parks and Recreation
89 Kings Highway
Dover, Delaware 19903

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U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

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DELAWARE EXEMPLARY NATURAL HABITATS*
NEOTROPICAL MIGRATORY BIRD STUDY

* Sites that are located within the study area.

The following exemplary sites were identified, within the study area, during the course of the neotropical migratory bird study (or were identified previously and additional data were collected during the past year). These sites are deemed to be exemplary because of particular attributes (e.g. relatively pristine, excellent examples of particular communities, assemblages of species, structural components, presence of rare species, large contiguous habitat, etc.). Several of these exemplary natural habitats also contained migratory bird sampling sites (these will be noted below).

ASSAWOMAN BAY WILDLIFE AREA (ABWA)

This natural area consists of a mosaic of natural habitats. Extensive pine-hardwood palustrine and terrestrial forests are predominantly composed of sweet gum (Liquidambar sytraciflua), red maple (Acer rubrum), and loblolly pine (Pinus taeda); the canopy height ranges from 60-90 feet. Common understory trees and shrubs include black gum (Nyssa sylvatica), American holly (Ilex americna), several oaks including white (Quercus alba) and southern red (Q. falcata), black cherry (Prunus serotina), sassafras (Sassafras albidum), sweet bay (Magnolia virginiana), bayberry (Myrica pensylvanica), wax myrtle (Myrica cerifera), and highbush blueberry (Vaccinium corymbosum), among others. Overall the herbaceous strata (where surveyed) was relatively sparse with cinnamon-fern (Osmunda cinnamomea), royal fern (Osmunda regalis), netted-chain fern (Woodwardia areolata), marsh fern (Thelypteris palustris), clubmosses (Lycopodium spp.), partridge berry (Mitchella repens) and moccasin flower (Cypripedium acaule) well represented.

In addition to the forested habitats, the natural area includes numerous small seasonal ponds, as well as several larger impoundments. Some of the smaller and larger ponds have been ditched to allow a tidal exchange and thus have resulted in brackish waters and an overall decline in species diversity. However, those ponds that are natural and have been least impacted (i.e. no ditching or dredging) are highly diverse and are home to a suite of rare species, including several that are globally rare. The awned meadowbeauty (Rhexia aristosa) and Hirst's panic grass (Panicum hirstii) are found in one of these ponds; both are Federal Candidates for Listing as Endangered or Threatened. Overall there are more than 15 rare species found in these ponds, or utilize the ponds during a portion of the year (e.g. spotted turtle).

Extensive salt marsh also occurs in the ABWA. The marsh community has a relatively low diversity with only a few species able to cope with its harsh environment and is primarily composed of cordgrass (Spartina alterniflora), salthay (Spartina patens),

big cordgrass (Spartina cynosuroides), spike grass (Distichlis spicata), saltwort (Salicornia spp.), high-tide bush (Iva frutecens), groundsel tree (Baccharis halamifolia) and reed grass (Phragmites australis). Phragmites may become a pest in disturbed areas. Nevertheless this is one of the most productive habitats known. It is important as spawning grounds for fish, provides large quantities of phytoplankton that are the basis to the foodweb, are important feeding areas for wading birds and migratory waterfowl (e.g. blackduck, goose, rails etc.). Unfortunately, much of the marsh was ditched in the past, in an effort to reduce mosquito populations, and therefore is less pristine.

The ABWA is bounded on the north by RD. 363, on the south by Dirickson Creek, on the east by Little Assawoman Bay and on the west by RD. 364 and RD. 363.

SIZE

2812.6 acres (1139 hectares)

LOCATION

Sussex CO., Assawoman Bay/Bethany Beach Quadrangles. Several access points: Jct RT. 26 and RD. 361 (at Bethany Beach); south on 361 to Rd. 363. Turn left onto Rd. 363 (heading south) and proceed ca. 1.1 mile to dirt access road on south side of road. Site extends to Miller Creek. To reach southern portion of ABWA proceed south on RD. 363 to RD. 364, turn east onto Rd. 364 and follow to ABWA.

OWNERSHIP

State of Delaware, Division of Fish and Wildlife and Private.

PROTECTION STATUS

Much of the ABWA is protected by the State, but there is a need for development of a management plan that addresses the natural resources, rare species, and the unique natural community. Areas in private ownership should be considered for acquisition, or as possible management agreements/conservation easements with the landowner(s).

THREATS

Non-point pollution from adjacent agricultural lands; changes in groundwater levels which may adversely impact the ponds; ditching and dredging of ponds.

MANAGEMENT CONSIDERATIONS

Determine hydrologic regimes of the ponds (i.e. how important is the groundwater in recharge/discharge of the ponds and how far does water travel to the ponds?); monitor and removal of woody

plants from ponds; may be necessary to plug some ditches.

BOUNDARY JUSTIFICATION

The boundary is drawn to include all forested tracts and marshes of the ABWA and adjacent lands. The site contains numerous freshwater Coastal Plain ponds that are dependent on groundwater recharge and thus the necessary buffer to protect these systems is not accurately known.

NEOTROPICAL MIGRATORY BIRD SITES PRESENT

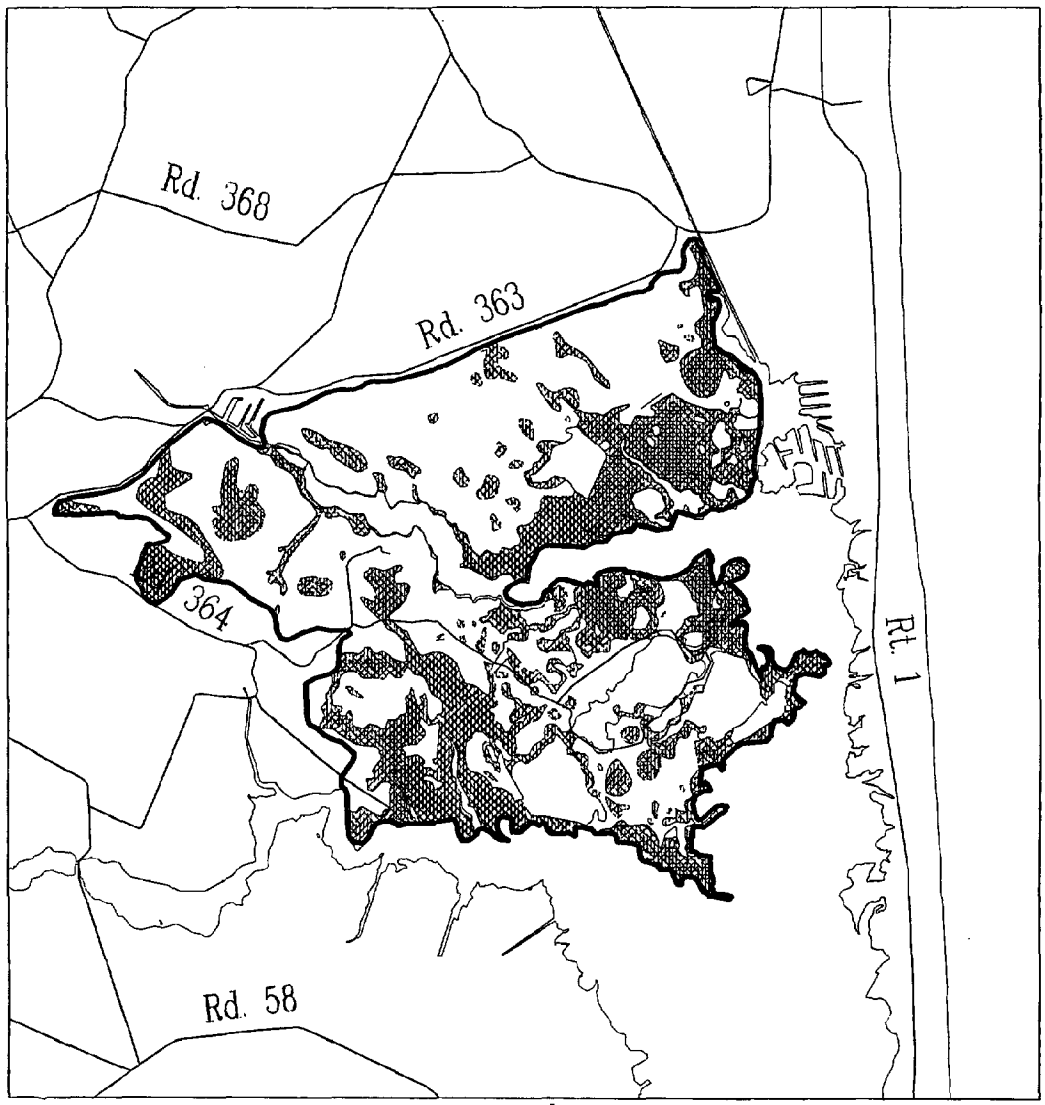
Several survey sites were contained within this natural area.

Assawoman Bay Wildlife Area

2812.6 Acres

Assawoman Bay Quadrangle

Bethany Beach Quadrangle



NWI
Site Boundary
LEGEND

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N

ASSAWOMAN BAY WILDLIFE AREA
ASSAWOMAN BAY/BETHANY BEACH QUADRANGLE

MARSHTOWN UPLAND WOODS

This relatively large contiguous tract consists of a mature upland mesophytic forest of mixed pines and hardwoods. The 80-90 foot canopy species are comprised of tulip poplar (Liriodendron tulipifera), white oak (Quercus alba), scarlet oak (Quercus coccinea), northern red oak (Quercus rubra), red maple (Acer rubrum), sweet gum (Liquidambar styraciflua) and loblolly pine (Pinus taeda). Black walnut (Juglans cinerea) occurs as scattered individuals. Important species in the subcanopy tree and shrub strata include dogwood (Cornus florida), American holly (Ilex opaca), blueberries (Vaccinium spp.), spicebush (Lindera benzoin), honeysuckle (Lonicera japonica), and virginia creeper (Parthenocissus quinquefolius). Herbs were relatively sparse where sampled but included may apple (Podophyllum peltatum), bellwort (Uvularia perfoliata), colic root (Dioscorea villosa), enchanter's nightshade (Circaea lutetiana) and Solomon's seal (Polygonatum biflorum). To the southwest the upland woods narrows to a moderately sloped floodplain and marshy area of Sarah Run (a tributary of Herring Creek). A portion of the uplands were recently logged and are now comprised of a dense thicket of hercules club (Aralia spinosa) and red maple saplings. At RD 279 the forest tract constricts and then continues on the east side of the road towards marsh and Rehoboth Bay. Several trailer parks occur along RD. 279. Additional survey work should be done throughout this site (including the extensive contiguous habitat east of RD. 279) as the potential for rare species is high.

Size

388.4 acres (157 hectares)

Location

Sussex CO., Fairmount Quadrangle. From Marshtown Jct. of RD. 279 and RD. 289 go west on RD. 289 to ca. 100 meters east of RT. 24. Park on shoulder and proceed into site on south side of road. Site extends south and then east to RD. 279.

OWNERSHIP

Private.

PROTECTION STATUS

No portion of the site is currently protected.

THREATS

Primary threats include logging; agriculture runoff; housing development.

MANAGEMENT CONSIDERATIONS

No active management is anticipated. Allow forest to develop into old growth stand. Recent clear cut may require some form of management.

BOUNDARY JUSTIFICATION

Boundary was drawn to capture entire forested area, adjacent land may be considered for acquisition and then allowed to succeed naturally. Large tracts of contiguous habitat are vanishing in Delaware at a rapid pace.

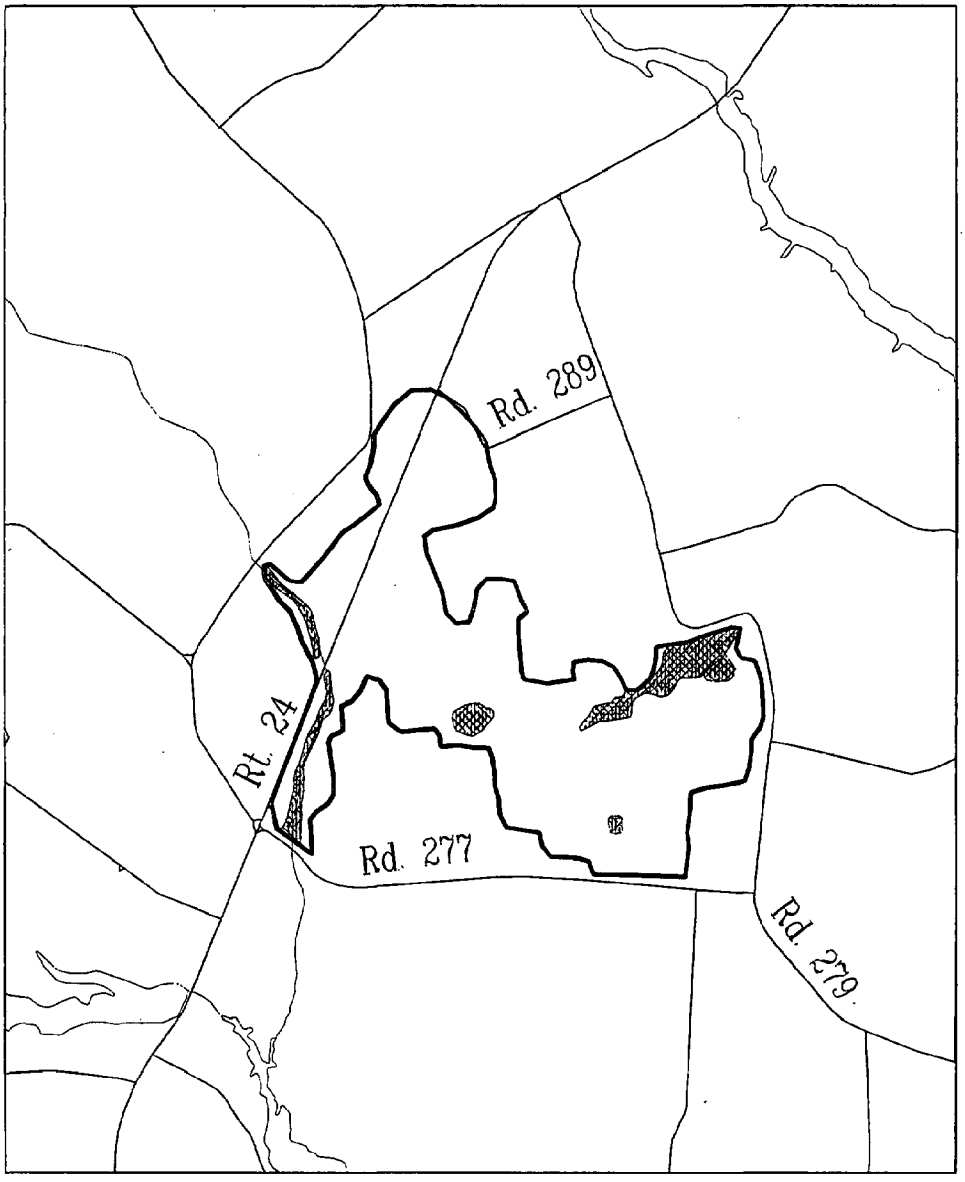
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

No survey sites were contained in this natural area.

Marshtown Upland Woods

388.4 Acres

Fairmount Quadrangle



LEGEND

NWI

Site Boundary

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N

MARSHTOWN UPLAND WOODS
FAIRMOUNT QUADRANGLE

WOLFE NECK FOREST/WOLFE GLADE MARSH

This natural area contains diverse habitats, including an excellent mature upland forest, adjacent palustrine wetlands with several bog-like habitats, and brackish marshes. The mesophytic forest is comprised of loblolly pine (Pinus taeda) and southern red oak (Quercus falcata) as codominants in several areas, with lesser amounts of willow oak (Quercus phellos), scarlet oak (Q. coccinea), red maple (Acer rubrum), swamp chestnut oak (Q. michauxii, in lower spots), and virginia pine (Pinus virginiana). The subcanopy consists of american holly (Ilex opaca), wax myrtle (Myrica cerifera), dogwood (Cornus florida), sassafras (Sassafras albidum), highbush blueberry (Vaccinium corymbosum), black gum (Nyssa sylvatica), black cherry (Prunus serotina) and greenbrier (Smilax rotundifolia). The herbaceous layer is relatively sparse and consists of scattered patches of cinnamon (Osmunda cinnamomea) and netted chain (Woodwardia areolata) ferns. A survey of this site for herbs should be undertaken in the spring and early summer.

The upland forest grades into palustrine forested wetlands to the west (several wet seeps are adjacent to Wolfe Glade Marsh) which contain several state rare plant species, and to the north and east the forest is replaced by open marsh habitat. The state rare species include ten-angle pipewort (Eriocaulon decangulare), purple bladderwort (Utricularia purpurea), arrowhead (Sagittaria engelmanniana), roundleaf sundew (Drosera rotundifolia), laurel-leaf greenbrier (Smilax laurifolia), and a violet (Viola brittoniana). There is a high potential for the discovery of additional rare species; including several significant historical species (e.g. bog asphodel, Narthecium americanum; and false asphodel, Tofieldia racemosa; last collected in Delaware in 1895 and 1937 respectively).

SIZE

470.3 acres (190 hectares)

LOCATION

Sussex CO., Rehoboth Beach/Cape Henlopen Quadrangles. Jct. RT. 1 and RD. 270 (just south of RT. 24) go east on RD. 270 to the end (there will be a gate at end of road), park on side of road and continue on foot to old RR bed. Proceed along RR in nw direction for 200 yds., then walk in ne direction into woods; site includes all of the forested habitat ne of the RR.

OWNERSHIP

Private.

PROTECTION STATUS

No portion of the site is currently protected.

THREATS

Logging; agriculture run-off; development; saltwater intrusion are all potential threats to natural area.

MANAGEMENT CONSIDERATIONS

No active management is anticipated; allow for natural succession of forest community to take place.

BOUNDARY JUSTIFICATION

All of the upland forest is included within the boundary. Boundary may need to be redrawn to north and east after additional survey work is completed.

NEOTROPICAL MIGRATORY BIRD SITES PRESENT

One survey site was contained in this natural area.

Wolfe Neck Forest
Wolfe Glade Marsh

470.3 Acres

Rehoboth Beach/Fairmount
Cape Henlopen/Lewes Quadrangles

NWI
Site Boundary
LEGEND

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N

WOLFE NECK FOREST/WOLFE GLADE MARSH
REHOBOTH BEACH/CAPE HENLOPEN/FAIRMOUNT QUADRANGLES

PHILLIPS BRANCH FRESHWATER ACIDIC FEN

This site encompasses three small wetland areas dominated by twigrush (Cladium mariscoides). The vegetation occurs on peaty-mucky sediments in embayments along the Phillips Branch near its confluence with Unity Branch. This community has been described as an "acidic fen" (T. Rawinski, Delaware Natural Heritage Inventory database). The community is influenced by groundwater seepage from adjacent uplands and probably also by fresh tidal hydrology. State rare species found in these freshwater herbaceous wetlands include the ten-angle and flattened pipeworts (Eriocaulon decangulare and E. compressum), white buttons (Eriocaulon septangulare), robbin's spikerush (Eleocharis robbinsii), Mitchell's sedge (Carex mitchelliana) and seaside alder (Alnus maritima). Additional survey work at this site is likely to result in discovery of other rare species. On the west side of the site is a large campground which has had a negative impact on the upland forest buffer zone; a new dirt road has been built and has resulted in destruction of some of the wetlands. East of the site the Phillips Branch flows into Herring Creek and then into Rehoboth Bay.

SIZE

89.2 acres (36 hectares)

LOCATION

Sussex CO., Fairmount Quadrangle. Jct. RT 24 and RD 48; south on RT 24 to Phillips Branch (access is either from RT 24 or nearby campground). Three small wetland communities west of Rt 24 near confluence of Unity Branch.

OWNERSHIP

Private.

PROTECTION STATUS

Currently no portion of the site is protected.

THREATS

Logging; wetland destruction, development, agriculture run-off.

MANAGEMENT CONSIDERATIONS

May have to actively manage site due to gradual negative impact of site from adjacent land practices.

BOUNDARY JUSTIFICATION

Boundary includes all wetlands and any adjacent upland forest buffers; critical to continued existence of site.

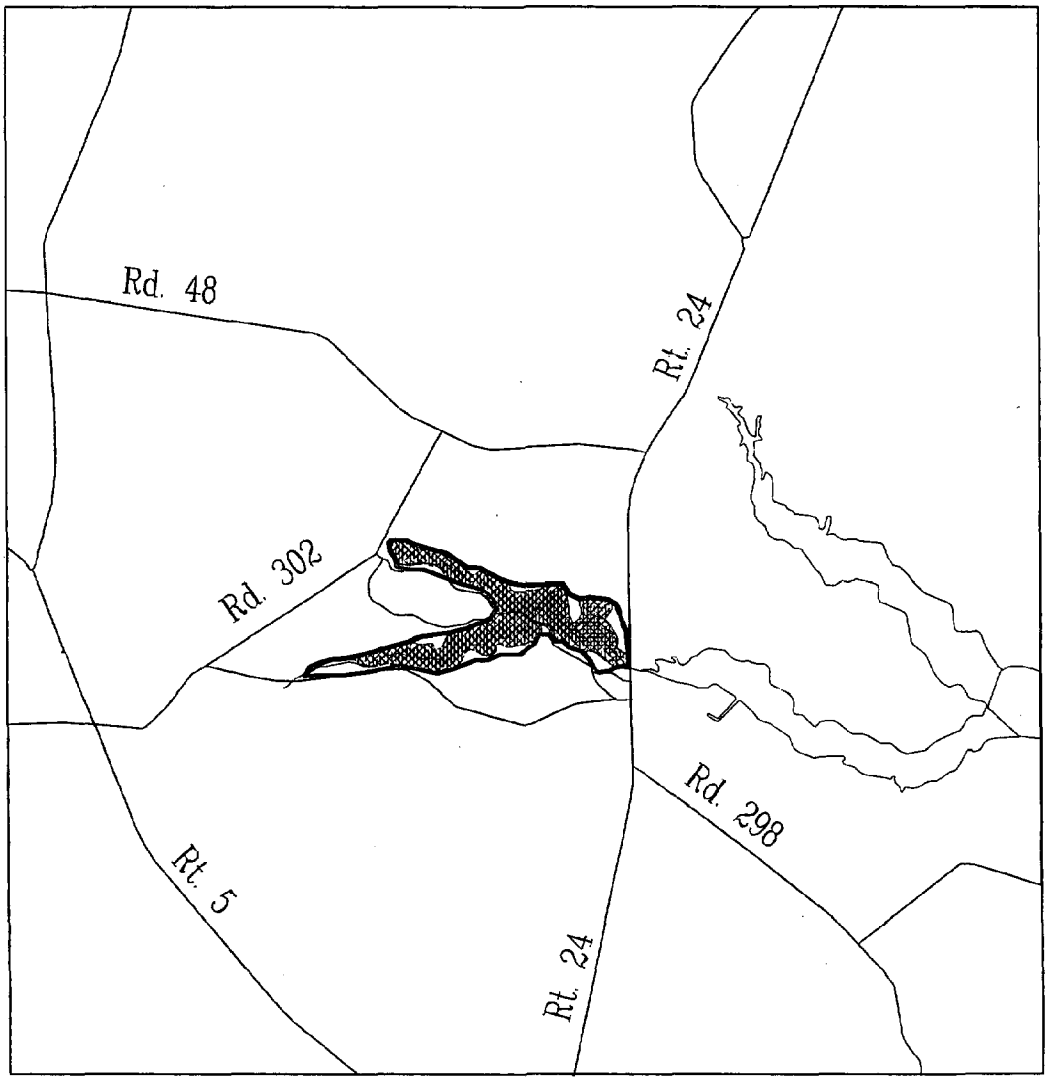
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

No survey sites were contained in this natural area.

Phillips Branch Freshwater Acidic Fen

89.2 Acres

Fairmount Quadrangle



NWI
Site Boundary
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PHILLIPS BRANCH FRESHWATER ACIDIC FEN
FAIRMOUNT QUADRANGLE

OLD MILL CREEK WOODS

A small, but significant, tract of relatively mature upland mesophytic forest on moderate slopes. The overstory consists of a mixture of oaks (southern red, Quercus falcata; red, Q. rubra; and white, Q. alba), tulip poplar (Liriodendron tulipifera), and several hickories (Carya glabra and C. tomentosa). The canopy reaches 90 feet in height. Important subcanopy trees and shrubs include dogwood (Cornus florida), american holly (Ilex opaca), black gum (Nyssa sylvatica), sassafras (Sassafras albidum), black cherry (Prunus serotina), highbush blueberry (Vaccinium corymbosum), sweetbay (Magnolia virginiana), and swamp azalea (Rhododendron viscosum). Herbs are relatively sparse but include cranefly orchid (Tipularia discolor), cinnamon (Osminda cinnamomea), virginia chain (Woodwardia virginica) and new york (Thelypteris novaboracensis) ferns, partridge berry (Mitchella repens), solomon's seal (Polygonatum biflorum) and forest bedstraw (Galium circaezans). It is anticipated that additional species will be recorded for this site after subsequent surveys. Several recently built homes border the site on the east and agricultural fields are found on the north, west and south sides. A small unnamed tributary of Old Mill Creek, bisects the site and a small impoundment occurs on the east end of the site.

SIZE

34.9 acres (14 hectares)

LOCATION

Sussex County. Lewes Quadrangle. Jct RT. 9 and RT 1, N on RT 1 to Willow Creek Road to first bend in road. Park on shoulder and walk into woods in a northeast direction.

OWNERSHIP

Private.

PROTECTION STATUS

No portion of site is currently protected.

THREATS

Logging of mature hardwoods; agricultural runoff; housing developments.

MANAGEMENT CONSIDERATIONS

Allow forest to remain intact and to continue to develop.

BOUNDARY JUSTIFICATION

Boundary includes all forested habitat that is still present; some of this habitat consists of immature trees and several

exotic species (e.g. tree of heaven, honeysuckle, perilla mint). Younger growth forest is necessary as a buffer to mature forest.

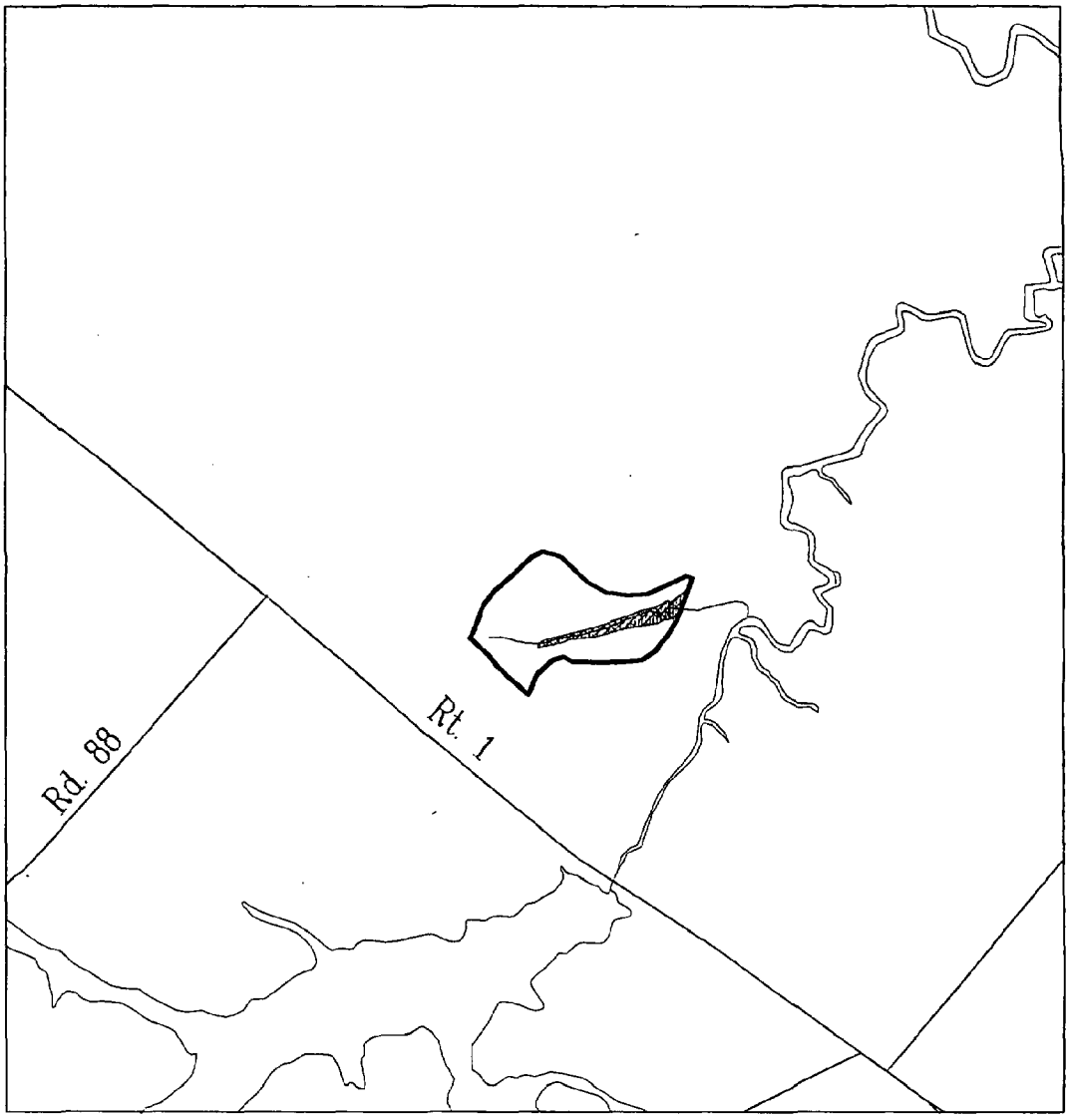
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

Two survey sites were contained within this natural area.

Old Mill Creek Woods

34.9 Acres

Lewes Quadrangle



LEGEND

NWI

Site Boundary

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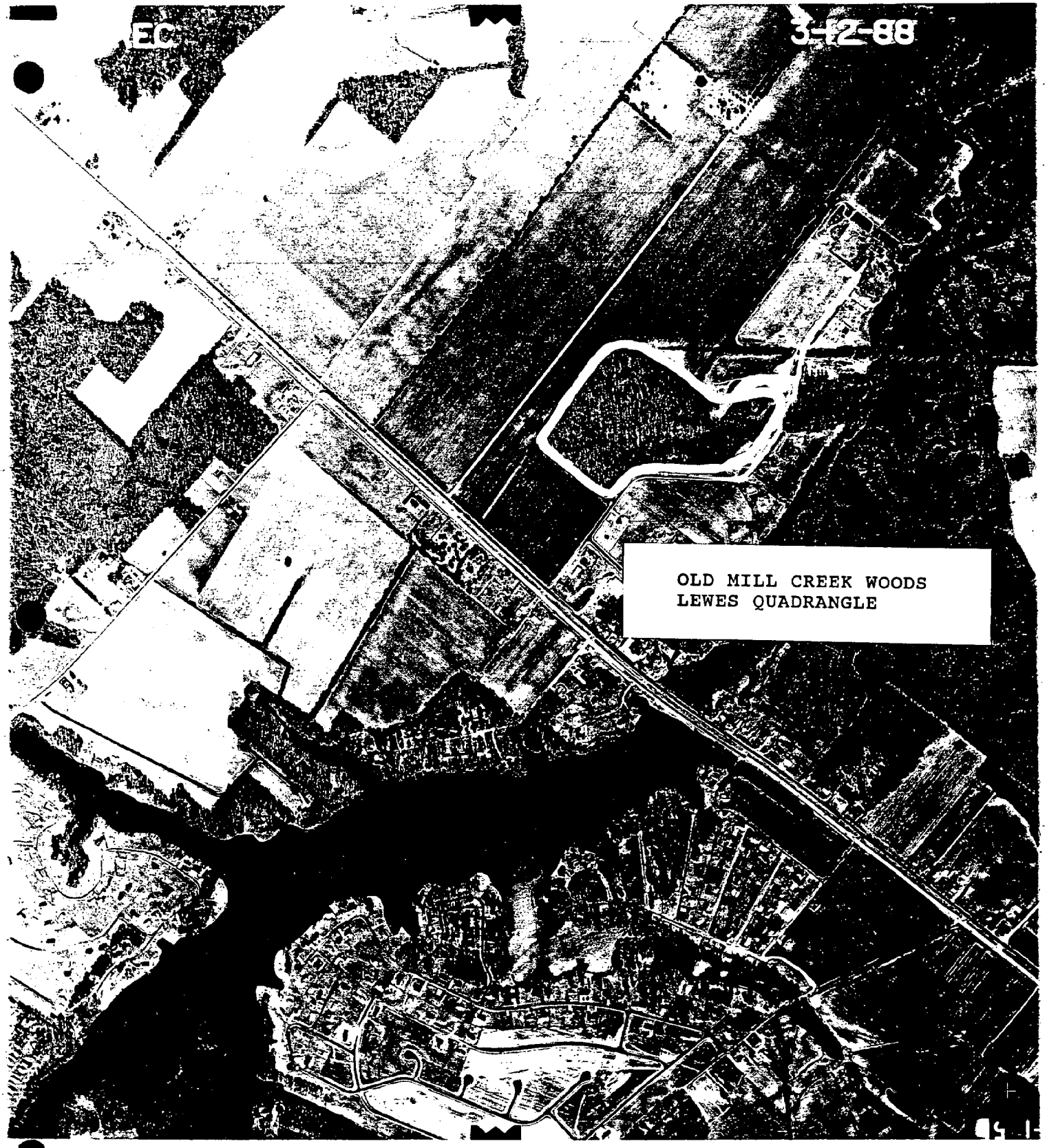
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OLD MILL CREEK WOODS
LEWES QUADRANGLE

RED MILL POND WOODS

This relatively large mesophytic forest tract consists of a mixture of oaks (white, Quercus alba, southern red, Q. falcata, and red, Q. rubra), hickories (Carya spp.) and virginia pine (Pinus virginiana). The lower tree and shrub strata are dominated by dogwood (Cornus florida), american holly (Ilex opaca), sassafras (Sassafras albidum), and red maple (Acer rubrum). Less common species include persimmon (Diospyros virginiana), highbush blueberry (Vaccinium corymbosum) and black cherry (Prunus serotina). The herb layer is relatively sparse. The canopy height is about 70 feet and dbhs for the largest trees are upto 20 inches. The forest tract has had limited disturbance over the past several decades and if allowed to continue to develop should only improve in quality. More survey work is needed. To the north side of site the community changes into a predominantly pine forest, while to the southwest the forest was recently logged.

SIZE

73.2 acres (30 hectares)

LOCATION

Sussex County. Lewes Quadrangle. Jct RT 1 and RD 88; west on RD 88 ca. 0.25 mile. Park on shoulder and enter woods on north side of road.

OWNERSHIP

Private.

PROTECTION STATUS

No portion of site is currently protected.

THREATS

Logging; agriculture runoff; development.

MANAGEMENT CONSIDERATIONS

Allow forest to continue to develop.

BOUNDARY JUSTIFICATION

All intact forest has been included within site boundary; forest is relatively homogenous except for recent clearcut and included pine stand.

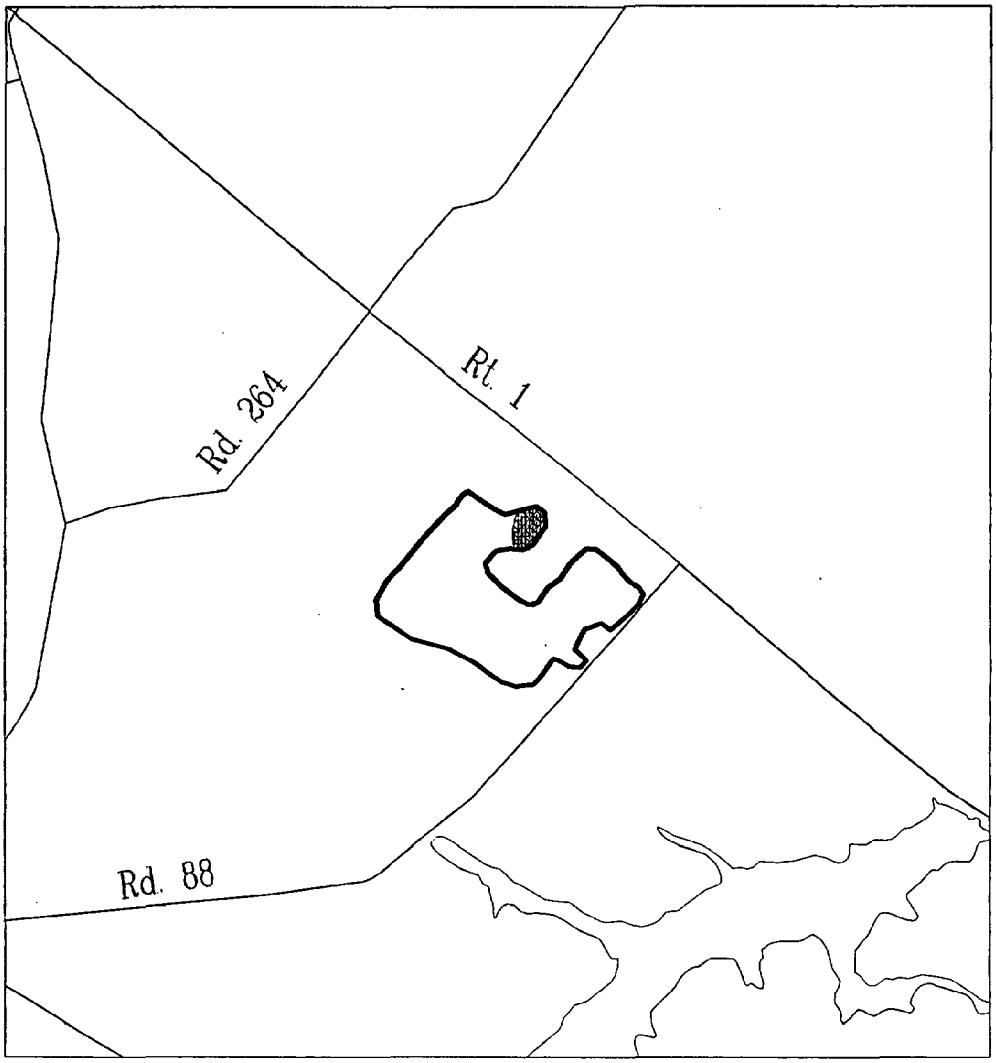
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

Three survey sites were contained within this natural area.

Red Mill Pond Woods

73.2 Acres

Lewes Quadrangle



LEGEND

NWI

Site Boundary

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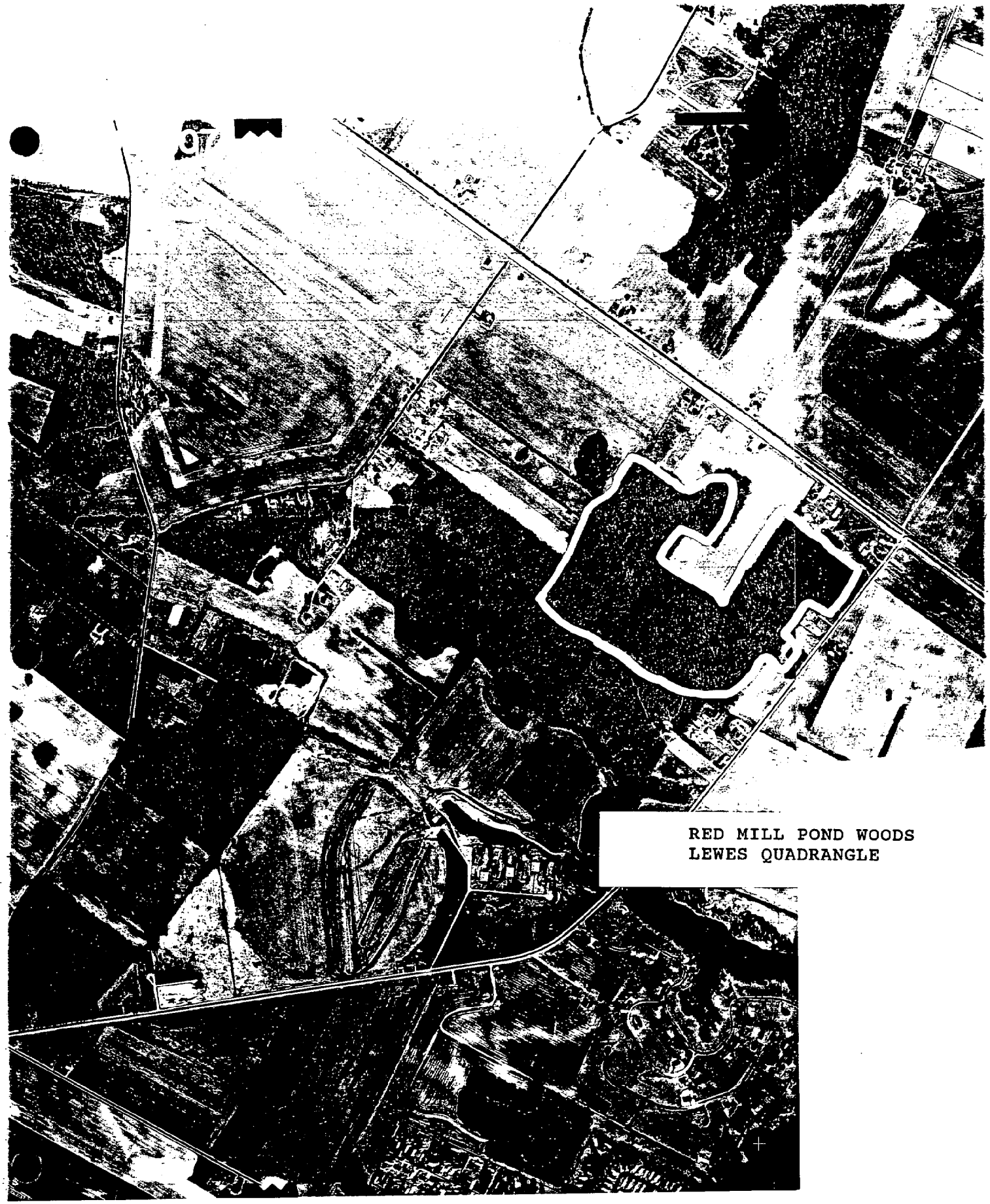


RED MILL POND WOODS
LEWES QUADRANGLE

HUCKLEBERRY POND AND SWAMP

This site consists of two large coastal plain ponds (or Carolina Bays). One of the ponds is now completely forested while the other has a large opening with a predominantly herbaceous cover. These "Carolina Bays" are oval in shape, possess a se-nw orientation, have prominant sandy rims on their southeast ends and are seasonally flooded.

Huckleberry Pond is the most pristine of the two bays and is the largest bay in Delaware and possibly for the whole of the Delmarva Peninsula. This pond has an approximately 10 acre (4 hectare) opening that contains numerous (more than 15) state as well as globally rare plant species (e.g. Coelorachis rugosa, Coreopsis rosea, Eleocharis melanocarpa, E. quadrangulata, E. robbinsii, Lachnanthes carolina, and Scleria reticularis among others). Surrounding the open pond area is a mixed hardwood-pine forest community that on the sandy rim consists of a mixture of oaks (white, southern red), tulip poplar, sweet gum, red maple, hickories, loblolly and virginia pine. The understory is comprised of dogwood, holly, arrowwood, black cherry, sassafras, honeysuckle, greenbrier, false solomon's seal, and jack-in-the-pulpit.

The woody taxa characteristic of the pond margin include red maple, sweet gum, black gum, persimmon, sweet pepperbush, willow oak, s. red oak, high-bush blueberry, and american holly.

Overall the Huckleberry Pond is undoubtedly one of the finest coastal plain ponds in Delaware.

SIZE

242.6 acres (98 hectares)

LOCATION

Sussex CO., Milton Quadrangle. Jct. Rt 1 and RD 38. Northeast on RD 38 to ca. 0.25 mile east of RD 222 junction. Park on shoulder of road just past farmhouse on south side of road. Walk north into woods and down to pond. Swamp forest is further north and east.

OWNERSHIP

Private. Owner is aware of high quality of habitat and has expressed an interest in protecting site but is not willing to enter into a conservation/management agreement with The Nature Conservancy or the State.

PROTECTION STATUS

Currently site is not protected but owner is interested in its protection.

THREATS

Primary threat is woody species encroachment (a 1930 aerial photograph shows the pond opening to be twice the areal extent that it is in 1992). Deer hunters have access to pond and in the Fall of 1991 dug a large pit (ca. 4 x 4 x 4 ft) to expose water to attract deer (this had the immediate impact of destroying individual rare plants). Other threats: agriculture run-off; logging of upland; siltation; changes in groundwater levels thus impacting hydrology.

MANAGEMENT CONSIDERATIONS

Determine hydrologic regime of pond; woody plant control; possible removal of woody plants (on experimental basis) from Huckleberry Swamp.

BOUNDARY JUSTIFICATION

The boundary was drawn to capture all forested buffer surrounding the pond; this nevertheless may not be adequate as the hydrology of the pond is groundwater driven.

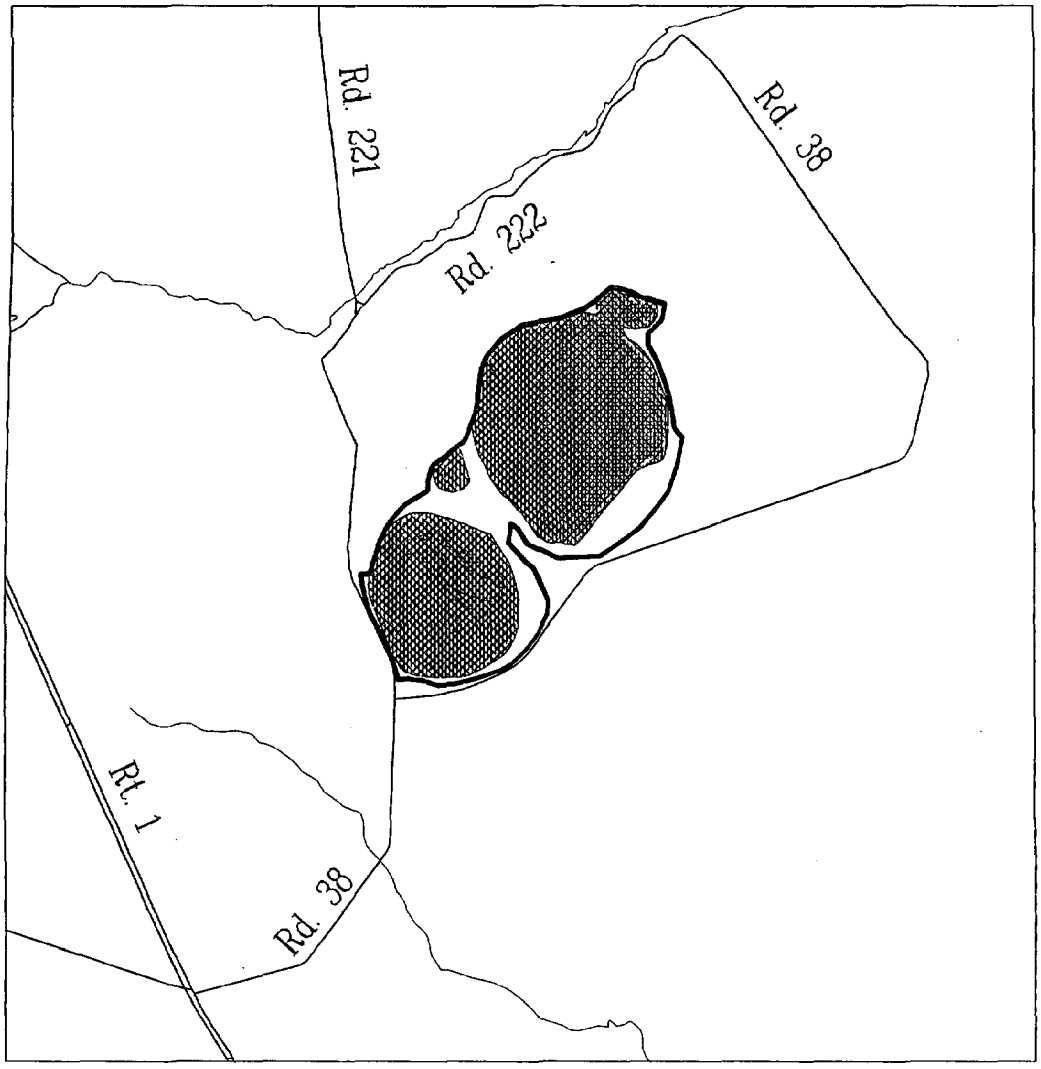
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

One survey site was contained in this natural area.

Huckleberry Pond and Swamp

241.6 Acres

Milton Quadrangle



LEGEND

NWI Site Boundary

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N

HUCKLEBERRY POND AND SWAMP
MILTON QUADRANGLE

LITTLE NECK WOODS

Terrestrial mixed mesophytic deciduous forest of excellent quality. Tulip poplar (Liriodendron tulipifera) is the dominant tree species. Trees in less abundance include white and red oaks (Quercus alba and Q. rubra), loblolly pine (Pinus taeda), sweet gum (Liquidambar styraciflua) and black walnut (Juglans nigra). Hickories (Carya spp.) are also present. The shrub strata include abundant dogwood (Cornus florida) and american holly (Ilex opaca) with lesser amounts of black cherry (Prunus serotina), sassafras (Sassafras albidum), virginia creeper (Parthenocissus quinquefolius), arrowwood (Viburnum dentatum), and poison ivy (Toxicodendron radicans). The herb layer though relatively sparse include grapefern (Botrychium virginianum), clubmoss (Lycopodium lucidulum), partridge berry (Mitchella repens), and jack-in-the-pulpit (Arisaema triphyllum). This high-quality forest tract is surrounded by marsh on three sides and by agricultural lands on the west. More survey work is needed at this site and in adjacent habitats.

SIZE

66.9 acres (27 hectares)

LOCATION

Sussex CO., Milton Quadrangle. Jct RD 38 and and RT 1. East on RD 38 to RD 223. South and then east on RD 223 to entrance to Prime Hook Wildlife Refuge; forest tract on north side of road.

OWNERSHIP

Prime Hook National Wildlife Refuge; U.S. Fish and Wildlife Service.

PROTECTION STATUS

More or less protected but may be threatened by specific management activities by Refuge personnel.

THREATS

Minimal but may include logging; creation of impoundments.

MANAGEMENT CONSIDERATIONS

Should leave forest as is (i.e. allow to develop naturally).

BOUNDARY JUSTIFICATION

Drawn to include all forested lands.

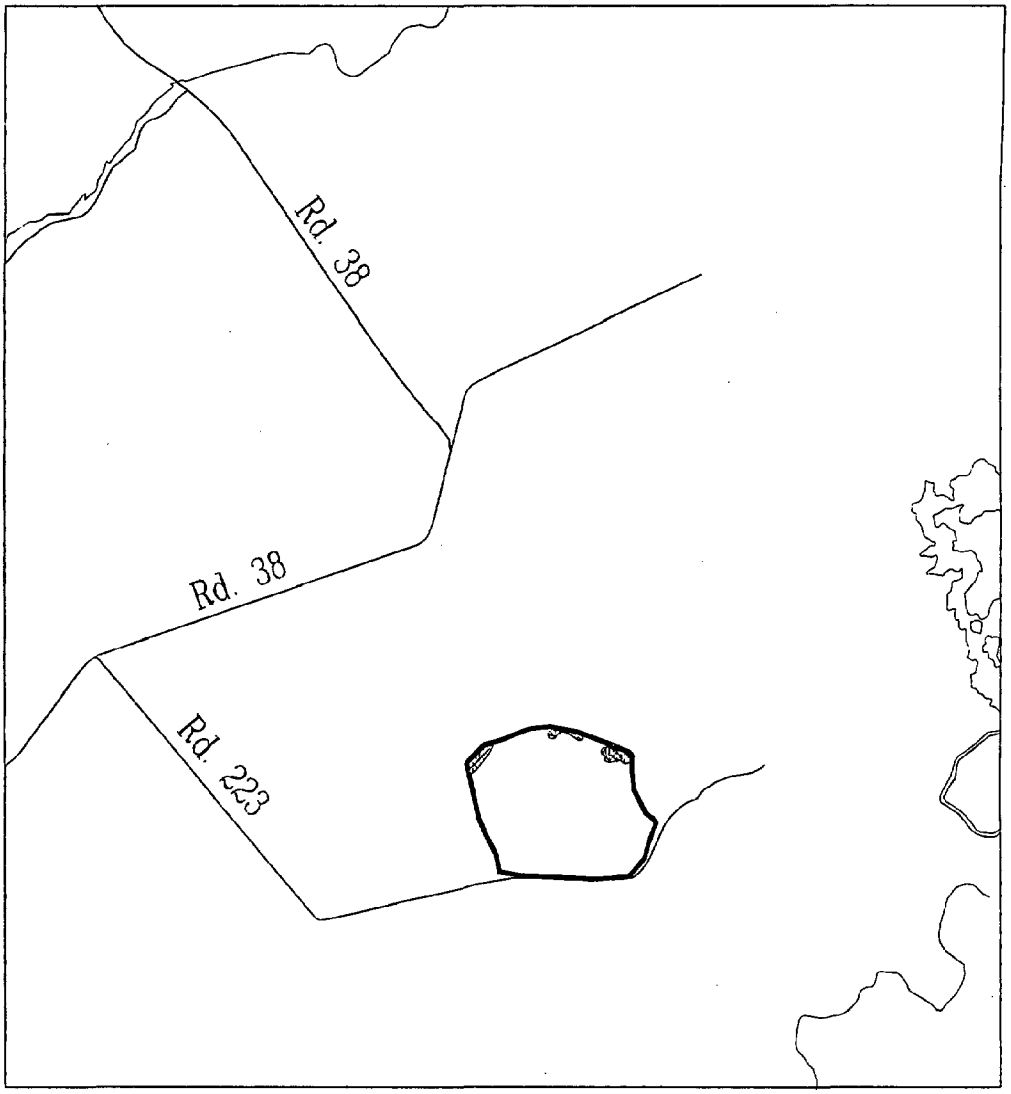
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

One survey site was contained in this natural area.

Little Neck Woods

66.9 Acres

Milton Quadrangle



LEGEND

NWI

Site Boundary

This map is prepared primarily for internal DERR resource management purposes. The information contained herein is preliminary and is subject to change or modification at any time. Use of this information by others is at their own risk and the DERR in no way guarantees the accuracy of the information.

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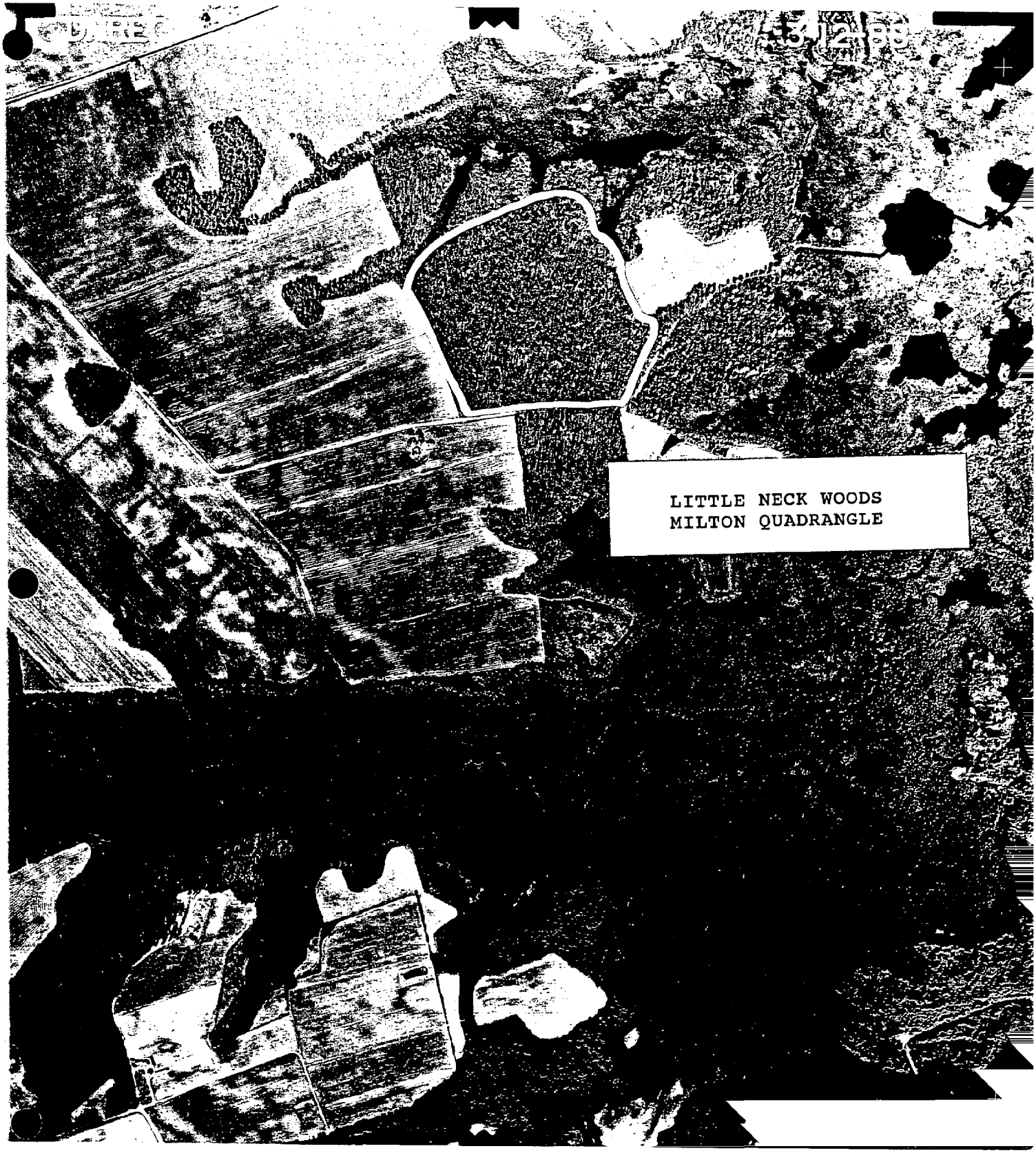

LITTLE NECK WOODS
MILTON QUADRANGLE

BENNETTS PIER WET WOODS

A palustrine and terrestrial mixed hardwood-pine community that is in a relatively pristine condition. The predominant canopy species are loblolly pine (Pinus taeda), willow oak (Quercus phellos) and southern red oak (Q. phellos). Some very large loblolly pines are present. Subcanopy tree species include red maple (Acer rubrum), sweet gum (Liquidambar styraciflua), white oak (Quercus alba), and black gum (Nyssa sylvatica). The shrub strata include abundant fetterbush (Leucothoe racemosa), black gum, highbush blueberry (Vaccinium corymbosum), sweet pepperbush (Clethra alnifolia) and lesser numbers of sweet gum, red maple, and greenbriars (Smilax spp.). The herbaceous layer (at time of sampling) was relatively sparse. This site may be more extensive than the 60 acres indicated; more survey work is needed. These woods have been relatively undisturbed over the past several decades. Agricultural fields and marshes are found at the perimeter of the forest tract.

SIZE

60.3 acres (24 hectares)

LOCATION

Kent CO., Bennetts Pier Quadrangle. Jct. Rd 121 and Rd 122 (at Thompsonville); north on Rd 122 past RD 418 (proceed past French's Mobile Home Park and Red Barn on right). Look for posted preserve sign on east side of road, park on shoulder. Proceed on foot into woods on east side of road.

OWNERSHIP

Delaware Wildlands Conservation Organization.

PROTECTION STATUS

Site is protected by Delaware Wildlands.

THREATS

Non-point pollution; agriculture run-off; logging of adjacent non-protected lands.

MANAGEMENT CONSIDERATIONS

Allow forest to develop naturally (i.e. no logging).

BOUNDARY JUSTIFICATION

Primary boundary drawn to include all of the wet woods; secondary boundary drawn to encompass all terrestrial woods.

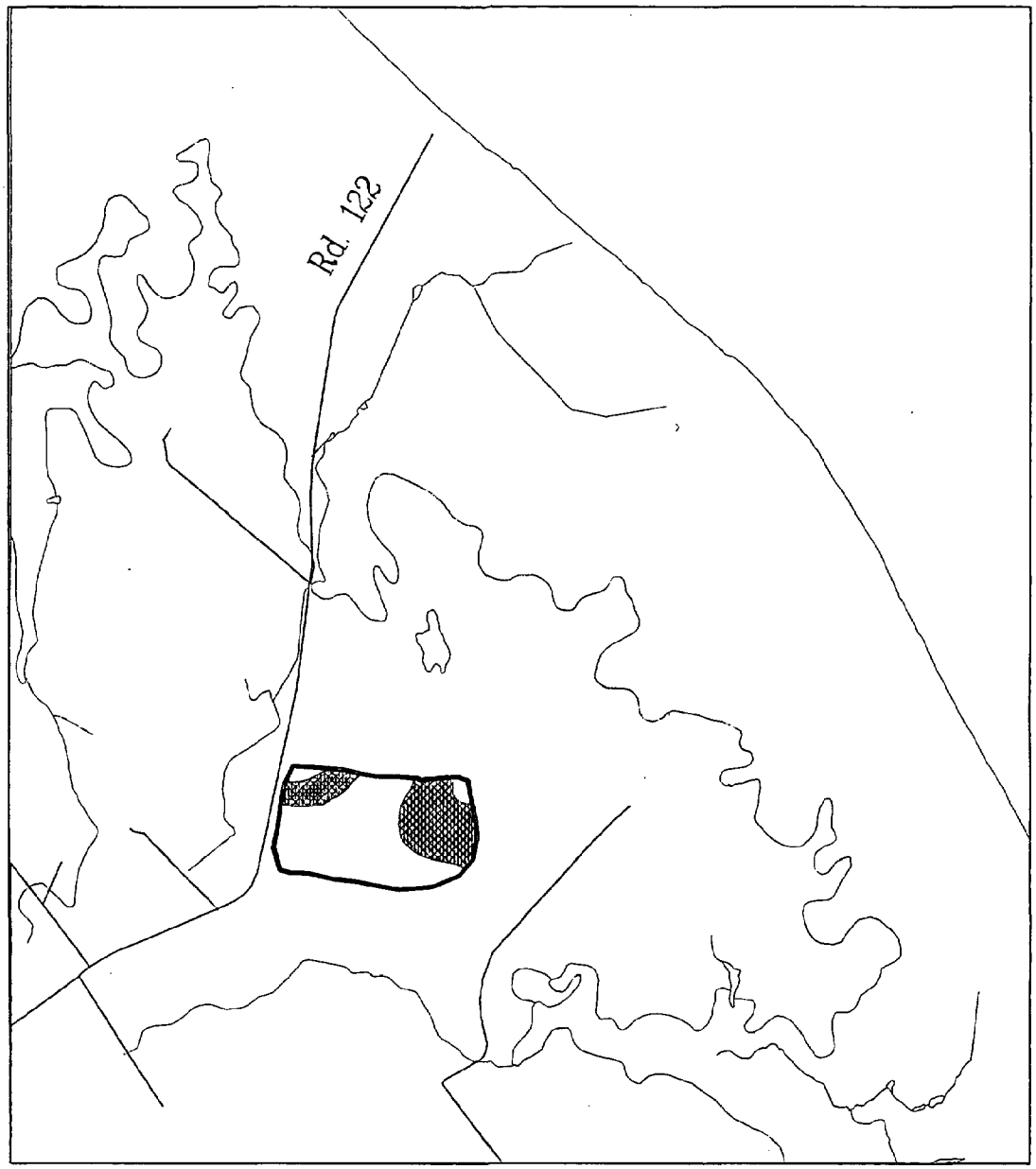
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

One survey site was contained within this natural area.

Bennetts Pier Wet Woods

60.3 Acres

Bennetts Pier Quadrangle



LEGEND

NWI

Site Boundary

This map is prepared primarily for internal SRFEC resource management purposes. The information contained herein is preliminary and is subject to change or modification at any time. Use of this information by others is at their own risk and the SRFEC in no way guarantees the accuracy of the information.

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3-22-88
BENNETTS PIER WET WOODS
BENNETTS PIER QUADRANGLE

WHITEHALL CROSSROADS WOODS

Large and relatively intact hardwood forest. Canopy approaches 100 feet in height; largest trees near 40" dbh. Oaks (Quercus palustris, Q. michauxii, and Q. alba), sweet gum (Liquidambar styraciflua), and red maple (Acer rubrum) are the predominant tree species. Common shrubs include holly (Ilex opaca), highbush blueberry (Vaccinium corymbosum), arrowwood (Viburnum dentatum), black cherry (Prunus serotina) and saplings of the tree taxa. The herb strata are sparse with club moss (Lycopodium obscurum), partridge berry (Mitchella repens), new york fern (Thelypteris novaboracensis) and pipsissewa (Chimaphila maculata) present. This is a high quality, mature hardwood forest (probably +100 years old). Additional survey work shoul be undertaken as the potential for rare species is high. The site is bounded by agricultural fields and a small amount of wetlands.

SIZE

69 acres (28 hectares)

LOCATION

Kent CO., Smyrna Quadrangle. Jct. RT 9 and Rd 84. North on RT 9 to first drive on east side of road; proceed up drive to end (ask permission to access site). Walk to woodlot on northeast side of house.

OWNERSHIP

Private.

PROTECTION STATUS

No portion of site is currently protected.

THREATS

Logging (especially since there are many large trees); agriculture run-off.

MANAGEMENT CONSIDERATIONS

Allow forest to continue to develop and mature.

BOUNDARY JUSTIFICATION

All forested lands are included in boundary; some of the forest at the perimeter is "edge" habitat of younger trees and less pristine habitat. The border is needed as buffer to the more interior high quality forest community.

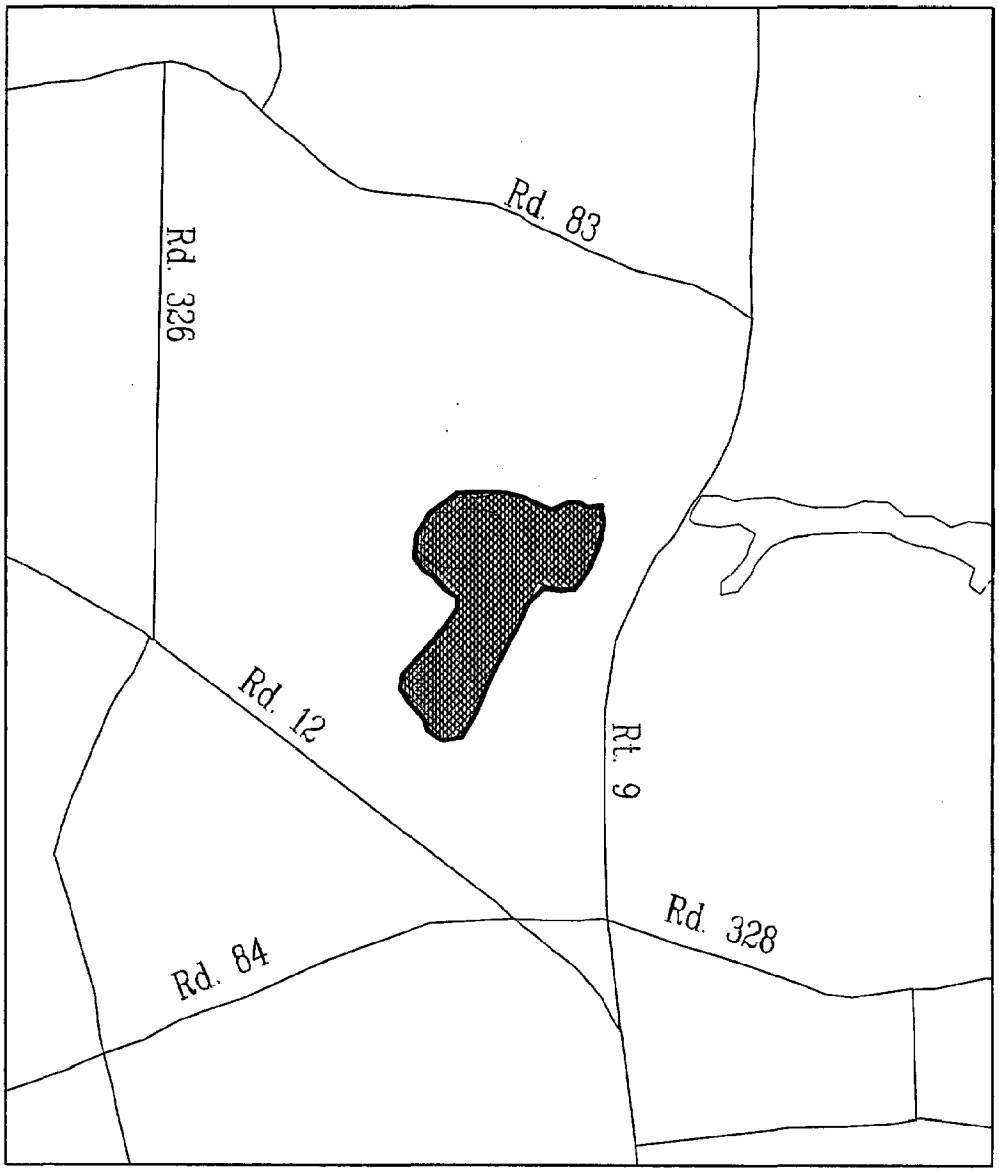
NEOTROPICAL MIGRATORY BIRD SITES PRESENT

Three survey sites were contained within this natural area.

Whitehall Crossroads Woods

69 Acres

Smyrna Quadrangle



NWI
Site Boundary
LEGEND

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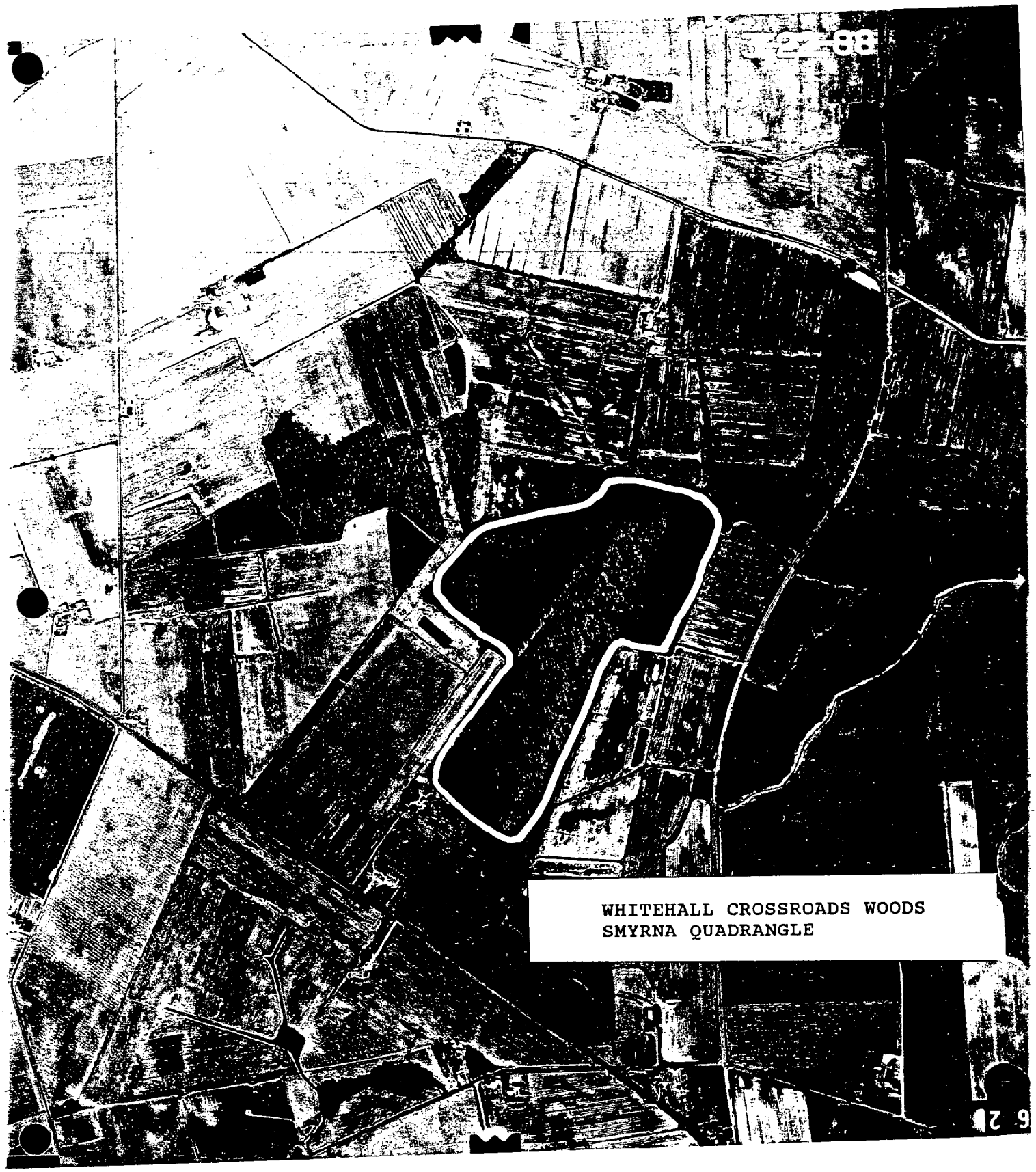

WHITEHALL CROSSROADS WOODS
SMYRNA QUADRANGLE

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