

ATTACHMENT D:
Selected Bird References, Figure 1, Figure 2, Tables 1, 2 and 3

Table 1: Breeding bird data, by point, for area-sensitive forest species, and/or uncommon or declining species from "The Preserve" in Old Saybrook, Westbrook, and Essex, CT. From the 10-27-04 Biological Survey report by EPS. Data collected by David Provencher, June 2002.

Species	Code	ROUTE 1, N edge of site, along town line						
		1-1	1-2	1-3	1-4	1-5	1-6	1-7
Black-billed Cuckoo	BB					1		
Yellow-billed cuckoo	YC		1					
Hairy Woodpecker	HR					1		
Northern Flicker	NF							
Eastern Wood Peewee	WP		1			1		1
Eastern Kingbird	EK							
Yellow-throated Vireo	YT							1
Red-eyed Vireo	RV	1	1	2	1			1
Blue gray Gnatcatcher	BG						1	
Woodthrush	WT	2		3	2	1		
Blue-winged warbler	BW						1	
Prairie Warbler	PW							
Black & White Warbler	WW							1
American Redstart	AR							
Worm-eating Warbler	WE				1			
Ovenbird	OB	3	1	2				1
Hooded Warbler	HO							
Scarlet Tanager	SC		1	2	1		1	1
Eastern Towhee	RS			1			2	1
Rose-breasted Grosbeak	GB					1		
Indigo Bunting	IB						2	
Total area-sensitive, forest species		3	3	4	4	4	2	5
Total area-sensitive, forest individuals		6	3	9	6	4	2	6

Notes: 1 Shading denotes an area-sensitive, forest species, impacted by fragmentation, observed on route.
 2. Tallies were prepared from raw data sheets following p. 16 of the Breeding Bird Survey Report. Several problems were encountered, e.g. use of the same code GC (from table on p. 16) was used for gray catbird and great crested flycatcher. Therefore the latter was not be included on the list of area-sensitive forest songbirds. CB, not on list, appears to have been used for some catbird observations.

Table 1, cont.: June 2002 breeding bird data, by point, for selected species at The Preserve.

		ROUTE 2, SW of Pequot Swamp Pond					
Species	Code	2-1	2-2	2-3	2-4	2-5	2-6
Black-billed Cuckoo	BB						
Yellow-billed cuckoo	YC	1	1	1		1	
Hairy Woodpecker	HR						
Northern Flicker	NF						
Eastern Wood Peewee	WP	1	1				1
Eastern Kingbird	EK						
Yellow-throated Vireo	YT						1
Red-eyed Vireo	RV	1	1	1	1		
Blue gray Gnatcatcher	BG						
Woodthrush	WT		2	1		1	1
Blue-winged warbler	BW						
Prairie Warbler	PW						
Black & White Warbler	WW						
American Redstart	AR						
Worm-eating Warbler	WE		1				2
Ovenbird	OB		1	2	3	2	
Hooded Warbler	HO						
Scarlet Tanager	SC		1			1	1
Eastern Towhee	RS						
Rose-breasted Grosbeak	GB		1	1		2	
Indigo Bunting	IB						
Total area-sensitive, forest species		2	6	4	2	4	5
Total area-sensitive, forest individuals		2	6	5	4	6	6

Table 1, cont.: June 2002 breeding bird data, by point, for selected species at The Preserve.

Species	Code	ROUTE 3, Site Center, E & N of Pequot Swamp Pond					
		3-1	3-2	3-3	3-4	3-5	3-6
Black-billed Cuckoo	BB						
Yellow-billed cuckoo	YC						
Hairy Woodpecker	HR						
Northern Flicker	NF						
Eastern WoodPeewee	WP	2	1	1		1	1
Eastern Kingbird	EK		1				
Yellow-throated Vireo	YT	1					
Red-eyed Vireo	RV	1	1	1	1	1	1
Blue gray Gnatcatcher	BG						
Woodthrush	WT				2	1	
Blue-winged warbler	BW						
Prairie Warbler	PW						
Black & White Warbler	WW						
American Redstart	AR	1					1
Worm-eating Warbler	WE		1	1	1		
Ovenbird	OB	1	1	2	1	3	1
Hooded Warbler	HO					1	1
Scarlet Tanager	SC					1	1
Eastern Towhee	RS						
Rose-breasted Grosbeak	GB				1		
Indigo Bunting	IB						
Total Area-sensitive, forest species		5	4	4	5	6	6
Total Area-sensitive, forest individuals		6	4	5	6	8	6

Table 1, cont.: June 2002 breeding bird data, by point, for selected species at The Preserve.

Species	Code	ROUTE 4, NE & E side, just east of RR ROW							
		4-1	4-2	4-3	4-4	4-5	4-6	4-7	4-8
Black-billed Cuckoo	BB								
Yellow-billed cuckoo	YC							1	
Hairy Woodpecker	HR			1					
Northern Flicker	NF							1	
Eastern WoodPeewee	WP		1				1		1
Eastern Kingbird	EK						1		
Yellow-throated Vireo	YT	1				1			
Red-eyed Vireo	RV	3	3	1	2	1	1	1	2
Blue gray Gnatcatcher	BG				1				
Woodthrush	WT		1	1					
Blue-winged warbler	BW				1				1
Prairie Warbler	PW								
Black & White Warbler	WW								
American Redstart	AR								
Worm-eating Warbler	WE						1		
Ovenbird	OB	2	1		2			1	
Hooded Warbler	HO								
Scarlet Tanager	SC	1	1	1	1	1			
Eastern Towhee	RS				1	1	2		
Rose-breasted Grosbeak	GB					2			1
Indigo Bunting	IB	2	1	2		1	1	1	
Total Area-sensitive, forest species		4	5	4	4	4	2	2	3
Total Area-sensitive, forest individuals		7	7	4	6	5	2	1	4

Also Northern Goshawk (Point 4-4)

Table 1, cont.: June 2002 breeding bird data, by point, for selected species at The Preserve.

Species	Code	ROUTE 5, SW Corner of Site						
		5-1	5-2	5-3	5-4	5-5	5-6	5-7
Black-billed Cuckoo	BB							
Yellow-billed cuckoo	YC	1	1					1
Hairy Woodpecker	HR							
Northern Flicker	NF							1
Eastern WoodPeewee	WP		1	1	1	1		1
Eastern Kingbird	EK							
Yellow-throated Vireo	YT							
Red-eyed Vireo	RV	1				1		
Blue gray Gnatcatcher	BG							
Woodthrush	WT	1	4	1	2		1	
Blue-winged warbler	BW							
Prairie Warbler	PW		1					
Black & White Warbler	WW							
American Redstart	AR							
Worm-eating Warbler	WE		1		1	1		
Ovenbird	OB	1	2	2	1		2	1
Hooded Warbler	HO							
Scarlet Tanager	SC	1		1		1	1	1
Eastern Towhee	RS		3					
Rose-breasted Grosbeak	GB							
Indigo Bunting	IB							
Total Area-sensitive, forest species		4	4	4	4	4	3	2
Total Area-sensitive, forest individuals		4	7	5	5	4	4	2

Data tabulation by point by S. Gadwa , Rema Ecological Services, LLC
12/8/2004

<i>Table 2: Trends</i>		<i>Breeding Bird Atlas: No. Blocks where Confirmed (out of a total of 596 blocks, each 10 sq. miles in area (Bevier 1994)</i>	<i>2003 Summer Breeding Bird Count, CT, Total Count</i>	<i>Rate of Decline or increase, Breeding Bird Survey Data, CT 1966-2002</i>
Black-billed Cuckoo		31	26	-9.20%
Yellow-billed cuckoo		20	50	-13.9%
Hairy Woodpecker	A	171	202	-3.70%
Northern Flicker	A	329	512	-3.30%
Eastern Wood Peewee	A	132	510	-0.60%
Eastern Kingbird		468	526	-2.50%
Yellow-throated Vireo	A	83	176	-2.50%
Red-eyed Vireo	A	264	2255	2.30%
Blue gray Gnatcatcher	A	97	217	7.10%
Woodthrush	A	245	1065	-1.20%
Blue-winged warbler		353	271	-3.20%
Prairie Warbler		93	101	-6.30%
Black & White Warbler	A	222	453	-0.80%
American Redstart	A	192	896	2.30%
Worm-eating Warbler	A	68	91	7.10%
Ovenbird	A	244	1249	0.10%
Hooded Warbler	A	18	11	63% (N=6)
Scarlet Tanager	A	187	569	-1%
Eastern Towhee		256	557	-5.80%
Rose-breasted Grosbeak	A	254	351	-2.60%
Indigo Bunting		115	346	-4.80%
<i>American Robin (for comparison)</i>		592	4750	0.60%

This table accompanies Table 1, showing data by point for selected species in the data set collected at the Preserve in June 2002 by David Provencher. Species annotated with "A" are forest species sensitive to habitat fragmentation (area-sensitive). Bold indicates species with lowest populations, state-wide.

Table 3: Avian species that are known from the Site or its vicinity or are expected at the Site based on regional abundance and available habitat, and which do not appear on the submitted avian lists.

Common Name	Scientific Name	Notes
American Black Duck	<i>Anas rubripes</i>	Shrub swamps, emergent wetlands
Broad-winged hawk	<i>Buteo platypterus</i>	<u>Observed</u> on the Essex portion of the Site in Summer of 2000
Ruffed grouse	<i>Bonasa umbellus</i>	Upland woods near wetlands, power line ROW
Great horned owl	<i>Bubo virginianus</i>	<u>Observed</u> on the Essex portion of the Site in Summer of 2000
Whip-poor-will	<i>Caprimulgus vociferous</i>	Known from the Essex portion of the Site (ca. 2000)
Pileated woodpecker	<i>Dryocopus pileatus</i>	Breeds in the vicinity of Site based on CT BBS*
Acadian flycatcher	<i>Empidonax virescens</i>	Woodlands; known from vicinity of Site
Eastern phoebe	<i>Sayornis phoebe</i>	<u>Observed</u> on the Essex portion of the Site in Summer of 2000
Brown creeper	<i>Certhia americana</i>	Expected based on habitat; known from the region
Carolina wren	<i>Thryothorus ludovicianus</i>	<u>Observed</u> on the Essex portion of the Site in Summer of 2000
Northern mockingbird	<i>Mimus polyglottos</i>	Power line ROW; known from vicinity of Site
Brown thrasher	<i>Toxostoma rufum</i>	ROW; woodland edges; CT Species of Special Concern
White-eyed vireo	<i>Vireo griseus</i>	Scrub shrub and emergent wetlands near woodland edges
Chestnut-sided vireo	<i>Dendroica pennsylvanica</i>	ROW; woodland edges; known from the vicinity of Site
Louisiana waterthrush	<i>Seiurus motacilla</i>	Flowing perennial stream in wooded swamps
Canada warbler	<i>Wilsonia canadensis</i>	Near stream within wooded wetlands
Swamp sparrow	<i>Melospiza georgiana</i>	Marshes, swamps, bogs, known from vicinity

* Connecticut Breeding Bird Survey (Summer 2003) (CT Ornithological Society)

SELECTED AVIAN REFERENCES:

General, Habitat Fragmentation and Loss

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The Preserve: **Old Saybrook, Westbrook, Essex, Connecticut**
As seen on a November 1, 2000 Aerial Photograph (www.globexplorer.com)

Date: 12/8/04

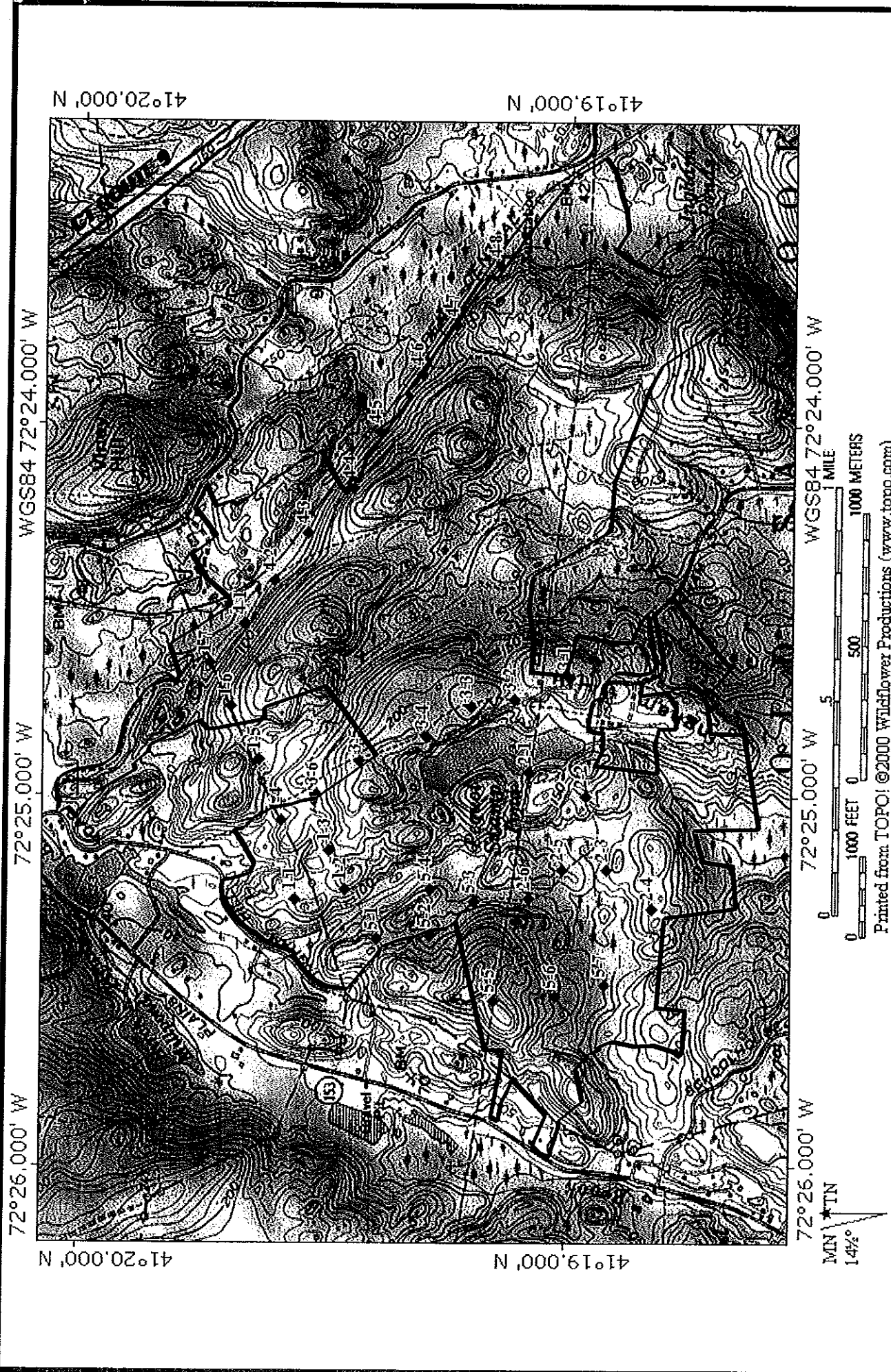


ROMA Ecological Services, LLC
164 East Center Street, Suite 2
Manchester, CT 06040

— Approximate Property Boundary (+/- 967 acres)
Note: Entire color plate covers approximately 7.1 square miles

Figure 1

1" = +/- 1,700'



Date: 12/8/04

Rema Ecological Services, LLC
 164 East Center Street, Suite 2
 Manchester, CT 06040

The Preserve: Old Saybrook, Westbrock, Essex, Connecticut
 As seen on USGS Topographic Map (Essex Quadrangle, 1977)

- Approximate Property Boundary
- ◆ Breeding Bird Survey Points (per David F. Provencher, 2002)

Figure 2

Scale: As shown

