OPSB Application **Seneca Wind**

Appendix N-3: Evaluation of Bird and Bat Occurrence and Potential Development Impacts at Seneca Wind Farm

SENF COS

SEWFPG305

FORM WD02 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SENECA	AF Survey type:	Pass MIG	Date: 09-16	-09
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Observer: 4KO Start time: 740 (military time) Stop time: 250 + 5 min)
FOR INTERNATION

Point number: 05 Temp (°C): 18 Wind speed (m/s): 5 KUCloud cover 0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	75	N	2	FLYING
RBWO	50	w	1	
AMRO	50	N	/	FOIL
DOWO	40	E	1	- FACE WEEKS
WBNU	150	E	1	WEEKS
BCCH	40	E	2	
BLJA	130	E	4	
AMRO	75	E	1	
CAGO	50	E	48	FLYOVERS
MARO	80	E	13	
BRCA	60	L	1	
BLPW	60	Ē	/	BLACKPOLL
5701	E DELIV	SRY FOR	FIELD	ENTRANCE IN
UNPA#1	75	N	/	POSSIBLE CHSP
CHSP	125	N	1	
IBNU	10	ω	/	
BCCH	10	W	3	
EAWP	40	W	1	
AWP	50	5W	7	
NOFL	20	5	/	FLY/NG
UNPA#2	50	E	1	HOF1??

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SEWF004

SEWFP6304

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of _/ 6/27/08 DIVISION OF WILDLIFE

Project Name:	SENECA	CSF Surve	ey type:_/	PASS MIG	Date: 09. 16-0°	7
	/ .				me) Stop time: 728	
Point number	04 Tem	in (°C): 16	Wind sp	eed (m/s):	O Cloud cover O %	

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	75	5	1	
RHWO	60	5	/	
BLJA	70	55E	/	
WBNU	75	54	1	
WBNU	<i>5</i> 1	E	1	
CAGO	1.00	NE	2	
TUTI	125	E	2	100
RB WO	100	5E	/	
NOCA	90	SE ENE	1	
AMRO	75	5	1	
BLJA	125	ENE	/	
AMGO	45	5W	/	
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GENFOLO

FORM WD02

6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 09-14-09

Observer: HKD Start time: 1008 (military time) Stop time: 1018

Point number: 16 Temp (°C): 18 Wind speed (m/s): 10 KN Cloud cover 15%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	100	W	/	
TUVU	80	W	/	
WBNU	100	WNW	/	
AMCR	200	E	6	FLYING
AMGO	20	N	4	
AMGO	20	W	3	
GBHE	150	NW	1	
EUST	0		5	FLYOUERS
AMRO	75	E	3	
GRCA	125	E	/	
CEDW	100	E	1	
CEDW	125	ENE	/	
BLJA	150	ESE	1	
BEKI	80	SE	2	
1	(

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SEWEPG308

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA W/ Survey type: PASS M/G Date: 09-14-09

Observer: HRO Start time: 926 (military time) Stop time: 936

Point number: /3 Temp (°C): /9 Wind speed (m/s): 6 Cloud cover /0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
GRCA	70/100	NW	2	
EAWP	80	W	2	77.110
UNPA#	40	NW	/	BARECY SEEN
INBU	45	NW	4	
WBNU	40	50	/	
AMGO	30	NW	2	
DOWO	70	NW	/	
UNFL	80	NW	1	EMPIDONAX, LEFL?
AMRO	60	N	1	
AMRÒ	80	NW	/	
WITU	70	W	1	BURBLING
BCCH	15/100	Na	3	
UNWO	90	Na	/	REWD OR RHWO.
AMRO	100	N	Z	FLYING
AMGO	80	NW	2	
GRCA	100	NW	/	
LEFL	100	NW	2	
UNFL	40	5W	/	PROBABLE LEFL
MAWA	40	W	1	
INBU	90	SW	/	

GENFOIL

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 09-14-09

Observer: HKO Start time: 845 (military time) Stop time: 855

Point number: // Temp (°C): // Wind speed (m/s): 4 Cloud cover 5%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	50	E	/	
AMRO	50	E	/	
EUST	75	5W	4	
RBWO	40	NE	1	
EUST	200	W	8	
GRCA	85	SE	2	
WBNU	100	5	1	
UNPA#I	70	5	1	
BCCH	125	5	1	
HOSP	200	S	5	
YTVI	100	5	1	YELLOW-THROATED VIREO
RBWO	150	5	/	
AM60	90	SW	1	
5				

SEWF012

SENFP6311

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Page $\underline{/}$ of $\underline{/}$

Project Name	SENE	ECA WE Surv	ey type:_/	PASS MIC	3I	Date: <u>09-14-09</u>
Observer:	HKC	Start time:	909	(military	time)	Stop time: <u>9/9</u>
Point number	. 12	Temn (°C): 19	Wind sr	need (m/s):	8	Cloud cover 5 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AM60	30	5	1	
WBNU	50	NW	/	
BUJA	100	561	/	
BLJA	50	W	1	FLYING
BLJA	25	E	/	
AMRO	50	W	1	
INBU	150	E	1	CF
GRCA	150	E	/	
MODO	150	E	1	
AMRO	100	ESE	1	
		-		
7				

SEWFPG311

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name: SENE	CAWF Surve	ey type: <u>PASS MG</u> , Date: <u>09-14-09</u>	7
Observer: //KO	Start time:_	7/6 (military time) Stop time: 726	
Point number: 07	Temp (°C): /4	Wind speed (m/s): 5KN Cloud cover 5%	

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	125	SE	5	
CEDW	20	NW	1	
AMRO	75	W	2	FLYOVERS
MODO	50	5	1	H
UNPAH	80	NW	/	
MODO	125	5 <i>E</i>	2	
HOSP	125	55	1	
AMRO	175	E	/	
AMCR	108	NW	1	
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		- Vite - Colonia		
				1-11-11-11-11-11-11-11-11-11-11-11-11-1

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6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECAWF Survey type: PASS MIG Date: 09-14-09

Observer: HKO Start time: 729 (military time) Stop time: 739

Point number: 08 Temp (°C): 15 Wind speed (m/s): 5KN Cloud cover 5%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	40	NW	/	The second secon
AMRO	60	NE	2	
AMRO	150	NE	1	FLYOUER
UNPA#1	80	NE	1	FLYING
BLJA	30	N	2	
AMRO	30	E	3	FLYOVER
AMRO	150	E	3	
AMCR	7200	N	17	>200M
AMCR	20	W	6	FLYOVERS
BLJA	200	E	/	

GENFOIT

SEWFP6313

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name	: SENECA	WE Surv	ey type:_	PASS A	16 Date:	09-16-09
Observer:	HKO	_Start time:_	832	(military	time) Stop	time: 842
Point number	: <u>/7</u> Tem	p (°C): /8	Wind s	peed (m/s):_	/2 Clo	oud cover 15%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
UNPA#1	80	N	/	UNID WARBLER
BLJA	50	5	/	
AM60	40	6	/	
BAWW	35	5	/	BLACK & WHITE WARBO
DOWO	25	se-	/	
WBNU	100	5W	/	
UNPAHI	:40	5	1	RCK1? VIRED?
			-	COUDINT GET CLE
BCCH	75	5	2	
TUTI	80	5	1	
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DUMPT	RUCKS OF	ME THRO	106H 7	WICE INTERRUPTING
ACTIV.				

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SEWFPG314

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6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECAWF Survey type: PASS MIG Date: 09-16-09

Observer: HKO Start time: 928 (military time) Stop time: 938

Point number: 03 Temp (°C): 17° Wind speed (m/s): 25 Killoud cover 20%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
MARO	50	5	1	
AMRO UNPA#1	40	5	1	AMGO?
AMRO	30	S	(
AMGO	10	5	1	
MODO	0		/	FLYOVER
(ſ			
		1		

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

SEWFP635 S Page/of/

Project Name	SENE	ECAWF Surve	ey type:_/	PASS MIC	Date:	09-16-09
Observer:	HKO	Start time:	955	_(military t	ime) Stop	time: 1005
Point number:	01	Temp (°C): 19	Wind sn	eed (m/s)· -	20KUCIO	ud cover 40%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	75	NW	1	
BLJA	200	N	1	
EAWP	80	Na	1	
AMCR	100	NE	/	
AMCR	150	5W	1	
AMRO	80	NW	1	
WBNU	75	SW	1	
WBNU	100	W	1	
TUVU	40	E	1	FLYOVER
BLJA	90	E	1	
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG. Date: 09-16.09

HKO Start time: 1010 (military time) Stop time: 1020

Point number: 02 Temp (°C): 22 Wind speed (m/s): 5 KN Cloud cover 40%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	60	NW		
ROPI	200	NW WSW	2	
AMGO	50	SE	/	
AMGO	100	ϵ	1	
BLJA	150	E	1	
EUST	200	5W	3	THEN FLYING 401
AMCR	200	5	1	
HOSP	200	5	2	in*
EAWP	75	W	/	
1	(
			1	

GENFO18

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 09-14-04

Observer: HKO Start time: 826 (military time) Stop time: 836

Point number: /8 Temp (°C): /8 Wind speed (m/s): 5 Cloud cover /0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
HAWO	2.0	SE	/	
50 SP	200	NE	1	
SASP	200	NE	1	
HOSP	200	NE	-3	
UNSP	200	NE	6	DEEP IN SOYBEANS
WAVI	100	NNE	1	
AMRO	50	W	i	
EUST	200	5W	5	
HOSP	200	5W	4	
BLJA	150	N	1	
AMRO	100	NE	4	FLYOVERS
CHSP	200	NW	3	
UNPA#1	150	5	1	SPARROW? AMGO?
AMCR	2.00	W	1	
WBNU	80	5W	1	
AMCR	200	3W	5	
			16	

SEWFPG318

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name:	SENECA (WF_Surve	y type:	955 MIG	Date:	-14-09
Observer:	HKO	_Start time:	755	_(military ti	ime) Stop time:	805
Point number:	△9 Temi	n (°C): 15	Wind spe	ed (m/s)·	S Cloud co	ver 5 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EAUIP	40	54	/	
GRCA	75	ESE	/	
COGR	80	NE	10	
AMRO	40	5W	/	
CEDW	20	E	4	
UNPAHI	35	ENE	/	
BLJA	200	NE	/	
NOCA	10	ESE	2	
BUTA	100	W	/	
RBWO	75	5W	1	
BLJA	100	NW	/	
UNPA#Z	100	6)	10	FLYOVERS
AMRO	70	5	/	
YTVI	75	WNW	/	YELLOWS. THEODORED VIRE
COHA	75	W	1	
1	\			
	1			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 **DIVISION OF WILDLIFE**

Project Nan	ne: SENEC	A WF Surve	y type: <u>PASSI</u>	1/6 1	Date: 09-14-09
Observer:	HKO	Start time:/	/035 (military	time)	Stop time: 1045
Point numb	er: 06 Ten	np (°C): /9	Wind speed (m/s):	8	Cloud cover 45%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	100	NE	2	
TUVU	150	NW	1	
GRCA	40	NE	1	
AMGO	25	E	1	
AMRO	100	NW	/	
BLJA	60	60	1	
BCCH	50	W	/	
AMGO	150	W	/	
AMRO	75	E	27	
AMRO	75	E	3	
BGGN	60	E	1	
AMRO	58-150	E	15	
BUTA	100	ESE	2	
TUTI	10	ENE	2	
CEDW	85	E	5	
COGR	70	E	3	FLYOVERS
GRCA	100	E	1	
AMRO	85	E	10	
RTHA	50	E	/	FLYOVER

SENF004

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of _ DIVISION OF WILDLIFE

Project Name:	SENECA.	WF Surv	ey type:	955 MIC	Date: <u>09-24-09</u>
Observer:	HKO	_Start time:_	943	_(military	time) Stop time: 953
Point number:	<i>04</i> Temp	o (°C): 2/°	, Wind spe	ed (m/s):	12 KDCloud cover/00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
KILL	200	E	/	
AMRO	75	E	2	FLYOVERS TOS
unkus	50	SE	/	FLYOVERS TOS RHWO?? UND WOODPECK
UNPAH	50	E	1	
TUVU	100	E	2	
AMRO	40	E	/	FLYOVER TON
RHWO	25	SW	/	
EAWP	100	SW	1	
RHWO	10	N	1	
AMRO	50	NE	1	
UNPA#2	30	5	/	FLYING
				C -//
				Fall Week 6
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GENFO05

SENFPG321

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 09-24-09

Observer: FIXO Start time: 924 (military time) Stop time: 934

Point number: O5 Temp (°C): 22° Wind speed (m/s): 4KD Cloud cover 99%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EAPH	20	N	/	
AMRO	35	NE	/	
BLJA	80	NE	/	
NOCA	25	E	2	
GRCA	200	E	/	
MODO	150	N	4	
AMRO	150	N	1	
BCCH	160	NNE	/	
WBNU	100	NNE	/	
BLJA	10	N	2	
BLJA	10	S	2	
AMRO	30	5	2	FLYOVER
AMGO	40	5	1	FLYING
UNPAZI	15	5	3	FLYOVERS

SENFOOS

SENFPG322

FORM WD02 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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Project Nam	e: SEN	ECA WE Surve	ey type:_	PASS MIG.	Date: 09-24-09
Observer:	HKO	Start time:	855	(military time)	Stop time: 905
Point numbe	er: 08	Temp (°C): 2/	Wind s	need (m/s): 2	Cloud cover 99%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	60	NE	2	
BLJA	150	N	/	
AMRO	0-40	3	7	FLYING N
EAPH	150	NE	/	
NOFL	200	NE	/	
AMRO	40	5	1	FLYDUER
AMGO	60	SE	2	
EUST	30	,5	3	FLYDUER
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GENFOOT

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name:	SENECA	WF	_Survey type:_	PASS	MIG	Date: 09-24-09	
	. / . / .						

Observer: HKO Start time: 836 (military time) Stop time: 846 kight for lifting

Point number: 07 Temp (°C): 21 Wind speed (m/s): 2 KD Cloud cover 99%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	40	E.		A
HOSP	150	SE	6	
AMRO	80	E	2	
EUST	150	5€	5	
RIJA	120	SE	1	
NOFL	140	E	1	
TUTI	150	E	2	
WBNU	150	E	1	
KILL	200	SE	/	WHEET
AMRO	80	NE	3	FLYOUTES
MAWA	150	E	2	MAGNOLIA WARBLER
KILL	300	E	4	>200M
AMRO	300	E	/3	7 200 M
RWBL	150	E	8	FLYOVER
MODO	150	5E	5	
AMRO	150	55	/	
CAGO	150	E	Z	
DOWO	200	E	1	
UNPA#1	150	E	1	PROBABLE RCKI

SEWF003

6/27/08

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 09-24-09 Observer: L/KO Start time: 802 (military time) Stop time: 8/Z Point number: 03 Temp (°C): 20 Wind speed (m/s): 0 Cloud cover 100%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
RWBL	25	NE	8	
FISP	10	NE	2	
BHCO	15	NE	/	
EUST	15	NE	5	
UNSP	20	NE	2	UNID SPARROWS
AMGO	10	E	2	
BLJA	25	E	/	
AMRO	20	SE	3	
AMRO	30	E	4	
AMGO	60	NW	2	
AM60	40	5	4	
AMGO	0		1	
AMRO	15	SE	3	
AMRO	15	55	5	
ANGO	15	NE	5	
AMGO	30	W	3	
DOWO	10	E	/	
AMGO	20	N	4	
AMGO	15	E		
MODO	20	W	/	
UNSP	40	NE	2	UNID SPARROWS

GENFOIS

SEWFP6325

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name: SENECA	WF Survey type: Pass Mig Date: 09-23-09
Observer: HKO	Start time: 925 (military time) Stop time: 935
Point number: / 8 Tem	p (°C): 24 Wind speed (m/s): 3 Cloud cover /00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMGO	80	Ace.	1	
EUST	200	50	3	
HOSP	200	50		
WBNU	80	W	1	
BLJA	100	NE	1	
AMGO	80	NW	/	
AMGO	40	NW	1	
BLJA	100	N	2	ADDITIONAL
AMRO	150	N	2.,	
AMCR	.50	5	1	FLYING
<	51			
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass M16 Date: 09-23-09

Observer: HKO Start time: 944 (military time) Stop time: 954

Point number: 09 Temp (°C): 25° Wind speed (m/s): 8 Cloud cover %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	80	N	1	
AMRO	90	NE	2	
AMCR	50	W	/	
AMCR	80	NW	1	
RHWO	75	NE	1	
PHWS	572	N	1	
RTHA	150	E	1	
BCCH	25	SE-	2	
EU57	120	E	1	FLYING
BLJA	150	E	/	
UNEVO	100	E	1	UND WOODPECKE.
Dowo	50	NE	2	
BLJA	150	SE	2	
UNPAHI	50	NE	/	MOVED W/ BCCH
TUVU	125	W	1	
(

SEWFPG327 Page / of /

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: 5	ENECA WF	_Survey type:_/	PASS MIG	_Date: 09-23-09
Observer: H	KO Start	time: 848	(military tim	e) Stop time: <u>858</u>

Point number: 12 Temp (°C): 23 Wind speed (m/s): 8 KN Cloud cover 00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	100	N	/	
BUJA	200	56)	1	
TUTI	150	ESE	1	
BLJA	50	NE	1	
BLJA	180	E	/	
AMRO	130	E	1	
DOWO	150	E	1	FCYING
UNPA#1	140	E	3	POD LEFT
EUST	200	£	1	
DOWO	200	E	1	
UNPA#2	180	E	1	
WBNO	180	4	/	
		1		
				16

SEWFOIL

SEWFP9328

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name:	SENE	CA WE Surv	ey type:_	PASSMIC	Date: 09 - 23-09
Observer:	HEO	Start time:_	908	(military tim	ne) Stop time: 9/8
Point number:	11	Temp (°C): 22	Wind s	peed (m/s): /C	Cloud cover/07%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	60	5W	2	FLYING
GRCA	85	5W	/	
BLJA	90	5W	2	
AMCR	50	E	4	FLYING
AMCR	60	E	2	
RBWO	100	5	1	
AMGO	80	5	1	
AMRO	90	SW	2	
RBWO	100	NE	1	
AMCR	50	SW	/	FLYING
RTHA	7200M	55	1	*0075DE 200M

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GENFOIL

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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SEWFP9329

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIS Date: 09-23-09

Observer: HKO Start time: 825 (military time) Stop time: 815

Point number: 16 Temp (°C): 2/ Wind speed (m/s): 2 Cloud cover 00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	200	NE	1-	
BLJA	200	NW	1	
AMRO	25	W	3	FLYDUER
AMGO	25	Ε	1	
EAWP	35	5	/	
AMRO	30	5	1	
AMGO	35	5	1	
EUST	100)	W	2_	FLYOURS
AMRO	110	W	1	21
UNPA#1	150	NW	3	SPARROW? INBU? CHIP NOTES - UPSELL
EUST	80	NW	25	74002 × 5
EUST	120	NW	2	
AMGO	40	1)	1	
BLJA	200	5	1	
AM60	100	E	7	
NOCA	25	-		
AMGO	60	E	/	
GRCA	20	E	/	

SEWFOIS

SEWFPG330

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name	: SENECA O	Surve	y type:_	PASS M.	C Date: 09.	23-07
Observer:	HKO	_Start time:	828	(military i	time) Stop time:	838
Point number:	<i>/3</i> _ Temp	o(°C): <u>23</u>	_Wind s	peed (m/s):_	/ Kル Cloud co	ver <u>99</u> %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	40	N	/	
BCCH	75	NW	2	
AMRO	40	W	/	
AMRO	50	SW	/	
COYE	35	NNW	2	
AMEU	75	501	1	
EAWP	75	NW	1	
AMCR	150	54)	/	
UNPA#1	50	NW	1	
INBU	70	NW	/	
INBU	80	NW	1	
Dowo	80	NW	1	
	4	\		

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass Mic Date: 09-23-09 Observer: 4/KO Start time: 720 (military time) Stop time: 730

Point number: 06 Temp (°C): 20 Wind speed (m/s): 0 Cloud cover 99%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	30	5W	2	
AMRO	40	WNW	/	
UNPAH	25	5	1	
AMRO	40	S	/	
AMCR	150	Na	/	
HOWR	45	W	1	
MIRO	50-100	W	4	
AMGO	15	N	/	FCYING
BLJA	125	asw	2	
AMGO	0		/	FLYING
CEDW	40	NW	2	
AMRO	30	N	2	
RBUD	50	NE	1	
AMRO	60	SE	1	
GRCA	100	ESE	1	
GRCA	75	ENE	2	
PIWO	200	NE	/	10. (11.1.2.2.4)
SWTH	60	NW	/	SWAINSON'S THRUSH
	5	70		

SENFOIT

SEVFPG33Z ES Page/of/

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Project Name:	SENECA	WF Surv	ey type:_/	PASS MIS	Date: 09-23-09
Observer:	HKO	_Start time:_	745	_(military time) Stop time: 755
Point number:	// Tem	p (°C): 2/°	Wind sp	eed (m/s): 4 K	Cloud cover/03%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMGO	100	NW	/	
TUTI	30	NZ	2	
AMBO	60	N	1	
WBNU	30	5W	2	
AMRO	60	5W 5E	/	
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

ES Page of /

Project Name:	SENG	ECA WF	_Surv	ey type:_	PASS 14	6 1	Date: 09-24-09
Observer:	HKC	Start t	ime:	735	(military	time)	Stop time: 745
Point number:	01	Temp (°C):	20	Wind s	peed (m/s):	0	Cloud cover/20%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BCCH	30	5	2	
BCCH EAWP UNPA [±] 1 AMRO	60	Sid	/	
UNPA=1	40	41	1	FLYING BTWN WOODS
AMRO	100	NW	2	
AMRO	50	E	1	
DOWO	70	5E	/	
AM60	100	Cel	1	
	4-			

SEWF002

SEWFP4334

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of // 6/27/08 DIVISION OF WILDLIFE

Project Name: SEN	Survey type: PASS MG Date: 09-24-09
Observer: AK	
Point number: Oc	Temp (°C): 20 Wind speed (m/s): 0 Cloud cover 100%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	100	N	1	
AMCR	150	N	1	
AMGO	30	NW	2	
AMGO	75	5W	/	
AMCR	150	NW	1	
BUTE	75	5	2	Flewin-landed in
AMCR	200	5	2	/
AMRO	15	E	1	
AMRO	75	NE	2	
EAWP	60	NE	1	
AM60	70	SE	1	
GRCA	150	E	1	
AMGO	50	E	2	FLYDUEXS
)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
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FENFPG335

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Seveca WF Survey type: Pass Mig Date: 10-01-09

Observer: HKO Start time: 9/2 (military time) Stop time: 922

Point number: /2 Temp (°C): 6 Wind speed (m/s): 4 Cloud cover 0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
NOFL	60	SE	/	
AMRO	70	58	/	
MODO	30	5	/	FC4/NG
UNUD	80	ESE	/	UND WOODPECKER RBWD?
AMRO	150	5W	/	
AMRU	150	E	1	
AMGO	50	W	2	
NOFL	100	SW	1	
NOFL	30	SE	1	FALL WEEK 7
BLJA	150	54	1	WEEK
WBNU	25	NE	1	
BLJA	100	N	,	
NOFL	150	5E	1	
TUTI	40	5E	3	
AMRO	50	E	/	
NOFL	125	NE	1	
AMED	10	E	7	FLYING TO 5
WTSP	20	NE	/	
\)			

SENF 008

SENFP6336

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of / DIVISION OF WILDLIFE

Project Name:	SENECA	WF Surve	ey type: <u>//</u>	55 MIG	Date: 09-30 09
Observer:	HKO	Start time:_	935	(military tir	me) Stop time: 945
Point number	08 Ter	nn (°C): 1-2	Wind spee	d (m/s). 14	KAKloud cover (20%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	70	N	/	
UNPA#1	75	6	1	
BLJA UNPA [#] I BLJA	150	E	/	
AMCR	400	W	/	*>200M
AMCR	700	N	/	
BLJA	200	NW	/	
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6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page 1 of 1 **DIVISION OF WILDLIFE**

Project Name:_	SEN	ECA WF	Surve	y type:_	PASS MI	<u>5</u> _C	ate: 15-	0109
Observer:/	160	Start t	ime:_/	002	(military	time) :	Stop time:	1012
Point number:	18	Temp (°C):	12	Wind s	peed (m/s):	15.	Cloud co	ver / 1 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WENU	35	W	1	
WBNU	40	5W	1	
BLJA	10	W	1	
UNSP	60	NE	2	UNID SPARROWS
EABL	100	5E	a	
AMGO	80	N	1	
BCCH	100	NW	1	
EUST	200	5W)	4	
BLJA	40	W	3	
DOWS	25	N	1	
TUVU	35	N	1	
AMCR	200	W	1	
UNPAHI	80	N	1	NOCA?
UNSP	150	NE	2	FLEW DOWN INTO COR
RBWO	100	NNW	1	
HOSP	150	5W	1	

SENF 007

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

Page / of /

Project Name	: SENECA	WF Su	rvey type: /	PASS MIG	_Date:	30 09
Observer:	HKO	Start time	: 915	(military tim	e) Stop time:	925
Point number:	:_ <i>07</i> Te	mp (°C):/	/Wind sp	eed (m/s): 4/5	Cloud co	ver/3) %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	30	NE	/	
WBNU	50	NE	2	
KILL	30	5	2	
KILL	25	SE	8	
EUST	150	56	31	
KILL	90	SE	/	
BLJA	150	E	3	
HUSP	150	E	5	
BLJA	150	E	2	
RBWO	125	E	/	
TUVU	200	E	/	
AMRO	150	SE	1	
TUVU	175	E	3	
MODO	125	~	2	
BLJA	150	E.	6	
WBNU	125	E	1	
DOWO	100	E	2	
TUTI	90	E	1	
BHCO	150	E	/	
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5	1			

SENFOOL

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES P
6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Sexual AJF Survey type: PASS MIG Date: 09.30 09

Observer: HKO Start time: 848 (military time) Stop time: 858

Point number: 06 Temp (°C): 9 Wind speed (m/s): 20 MCloud cover/10 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	75-150	W	25	
BLJA	75	W	2	FLYING S
BLJA	75	W	2	21
BLIA	90	W	-/	4
NOCA	7.5	Cel	2	
BLJA	60	(1)	2	
BLJA	30	E	6	FLYOUERS
BUTA	35	5	1	FLYING
RTHA	150	W	1	
TUTI	125	W	2	
		1 2		

GENFOIL

SENFP01340

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name;	SENE	CAWF	Surve	ey type: <u>Pass M16</u>	Date: 10-01 09
Observer:	HKO	Start ti	ime:_	940 (military time	e) Stop time: 950
Point number:	//	Temp (°C):	6	Wind speed (m/s):	Cloud cover 7 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	75	5W	3	
AMRO	90	5W	/	
AMGO	90	561	2	
NOFL	50	W	/	FLYING
WBNU	50	E	1	
UNSP	35	W	3	NHAY FIELD
EUST	40	5	3	
NOFL	115	S	1	Į.
RBWO	40	SE	1	
AMRO	75	5	2	
WBNU	125	5	2	
EUST	150	5	5	
AM60	40	5	2	
UNPA#I	70	-5	1	COYE ??
BLJA	150	5	1	
UNPA#2	70	5	1	
AM60	50	5	/	
5	5			

SENF003

SEWFPG341

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 09-30-09

Observer: HKO Start time: 1048 (military time) Stop time: 1058

Point number: 03 Temp (°C): 11 Wind speed (m/s): 15 KV Cloud cover 100%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BUTA	200	W	1	
BLJA	200	5	2	
BLJA	100	5	/	
TUTI	75	ESE	2	
BCCH	75	ESE	3	
	6			
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SENF013

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

SENFPG342

BIRD SURVEY FORM

Project Name: SEVECA WF Survey type: PASS MIG Date: 10-01-09

Observer: 14KO Start time: 845 (military time) Stop time: 855

Point number: 13 Temp (°C): 4 Wind speed (m/s): O Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	40	W	1	
GRCA	3)	5W	/	
TUVU	50	WWW	2	
NOCA	30	NW	2	
505P	40	WSW	1	
AMRO	120	N	1	
UNPAH	50	N	/	FLYING & INBU?
AMRO	*	NW	/	
INBU	40	N	2	
AMRO	40	5	1	
AMRO	5	E	1	FLY/NCO
MODO	150	5	1	
DOWO	35	4)	/	
AMGO	25	W	/	
BLJA	100	_5	/	
CEDW	50	5	5	
AMGO	80	5	7	
AMEO	80	5	3	
EUST	125	5	2	FLYING
CHSP	75	5	2	
4	5			

SENFO16

SENFP61343

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-01 09

Observer: HXO Start time: 820 (military time) Stop time: 830

Point number: 16 Temp (°C): 2 Wind speed (m/s): 0 Cloud cover 0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRD	100	NW	3	
BUTA	100	NW	1	
BUJA	150	NW	/	
BRTH	150	NW	1	
UNPA#1	90	NW	1	AMGO?
RR WO	100	NW	1	
EUST	150	Na	6	
BLJA	150	E	1	
HOSP	200	NE	5	
DOWO	100	ESE.	/	
BCCH	100	ESE	1	
NOFL	15	5	/	FLYING
MODO	150	WNW	3	

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIED DIVISION OF WILDLIFE

Project Name:	SENEC	AWF	Surve	ey type:	PASS	M16	_Date:_	09-	3009
Observer:	10	Start ti	me:_	951	(mili	tary tim	e) Stop 1	time:	001
Point number:	09	Temp (°C):	11	Wind	speed (m	/s): /2	KN Clos	ud cove	er/110 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
UNPA#1	25	E	/	NOCA PROBABLE
BLJA	100	561	/	
UNWO	100	NW	/	PROBABLE RHWO
WBNU	75	NW	1	
Dowo	75	NNW	/	
AMCR	1/57)	NW	1	
EUST	150	WSW	4	
RBWO	125	SW	/	
RTHA	200	W	1	FLYING
RHWO	75	NE	2	

SENFOIT

SEWF017
FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name: 5	NECAWF Sur	vey type:_/	PASS MIG	Date: <u>09-30</u> 0	7
Observer: AC	Start time:	1020	_(military tim	e) Stop time: 1030)
Point number: 17	Temp (°C)://	Wind spe	eed (m/s): 6 /	Cloud cover 1000%	6

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	50	SW	/	
BUJA	100	W	/	
WBNU	150	NW	/	
				IDED BELOW
BUTA	50	SW	a	
DOWO	75	SW	1	
DOWO	150	5	1	
50SP	150	5	2	
AMRO	150	5	3	
WBNU	150	5	/	
AMGO	150	5	3	
BPWA	150	S	/	line the eye
NAWA	150	5	/	linethou eye complete Eyering
EAPH	150	.5	/	0
NAWA	150	5	/	2 TOTAL
505P	175	5	2	ADDITIONAL
5				
)			

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DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name	SEVECA	WF Surv	ey type:	PASS MIG	Date: 09-	30-09
Observer:	HKO	Start time:_	815	(military tim	e) Stop time:	825

Point number: 04 Temp (°C): // Wind speed (m/s): 20 K/Cloud cover/06%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	75	ENE	/	
WBNU	75	5	1	
TUTI	50	ESE	2	
UNPA#1 AMCR	60	ESE	/	CHEW CHEW CHEW
AMCR	200	5	/	
TUTI	50	NE	/	
	(
/				

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name: Seve	o W Surve	ey type:_	Pass Mis	Date: <u>04-30-09</u>
Observer: HKO	Start time:	830	(military time	e) Stop time: 840
Point number: 15 Te	mp (°C): //	Wind st	אלן 5/ beed (m/s):	Cloud cover/00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
NBNU	25	NW	/	
DO WO	25	NW	1	
BCCH	25	NA	2	
ILJA	100	NE	/	
RB 400	150	E	1	
BLJA	150	5561	1	
UBNU	80	E	,	
AMRO	100	E	2	
DOWO	100	E	/	
(
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SENFOOL

FORM WD02

6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

SEWFPG348 CES Page/of/

Project Name:	SENE	CAWF_Surv	ey type: /	PASS M10	<u>6</u> _D	ate: 09	30-09
Observer:	HKO	Start time:	745	(military	time) S	Stop time:_	755
Point number	01	Temp (°C): //2	Wind er	need (m/s)·	11	Cloud cox	ren/00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	75	E	1	
BLJA UNPA#1	20	E	1	
BLJA	150	E	/	-11 ₁₁ -1141
UNPATZ	125	E	/	FLYING TOS
UNPA#3	25	(d)	1	FLYING TO N
AMCR	150	SE	1	
NOCA	45	W	2	
UNPA#4	50	E	1	FLYING
DOWO	70	N	1	
		1		
1)			

6/27/08

SENFPG349
FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page f of 1 DIVISION OF WILDLIFE

Project Name: Scheca WF Survey type: PASS MIG Date: 09-30-09
Observer: HKO Start time: 728 (military time) Stop time: 738
Point number: <u>D2</u> Temp (°C): <u>/O</u> Wind speed (m/s): <u>3 KN</u> Cloud cover <u>/O</u> %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	200	N	/	
AMCR UNPA#1	50	5	2	FLYING
AMRO	30	N	1	
AMGO	30	SE	/	
AMGO BLJA NO CA	150	N	1	
NOCA	125	E	2	
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	1			

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SEWFPG 350

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / **DIVISION OF WILDLIFE**

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-05-09

Observer: HKO Start time: 1005 (military time) Stop time: 1015

Point number: 13 Temp (°C): 9 Wind speed (m/s): 5 Cloud cover 0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMGO	25	E	1	
WBNU	100	W	1	
BLJA	15	5	1	FLYING
NOCA	30	5	1-	
AMRO	70	NNW	2	T 11
INBU	60	55W	2_	Fall Week 8
AMGO	60	55W	2	Week E
AMRO	80	5W	1	
UNPA#1	15	NO	1	
GRCA	40	Na	1	
UNPATZ	25	NE	/	IN CORN
GCKI	10	_5	1	3
INBU	60	NNW	2	
BLJA	0	_	2	FLYING
AMGO	0		2_	И
KILL	10	E	1	u
INBU	75	NNE	1	
505P	25	55W	1	
TUTI	25	55W	1	
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SENFOLL

SEWFPG35

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-05-09

Observer: HKO Start time: 943 (military time) Stop time: 953

Point number: 16 Temp (°C): 6 Wind speed (m/s): 5 Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	125	WNW	1	
MODO	100	W	/	FLYING
AMRO	75	5W	2	
BLIA	100	NE	1	
UNWO	75	5	1	UNID WOODPECKER
EUST	200	ENE	12	
COHA	200	ENE	1	
UNPA#1	80	E	3	SP? AMGO?
WBNU	100	ESE	1	
BLJA	150	55E	/	
AMRO	100	SE	1	
AMGO	70	ϵ	2	
WBNU	60	SW	1	
AMGO	75	NW	2	7
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GENFOIL

SENFPG352
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of 6/27/08 DIVISION OF WILDLIFE

Project Name:	SONO	ECA WF	Surv	ey type:_	PASS MIC	5_I	Date: <u>10-05-09</u>
Observer:	HO	Star	t time:_	1041	(military	time)	Stop time: <u>/05/</u>
Point number:	//	Temp (°C)	: /2	Wind s	need (m/s):	8	Cloud cover / %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	80	541	1	
EUST	80	56	3	
BLJA	200	5	/	
TUVU	100	5	/	FLYING
RBWO	10	E	1	
WBNU	100	5W	2	
DOWO	100	5W 5W	1	
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SENFP9353

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of / OIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WIF Survey type: PASS MIG Date: 10 - 05-09

Observer: HKO Start time: 1024 (military time) Stop time: 1034

Point number: 12 Temp (°C): 12 Wind speed (m/s): 12 Kilcloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
RBWO	50	5E	1	
BCCH	10	NE	/	
BLJA	100	N	/	
UNPA#1	40	SE	/	TUT13
EABL	80	5W	/	
AMCR	200	5	/	
AMGO	125	E	1/	
RBWO	75	ENE	1	
TUVU	200	5W	1	FLY/N6
NOFL	50	NW	2	
WTSP	20	N	3	
UNPA#2	15	5	/	INBUR NOCAR SPARROL STRONG CHIPS

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SENFP9354

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of _/ 6/27/08 DIVISION OF WILDLIFE

Project Name:	SENE	CA WF Surve	ey type:_/	PASS MI	/s Date:/0-09-09
Observer:	1KO	Start time:	828	(military	time) Stop time: 838
Point number:	01	Temp (°C): 7	Wind sr	need (m/s)·	6 KACloud cover 70%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	200	N	1	
AMRO	70	5	/	
UNPA#1	20	W	1	FLYING S
AMGO	0		3	FLYING E
DOWO	45	5	1	
RBWO	125	SE	/	
UNPA#Z	0	-	2-	FLYING 5
WBNU	150	Land	1	
RBWO	75	W	1	FLYING 5



SEWFP4355

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS M/G Date: 10-08-09

Observer: HKO Start time: 807 (military time) Stop time: 8/7

Point number: 02 Temp (°C): 7 Wind speed (m/s): 8 KU Cloud cover 60%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	0		/	FLYING N
BLJA	150	5	2	
UNPA=1	200	5	3	I. THINK: EAME HEARDONLY
AMCR	200	56	2	
EUST	150	5W	8	FLY/NG
BLJA	150	W	/	
UNWO	150	W	1	RBWO ?? UNID WOODPECKER
AMGO	100	5	/	
AMBO	70	SE	1	
AMGO	150	5	Z	
AMCR	150	5	ک	
UNPAT	153	5	1	AMRO? FLYING
505P	150	5	1	1
RWBL	150	_5	3	
UNPA#3	75	JE	2	PROBABLE SPARROW
5				
	1			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name:	SENI	ECA	WF	Surve	y type:	A55 M	16 I	Date:	10-08-	09
Observer:	HK	10	_Start ti	me:	9.11	_(military	time)	Stop tii	me: <u>921</u>	
Point number:	17	Tem	o (°C):	//	Wind spe	eed (m/s):	6	Cloud	d cover 209	%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	40	W	1	FLYING
WBNU	100	W	1	
EAME	150	5	1	HEARD ONLY
KILL	200	SW	/	
BLJA	0		/	FLYING S
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	\ \ \ \	9)		
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SEWF003

SEWFP4357

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of _/ 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass MIG Date: 10-08-09

Observer: HKO Start time: 850 (military time) Stop time: 900

Point number: 03 Temp (°C): 8 Wind speed (m/s): 10 KnCloud cover 60%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	200	WWW	2	
NOFL	200	WNW	1	
BLJA	57)	E	1	
UNPAH	50	NE	1	FLYING
AMGO	150	N	,	
BCCH	60	3	/	
WBNU	50	5	1	
NOCA	50	5	3	
UNSP	57)	5	2	UNID S PARROW
RBWO	125	5W	/	FLYING
)				

SEWF005

GENFPG358

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of 1 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass Mia Date: 10-05-09

Observer: HKO Start time: 800 (military time) Stop time: 810

Point number: 05 Temp (°C): 8 Wind speed (m/s): 3KW Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BCCH	25	W	8	
WBNU	20	W	1	
AMRO	70	50)	9	
NOCA	40	NW	2	
UNPA#1	30	W	2	FLYING
Dowo	30	W	1	
BLJA	75	E	1	
RTHA	30	N	1	FLYING, THEN PERCHE
EUST	20	E	3	
505P	30	SW	3	
AMRO	100	NW	1	
AMRO	100	WNW	1	
WBNO	70	NNE	1	
505P	50	5	1	
505P	30	N	1	
DOWO	40	SW	1	
CMWA	75	5W	1	CAPE MAY WARREST
NAWA	75	5W	2	YELLOW, EYERING
WBNU	125	5W	/	
3)			
	(

SEWFOOL

SENFP4359

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name: SENE CA	WF Survey type:_	PASS MIG I	Date: 10-5-09
Observer: HKO	Start time: 746	(military time)	Stop time: 156
Point number: 04 Tem	up (°C): Wind s	speed (m/s):	_Cloud cover_0_%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	100	N	/	
CAGO	10	W	25	FLYOVERS
BUJA	50	N	2	
WBNU	100	5W	/	
CAGO	80	NW	50	FLYOURS
RBWO	100	SE	/	
BUTA	90	5W	1	FLYING
AMGO	100	E	1	
RBWO	80	NE	/	
5	1			
			14	

GENFOLO

SEWF 196360

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-08-09

Observer: HKO Start time: 939 (military time) Stop time: 949

Point number: 18 Temp (°C): 13° Wind speed (m/s): 8 KN Cloud cover 80 % + HA ZE

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	125	W	2	
EUST	200	5W	14	
AMGO	30	E	2	FLYING
RBWO	50	W	2	
DOWO	10	W	/	
HOSP	200	5W	6	
BLJA	200	NE	1	
WBNU	100	WNW	1	
DOWO	80	WNW	/	
UNSP	100	NE	3	COULD BE CHEP - CLERR BREASTS
AMCR	200	E	/	FLYING
AMRO	75	N	8	• 41
RBWO	90	N	1	И
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of _/ DIVISION OF WILDLIFE.

BIRD SURVEY FORM

Project Name: SENECA	Survey type:	PASSMID	Date: 10-05-09
Observer: HKO	Start time: 822	(military time) Stop time: <u>832</u>

Point number: 06 Temp (°C): 5 Wind speed (m/s): 0 Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	15-100	SESE	15	
BLJA	100	N	1	
WBNU	70	NE	1	
NOCA	75	ϵ	2	
GRCA	100	E	1	
BCCH	80	NE	4	
RHWO	80	E	1	
7077	7.5	E	/	
UNWO	75	ENE	/	RHW07
AMRU	100	ENE	4	
BCCH	10	NW	2	
AMRO	80	NW	1	
AMRE	80	ENE	1	
NOFL	90	6	1	
UNPAHI	85	NE	2	
UNPA#Z	150	NE	4	EABL?
AMRO	10-100	E	9	FLYINGS
BLJA	50	5	1	
BLJA	51)	W	a	FLYING
	5			

SENF007

SEWFPG36Z

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Sauca WF Survey type: Pass Mis Date: 10-05-09

Observer: HKO Start time: 838 (military time) Stop time: 848

Point number: 07 Temp (°C): 8 Wind speed (m/s): 5KN Cloud cover / %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	90	NE	2	
WBNU	70	E	1	
MODO	125	5W	/	
1+05P	125	5E	4	
KILL	180-200		10	
TUVU	150	W	/	
TUVU	75	W	/	
HOLA	100-200	5	25	
TUVU	125	JE	3	
RBWO	60	ENE	1	4.7
EUST	125	SE	7	
AMRO	140	SE	1	
TUTI	100	E	4	
TUVU	80	ENE	1	PERCHED
BLJA	75	E	2	
MODO	120	E	1	
TUVU	40	5	2	
1				

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of 1 6/27/08 **DIVISION OF WILDLIFE**

Project Name: SENECA	WF Surve	y type: PASS MIG	_Date: 10-05-09
Observer: HKO	_Start time:	900 (military tim	e) Stop time: <u>910</u>
Point number: Of Temp	(°C): 9	Wind speed (m/s): 5	Cloud cover / %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	20	E	1	
RBWO	40	E	/	
AMGO	100	E	2	
RBWO	20	E	/	
Doab	7.5	E	2	
WBNU	150	E	1	
NOFL	10	N	/	
KILL	25	5	2	
BLJA	10	N	/	ADDITIONAL

SENFOOD

SENFPARH

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Sent A WF Survey type: PASS MIG Date: 10-05-09

Observer: HKO Start time: 9/8 (military time) Stop time: 928

Point number: 09 Temp (°C): 10 Wind speed (m/s): 3 KU Cloud cover 2 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
DOWD	5	N	3	
EUST	60	NE	4	
TUTI	40	E	1	
AMCR	100	NW	1	
AMCR	125	5	/	
AMCR	80	SE	/	
UNWO	75	E	/	RHWO?
DOW	85	E	1	
UNPA#1	150	E	1	FLYING TOS
RHWO	60	N	1	
GRCA	70	SE.	/	
WBNU	30	NW	2	
WBNU	20	N	1	
EUST	50	W5W	3	
TUTI	30	SE	1	
EUST	40	N	Z	
EUST	80	5W	1	
TUTI	50	5W	/	
AM60	150	W	2	
5				

SENFOT

SEWFP6365

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SENECAUF Survey type: Pass Mis Date: 10-13-09

Observer: HKO Start time: 8/7 (military time) Stop time: 827

Point number: /7 Temp (°C): /O Wind speed (m/s): 8 KN Cloud cover 00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
DOWO	5	NW	1	
UNPATI	10	N	2	PROBABLE SPARROW
SOSP	90	5	2	
UNSP	100	5	2	SOSP? UNID SPARROWS
AMGO	150	5	1	
AMGO	100	5W	1	
BCCH	80	3	1	
RBWO	60	5	2	
EABL	20	5	5	
VESP	50	5	1	EYERING,
SOSP	75	5	1	,
PIWA	60	5	1	EYERING, WINGBARS
			Fall 6	Jeek 9
			,	
)				



SENFP4366

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name:	SENECA	WF Surv	ey type:	ASS MIC	5 Date: 10-	13-09
Observer:	HKO	Start time:_	802	_(military	time) Stop time:_	8/2
Point number:	O5 Temp	CC) 8	Wind spe	ed (m/s):	15 KN Cloud co	ver/00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	100	5W	/	
WBNU	50	561	1	
NOFL	10	ω	1	
DOWO	50)	E	1	
AMGO	100	E	1	
BLJA	150	E	1	
RBWO	70	SW		
UNSP	10	5	2	UNIDSPARROWS
	/			
/				
1				

GENFOO4

SENFP6367

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name	: SENO	CA WF Surv	ey type:	PASS MIG	Date: 10-12-09
Observer:	14K0	Start time:_	1043	_(military tim	ne) Stop time: <u>/053</u>
Point number	. 14	Temp (°C): //	Wind sp	eed (m/s): 5	KA/Cloud cover/01/%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
TUVU	200	W	10	PEEDING AT ROADKICL
RTHA	200	4)	/	JAT ROADKICL
AMRO	50	NW	1	
RHWO	50	SW.	1	
RHWO	75	SW	/	
AMCR	125	5	1	
BLJA	40	5W	1	
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	Andrew of the state of the stat			
	- /			
	- /			

SENFOOG

SEWFP9368

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass 1916 Date: 10-12-09

Observer: HKO Start time: 1020 (military time) Stop time: 1030

Point number: 06 Temp (°C): 7 Wind speed (m/s): 12 Cloud cover/00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	20	E	3	
BLJA	30	5		
AMRO	VARIOUS	E	50	FLYING STON
EUST	80	W	20	FLYING
AMRO	60	W	20	n
AMRU	VARIOUS	E	93	FLYING 5 TO N
BLJA	60	E	/	
EUST	75	W	50	FLYING TO S
AMCR	100	W	2	
BCCH	50	WNW	1	
BCCH	60	W	/	
AMRO	VARIOUS	5	50	ESTIMATED ADDL
WBNU	50	NW	1	
	>			
LARGE	POD OF	SPARROUS	(SOSPID	ED), YRWA, AMGO
(-100				POINT 6 ON SAI
ROA.				



SENFOIL

SENFPG369

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name:	SENECA	WF Surve	ey type: <u>//</u>	255 ME	Date: 10-12-09
Observer:	HKO	Start time:	847	_(military t	time) Stop time: 857
Point number:	// Ten	np (°C): 7	Wind sp	ى eed (m/s):	Z Cloud cover/00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	25	SW	20	
AMRO	90	5W	2	
AMRO	30	W	/	FLYING
AMRO	60	W	2	FLYING 5 -LANDED
AMRO	100	5	1.	
MODO	7.5	NW	1	
RBWO	100	5W	1	
BLJA	40	5	2	
EUST	30	N	1	FLYING N
CAGO	125	W	5	FLYNUERS

SENFOIZ

SEWF FO 370

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS M16 Date: 10-12-09

Observer: HKO Start time: 829 (military time) Stop time: 839

Point number: /2 Temp (°C): 7 Wind speed (m/s): 6 Cloud cover/00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	75	5	/	FLYING
AMCR	150	5W	/	
AMRO	150	5W	/	
DOWS	50	SE	/	
CAGO	150	5	4	
RBWO	100	5W	/	
AMCR	20	_5	1	FLYING
AM60	50	5	Zone	
EUST	30	W	15	FLYAUERS
UNPAHI	20	E	2	11 (TUT) -5/20
UNPA#2	40	E	/	
EUST	50	W	18	FLYOVERS
WBNU	40	N	1	
UNSP	30	N	2	WTSP?
BLJA	40	N	2	FLYOUTR
AMRO	35	N	2	11
EUST	40	N	1	4
AMGO	100	5W	1	
5				

SENFO13

SEWFP61371

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: <u>SENECA WF</u> Survey type: <u>PASS MIC</u> Date: 10-12-09

Observer: HKO Start time: 813 (military time) Stop time: 823

Point number: 13 Temp (°C): 6 Wind speed (m/s): 6 Cloud cover 80%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	200	NW		
HOSP	200	SE	1	
UNPAHI	30	W	1	
AMRO	40	W	/	
AMRO	0	_	20	FLYOVERS
AMRO	60	5W	1	
CAWR	20	W	1	CAROLINA WEEN
DOWO	200	SE	/	
UNPA#2	125	NW	1	FLYING
BUTA	100	N	/	И
AMICR	30	SW	1	" 11
EUST	150	N	1	FLYOVER
EUST	30	NW	3	FLYOUELS
CAGO	30	NN	9	11
BCCH	48	W	1	

SENFO16

SENF PG 372

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of _/ 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECAWF Survey type: PASS MG Date: 10-12-09

Observer: HKO Start time: 747 (military time) Stop time: 757

Point number: 16 Temp (°C): 5 Wind speed (m/s): 3 KN Cloud cover 65%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	100	NW	/	
DOWO	70	55W	1	
AMRO	100	W	5	FLYING 5
RSHA	50	E	/	
AMRO	50	SE	3	FLYING
MODO	10	5	1	n
RBWO	75	W	1	
GBHE	200	NW	1	
TUVU	50	E	/	
TUVU	80	NW	1	
TUVU	20	N	1	
UNSP	60	NW	/	UNID SPARROW
AMGO	30	N	1	
AMGO	15	W	1	
NOCA	50	· Cs	1	
WBNU	50	5	1	Tel
	}			

SENFP61373

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Seveca WF Survey type: Pass Mig Date: 10-12-09

Observer: HKO Start time: 9/9 (military time) Stop time: 929

Point number: 08 Temp (°C): 8' Wind speed (m/s): 12 KMCloud cover 105%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
TUTI	20	E	1	
CAGO	200	cel	6	FLYOUER
BLJA	150	N	2	
BLJA BLJA	40	WNW	2	
1				
				· · · · · · · · · · · · · · · · · · ·

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of 1 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name:	SOVECA	4 W/E Surv	ey type:_/	PASS MIG	_Date://O-/	2-09
Observer:	HKO	_Start time:_	903	(military time	e) Stop time:_	913

Point number: 09 Temp (°C): 7 Wind speed (m/s): 5 KW loud cover/100 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	100	W	2	
NOCA	50	5W	2	
NOCA UNPA#1	70	456	2	CHIPNOTES - LIKELY BCCHORTUT
EUST	75	W	1	
AMGO	20	SE	2	
	9			
				· · · · · · · · · · · · · · · · · · ·
		100		1

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of 1 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECALIF Survey type: Pass M16 Date: 10-12-09

Observer: HKO Start time: 933 (military time) Stop time: 943

Point number: 07 Temp (°C): 8 Wind speed (m/s): 15 KW loud cover 20%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	100	SE	4	
BLJA	30	E	,	FLY/NG
BLJA	80	E	/	n N
EUST	90	E	/	n N
HOSP	100	SE	2	
AMCR	70	5W	5	11
KILL	150	50	1	
4				
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SENFO18

SEWFP4376

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of 16/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA G/F Survey type: PASS M/G Date: 10-12-09

Observer: HKO Start time: 952 (military time) Stop time: 1002

Point number: 18 Temp (°C): 9 Wind speed (m/s): 18 KU Cloud cover 100%

Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
200	NE	/	
200	54	5	
40	NW	/	CHIPNOTES
200		1	
40	W	1	
70	5	/	
80	5W	/	
\			
	3+6		
500M	SW	/	7200M 5WX
	•		
	distance (m) 200 200 40 200 40 70	distance (m)	distance (m) (bearing) in flock 200 NE / 200 SU 3 40 NU / 200 SW / 40 U / 70 S / 80 SU /

SENFPOIS 17

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Nam	e: <i>SEAJE</i> C	A Col F Surv	ey type:_/	PASS MIG Date: 10	-13-09
Observer:	HKO	Start time:	848	(military time) Stop time:	858

Point number: 03 Temp (°C): 9 Wind speed (m/s): 10 Cloud cover 99%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	200	W	1	
UNPA	10	(29)	1	PROBABLE SOSP
EUST	70	W	40	FLYOVERS
AMCR	50	5	/	11
AMRO	40	W	3	t)
UNPA#2	50	5W	,	" SPARROW
RNBL	40	NE SW	20	1
RTHA	33	5W	1	FLVING
7		1		
		10		
	1			

GENFOO!

SENFP01378

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass Mig Date: 10-13-2009

Observer: HKO Start time: 9// (military time) Stop time: 92/

Point number: 0/ Temp (°C): 9 Wind speed (m/s): 15 KUCloud cover 99%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	15	E	5	FLYING N
BUJA	75	5	1	
AMCR	150	E	1	" N
BLJA	20	E	1	11 N
RTHA	25	W	1	
AMCR	50	6	1	11 K
AMCR	125	E	/	n N
AMCR	70	5	1	n N
BLJA	7.5	E	1	И
AMCR	100	E	3	a N
AMCR	110	E	2	a N
DOWO	80	E	1	
RBWO	125	NE	/	
BLJA	30	W	/	
NOCA	100	E	2	
GRCA	150	6	/	
DOWS	125	ESE	/	
GCKI	40	W	5	
WBNU	20	W	1	
5)			
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GENFOOZ

GENFPG 379

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of _/
6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MG Date: 11-13-09

Observer: HKO Start time: 928 (military time) Stop time: 938

Point number: O2 Temp (°C): // Wind speed (m/s): /O Cloud cover //0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
CAGO	100	SW	2	
BLJA	100	5	1	
AMRO	70	E	16	FLYOVERS AMBO?
UNPAHI	50	E	/	CHIP HEARD
RBWO	90	NE	1	
AMGO	75	5	3	FLYING
RWBL	90	E	1	М
BLJA	75	WNW	1	
AMCR	150	W	/	М
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SEW-CO4

SEWFP1980

FORM WD02 6/27/08

OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-21-09

Observer: HKO Start time: 931 (military time) Stop time: 94/

Point number: 04 Temp (°C): 9 Wind speed (m/s): 5 Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	60	N	2	
EABL	100	E	1	
AMRO	20	E	2	FLYOVERS
AMRO	50	5	2	
NOFL	60	5W	2	
AMCR	175	W	1	
BLJA	150	SE	1	
EUST	60	E	2_	FLYOUELS
NOFL	100	SE	1	
BCCH	70	E	3	
HOSP	125	E-	2	THILL
AMRO	150	NE	1	Fall Week 1
DOWO	100	ESE	1	
WENU	70	ENE	/	
RBWO	80	ESE	2	
AMGO	120	E	/	
(1			



SENFPOISE1

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Page / of / + 1 @ BOTTOM

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-21-09

Observer: 4KO Start time: 946 (military time) Stop time: 956

Point number: 03 Temp (°C): 10° Wind speed (m/s): 6 Cloud cover 5%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRU	75	W	37	FLYOVERS
BLJA	75	SE	/	
BCCH	50	W	2	
RWBL	40	W	4	
WBNU	35	SE	/	
NOFL	D	E	/	
BCCH	20	5	2	
TUTI	25	SE	2	1
DOWO	30	SE	1	
RCKI	20	E	1	
AMRO	5	E	18	FLYOUERS
WISP	20	SE	2	
NOCA	20	NE	2_	
YRWA	20	E	4	
AM60	z5	E	2	
UNPA#1	10	E	4	FLYOVERS
AMCR	200	SW	1	
AMGO	50	NE	2_	
YRWA	50	E	5	
WTSP	50	L	6	
SCKI	50	E	1	
KILL	30	N	1	FLY/N6

SENFOOS

SENFPLA382

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Seveca WF Survey type: PASS M16 Date: 10-21-09

Observer: HKO Start time: 913 (military time) Stop time: 923

Point number: 05 Temp (°C): 1/0 Wind speed (m/s): 5 Cloud cover 3 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	5	N	2	
TUTI	5	N	2	
AMRO	20	5	7	FLYOVERS
BCCH	30	SW	5	
BCCIT	20	w	2	
BLJA	60	NW	/	
CHSP	10	W	1	
9M60	20	WSW	/	
PIWO	100	W	1	
BCCH	20	NE	2	
NOFL	30	W	1	
BLJA	150	E	2	
AMRO	20	W	2	FLYOUERS
GCKI	20	N	1	
DOWO	57)	N	(
RBW0	100	5W	/	
WBNU	100	55W	1	
EUST	40	5	1	FLYOVER
BLJA	100	W	1	
AMRO	15	5	4	
amrd	15	W	3	

GENFOOL

SENFP4383

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name:	SENEC	A WF Sur	vey type:	PASS MIG	Date: 10-21-	09
					e) Stop time: 8/	
Point number	02 т	emn (°C)· S	Wind	sneed (m/s): /	Cloud cover	150%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
CAGO	50	5	2	
WBNU	50	W	1	
AMGO	75	5	3	
RWBL	100	5	3	FLYOVERS
RWBL	100	5	1	CHE-U
AMGO	50	ESE	1	
505P	70	ESE	,	
AMCR	200	NW	/	
RWBL	100	SE	1	
AMGO	150	-5E	- /	
RWBL	200	55E	3	
EUST	25	50-	1	FLYOVER
	<			
				1/
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	1			

SENFOOL

SENFPG 384

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA (1) F Survey type: PASS MIG Date: 10-21-09

Observer: HKO Start time: \$23 (military time) Stop time: 833

Point number: 01 Temp (°C): 10° Wind speed (m/s): 5 Cloud cover 15%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	80	E	/	
TRES	75 57	E	45	FLYOVERS
TRES	50	E	2	61
BLJA	30	W	1	FLYING N
AMRO	20	W	6	FLYOVERS
NOCA	50	5	/	CHIP
NOCA	70	SE	1	
BLJA	40	W	Z	FLYING S
WBNU	75	WNW	/	
TUTI	30	W	1	FLYING N
BLJA	150	W	,	
NOCA	80	WNW	2	
)			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name:	SENECA	WF Survey	y type:/	PASS M	<u>/6</u> Da	te: 10-19	01
Observer: //	1Ko	Start time:	800	_(military	time) St	op time: <u>810</u>)
Point number:	<i>09</i> Temp	(°C):_ <i>O</i>	_Wind spe	eed (m/s):_	7	Cloud cover/0	2%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BCCH	20	5	2	
AMCR	10-40	W	4	
WBNU	50	NW	1	
TUTI	10	5	2	
AMRO	0-40	_	12	FLYOVERS
AMCR	150	NW	1	
AMCR	150	W	1	
RCKI	50	NE	1	
GCKI	20	NE	1	
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	1			

SENFO18

SEWFP61386

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name:	SENE	ECAWF	Surve	ey type: PASS MIC	5_I	Date: 10-19-09
Observer:	HKO	Start ti	ime:_	8/7 (military	time)	Stop time: <u>827</u>
Point number:	18	Temp (°C):	0	Wind speed (m/s):	10	Cloud cover 5 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
MODO	200	541	6	
EUST	200	5W	6	
HOSP	200	56)	2	
WBNU	80	W	1	
AMCR	200	SE	1	
WBNU	50	NW	1	
UNPA#1	40	5	1	FLYOVER
	(

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SENFPG387

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name: SENEC	4 G/F Surve	ey type:_/	PASS MI	6_1	Date: 10-19-09
Observer: HKO	_Start time:_	911	(military	time)	Stop time: 921
Point number: 13 Tem	n (°C) 3	Wind sr	seed (m/s)·	フ	Cloud cover 65%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WISP	40	55W	4	
AMGO	60	N	2	
WBNU	50	W	1	
RBWD	75	NO	1	
NOFL	70	W	1	
AMGO	100	N	1	
RCKI	75	N	2	
WTSP	70	N	3	
CHSP	80	N	3	
RWBL	90	N	30	FLYOUERS
RBWO	20	5W	1	
	1			

SENFO16

SENF-PG1388

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS M/B Date: 10-19-09

Observer: 4KO Start time: 937 (military time) Stop time: 947

Point number: 16 Temp (°C): 6 Wind speed (m/s): 8 Cloud cover 15%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	100	5	/	
BCCH	20	SE	3	
amgo	30	5	4	
YRWA	10	N	3	
YRWA	20	E	4	
WBNU	40	SE	1	
RCKI	20	5E	1	
505P	25	NE	1	
RBWO	40	_5	1	
YRWA	70	ESE	3	
DOWO	40	ESE	1	
AMRO	70	E	4	
BCCH	30	N	1	
SCK1	25	5	1	
YRWA	30	N	2	
YRWA	40	NW	3	
\)			
)				

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

Project Name:	SEN	ECAWF	Surve	ey type:_	PASS 1	MIG	_Date:_	10-19	-09
Observer:	HKC	Start ti	me:_	833	(milita	ry time	e) Stop	time: <u></u> <i>84</i>	3
Point number:	//	Temp (°C):	4	Wind s	need (m/s). <i>S</i>	Clo	ud cover/	50%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	75	55W	- 8	
AMRO	90	5W	1	
RBWO	100	5	1	
UNSP.	90	5W	1	UNID SPARROW
RTHA	70	5	1	
EABL	50	5	1	FLYING
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SEWFOIZ

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIS Date: 10-19-09

Observer: HKO Start time: 849 (military time) Stop time: 859

Point number: 12 Temp (°C): 4 Wind speed (m/s): 5 Cloud cover 25%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	125	5	/	
DOWO	125	E	1	
EABL	150	E	7.	
WBNU	150	E	/	
NOFZ	150	E	2	
DOWO	150	E	1	
WTSP	150	E	4	
BCKI	150	E	4	
RCKI	150	E	3.	
DETU	150	E	2	
NAWA	150	E	/	NASHVILLE WARBOCK
YRWA	150	E	3	YELLOW-RUMPED WARBLE
RBWO	150	E	/	

SENFOOT

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of 16/27/08 DIVISION OF WILDLIFE

Project Name: SENECA WE Surve	y type: <u>Pass 1416</u> Date: <u>10-19-04</u>
Observer: HKO Start time:	1016 (military time) Stop time: 1026
	Wind speed (m/s): 18 Cloud cover/11%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	10	N	3	
AMCR EUST HOSP	100	ESE ESE	1	
HOSP	100	ESE	1	
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				210-1

GENFO14

52NFPG3912

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

Project Name: SEN	ECA WF Surve	ey type: <u>PASS M16</u> Date: 10-19-09
Observer: HKO	Start time:_	958 (military time) Stop time: 1008
Point number: 17	Temp (°C):9_	Wind speed (m/s): 15 Cloud cover %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EABL	150	5	2	
EABL	150	NW	/	
BCCH	150	NW N N	1	
DEJU	50	N	3	
YRWA	50	N	1	
CHSP	60	N	1	
TUTI	60	N	/	
/				

GENFOOLE

SEWFPG 393

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-19-09

Observer: HKO Start time: 1048 (military time) Stop time: 1058

Point number: 06 Temp (°C): 8 Wind speed (m/s): 15 Cloud cover 5 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	0-50		200	FLYOVERS
BLJA	50	SW	1	
BLJA	60	E	1	
WBNU	25	NE	1	
AMRO	70	SE	1	
BLJA	40	E	2	
BCCH	30	E	4	
NOCA	80	ENE	3	
AMRO	10-150	E	30	
GCKI	70	ENE	1	
SOSP	100	ENE	/	
WESP	100	ENE	/	WHITE CROWNED SPARROW
5	5			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 **DIVISION OF WILDLIFE**

Project Name: SENEC,	A WF Survey type: PASS M16 Date: 10-19-09
Observer: HKO	Start time: 1028 (military time) Stop time: 1038
Point number: 08 Ter	mp (°C): // Wind speed (m/s): // KNCloud cover // %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	15	N	/	
UNPA#1		N	1	
WBNU UNPA#1 BCCH	100	N	1	
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				20.00

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6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-29-09

Observer: HKO Start time: 934 (military time) Stop time: 944

Point number: 05 Temp (°C): 12° Wind speed (m/s): 3 Cloud cover 100%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMRO	30	5W	3	
WBNU	60	56	1	
505P	50	N	1	
DOWO	10	W	2	1.1
AMCR	125	SE	1	WEEK 11
WBNU	50	W	1	
BLJA	200	N	1	
AMGO	60	SE	3	
RBWO	15	W	2	
RWBL	0-25	13/5	60	FLYOVERS - TO E
DEJU	25	N	2	
NOFL	20	NE	2	
BUTA	78	N	1	
DEJU	50	NNE	2	
BCCH	30	NNE	3	
TUTI	30	NNW	3	
AMRO	40	NE	1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
YRWA	10	NE	1	
GCKI	35	N	1	
BLJA	50	NE	1	
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

SENFP4391

BIRD SURVEY FORM

Project Name: SENECA GIF Survey type: PASS MIG. Date: 10-26-09

Observer: HKO Start time: 818 (military time) Stop time: 828

Point number: /8 Temp (°C): 5 Wind speed (m/s): 2 Cloud cover 5 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
DOWO	10	5	1	
NOCA	3	5W	1	
CEDW	30	W	6	FLYOVERS
AMRO	10	W	/	
RWBL	25	NW	2	FLYOUERS
AMRO	20	W	2	
AMRO	20	W	2	
YRWA	20	W	1	
WBNU	50	NW	1	
RBWO	20	5	/	
AMRO	20	SE	23	FLYING ADDITIONAL
RBWO	30	W	/	
HOSP	200	5W	5	
EABL	80	SE.	2	
PIWO	100	N	1	FLYING
RWBL	200	5W	3	
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SEWFOOT

SENFP61397

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass MiG Date: 10-26-09

Observer: HO Start time: 800 (military time) Stop time: 810

Point number: 09 Temp (°C): 4° Wind speed (m/s): 3 Cloud cover 15%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	50	NE	2	
AMCR	200	5	/	
WBNU	20	N	/	
DOWO	30	N	1	
NOFL	25	N	/	
NOCA	30	5W	2	
AMCR	75	N	1	
EABL	0	_	1	FLYOVER
AMRO	0	_	1	FLYOVER
UNWO	60	NW	1	UNID WOODPECKE
TUTI	90	W	1	
RBWO	100	W	1	
EABL	120	W	1	
BLJA	120	usw	1	
AMCR	180	W	1	
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SENFPG1392

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-26-09

Observer: HKO Start time: 833 (military time) Stop time: 843

Point number: ____// Temp (°C): _____ Wind speed (m/s): _____ Cloud cover ___/__ %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	75	5W	8	1
RBWO	20	5	2	
NOFL	70	7	1	
UNAS#1	35	E	1	FLYING
WBNU	40	SE	1	
DOWO	100	5	1	
WBNd	100	\5	1	
DOW	150	5	,	
EUST	100-158	5	6	
YRWA	60	SSE	1	
HETH	60	35E 35E	1	HERMIT THRUSH
NOFL	100	5	1	
	(
			1	

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Page of /

Project Name: SENECA WF Survey type: PASS Mrs Date: 10-26-09

Observer: HKO Start time: 852 (military time) Stop time: 902

Point number: 12 Temp (°C): 6 Wind speed (m/s): 3 Cloud cover 5 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
RTHA	80	5	1	
TUTI	40	W	2	
AMRO	150	5W	1	
UNSP	15	W	1	FLYING
WBNU	40	W	1	
NOCA	58	W	/	
GCKI	30	W	3	
AMGO	40	W	1	100
TUTI	150	W	5	
NOFL	70	W	1	
YRWA	70	W	1	
UNSP	75	<i></i>	1	
MODO	100	W	3	
NOCA	65	W	2	
BLJA	100	5W	1	
WISP	50	W	1	
RCKI	70	W	2	
BCCH	50	W	3	

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SENFPG1400

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: ENECA WF Survey type: Pass Mrs Date: 10-26-09

Observer: HKO Start time: 970 (military time) Stop time: 920

Point number: 13 Temp (°C): 5 Wind speed (m/s): 3 Cloud cover 15%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
NOCA	0		1	
AMPS	5	N	/	
WBNU	50	NW	2	
AMRO	50-100	NW	9	
EABL	51	NW	1	
GCKI	30	WNW	1	
7U T1	60	NW	1	
AMCR	B	W	1	
BLJA	20	W	1	
EUST	50	W	30	FLYOVERS
RCKI	50	NW	2	
YRWA	70	NW	2	
YRWA	90	NW	1	
NOFL	80	NW	1	
505P	70	NNW	/	
WCSP	70	NNW	1	
RWBL	200	5	/	
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SENFOLD

SEWIPG 401

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-26-09

Observer: HKO Start time: 833 (military time) Stop time: 843

Point number: 16 Temp (°C): 5 Wind speed (m/s): 3 Cloud cover 10 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	150	541	1	
TUTI	60	W	/	
AMGO	50	NW	2	
RTHA	200	NE	/	
EUST	175	NW	5	
BLJA	60	W	/	
RBWU	150	W	1	
BLJA	78	5	1	
EUST	200	NE	1	
AMGO	70	SE	2	
AMGO	150	ENE	1	
RWBL	200	E	12	FLYOVERS
WBNU	50	-5	2	
RBWO	100	SE-	1	
EUST	175	E	8	
RWBL	125	E	3	
EUST	0	-	12	FLYOVERS
RWBL	0		15	FLYOVERS
NOFL	75	W	1	

SENFOOT

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

Page _/ of _/

BIRD SURVEY FORM

Project Name: SENECAWF Survey type: PASS Mis Date: 10-26-09

Observer: HKO Start time: 1008 (military time) Stop time: 1018

Point number: 07 Temp (°C): // Wind speed (m/s): 8 Cloud cover 5%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	50	5	/	FLYING
AMRO	10	N	/	
AMCR	100	N	/	
BCCH	20	NW	2	
WBNU	50	NW	/	
TUTI	20	N	/	
EUST	100	5E	4	
HOSP	100	JE	/	
HOLA	100	SE-SW	12	
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SENF DOS

SENFP6403

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of // 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Seneca WF Survey type: Pass Mis Date: 10-26-09

Observer: HKO Start time: 955 (military time) Stop time: 1005

Point number: <u>/8</u> Temp (°C): <u>/0</u> Wind speed (m/s): <u>/0 Ku</u> loud cover <u>5</u> %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
RWBL	70	W	5	
RWBL	150	WNW	2	
RWBL RWBL RWBL	40	W	2	
DOW	75	WNW	/	
EABL	108	5	/	
EABL RWBL RBWO	70	5	3	
RBWO	70	NW	1	
1	1			

SEWF-CO4

6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIB Date: 10-29-09

Observer: HKO Start time: 9/6 (military time) Stop time: 926

Point number: <u>Of</u> Temp (°C): <u>/2</u> Wind speed (m/s): <u>O</u> Cloud cover <u>/00</u>%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	30	5	2	
RHWO	70	5W	/	
TUTI	50	5	1	
RHWO	75	WWW	1	
RTHA	150	W	/	FLYING
BLJA	75	5W	/	
BLJA	90	NW	/	
RBWO	60	5	/	
NOCA	75	NE	1	
NOFL	70	5	1	
DOWO	100	E	1	
BLJA	125	5E	/	
EABL	50	N	2	

SEWF ODS

SEWFP191405

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SEVECA WF Survey type: PASS MIG Date: 10-29-09

Observer: HKO Start time: 854 (military time) Stop time: 904

Point number: 03 Temp (°C): 10 Wind speed (m/s): 2 Cloud cover 97%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	30	SE	1	
RWBL	30	W	105	FLYOVERS TOS
RWBL	10	N	2	n (E)
NOCA	10	NE	Z	
RWBL	48	5	3	n
WBNU	75	5	3	
AMGO	30	NNE	1	
RBWO	200	W	/	
RWBL	125	W	3	
NOFL	200	SW	1	
RWBC	50	W	5	
BLJA	100	NE	1	
RWBL	20-100	NINE	15	
AMCR	150	5	1	
RBWO	15	5E	/	
<	5			
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SENFPG402

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-29-09

Observer: HKO Start time: 8/2 (military time) Stop time: 822

Point number: 02 Temp (°C): 9 Wind speed (m/s): 3KN Cloud cover 98%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	200	6)	/	1 47 3 37.5
AMRO	100	5	1	
BUJA	75	N	/	
AMRO	50	W	6	
AMGO	40	W E	2	
AMRO	60	E	/	
BLJA	50	WNW	1	
BLJA	200	5W	1	
AMCR	150	W	3	FLYING
UNSP	150	W	2	UNID SPARROCAS
HOSP	175	WSW	2	
AM60	50	5	/	
RWBL	100	5	4	FLYING
RWBL	150	5	1	
RWBL	200	55E	2	
AMGO	100	5E	1	
RBWO	100	N	1	
RWBL	200	5W	8	FLYING
ROPI	200	5W	1	
AMG0	30	E	11	FLYING
5	5			

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SEWFP9407

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 10-29-09

Observer: HKO Start time: 828 (military time) Stop time: 838

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
NOCA	75	SE	/	
WBNU	100	ESE	1	
NOCA	60	W	1	
RWBL	10	W	7	FLYOUERS-TOS
BLJA	20	W	1	n
RWBL	30	W	5	705
BLJA	10	W	/	A
RWBL	0-50	E/W	15	11
RWBL	0-40	ElW	12	4 705
AMGO	40	N	/	705
BLJA	100	W	1	
RWBL	0-50	E/W	15	FLYOVERS
DOWD	100	W	1	
Dowd	40	N	1	
BLJA	125	E	1	
RWBL	0-30	E/w	15	FLYOVERS TOS
AMRO	125	E	14	
AMCR	125	N	1	
RWBL	125	E	13	FLYOUERS TOS
BCCH	100	E	/	
WBNU	1.00	ENE	/	

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6/27/08

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass Mio Date: 10-26-09

Observer: HKO Start time: 1048 (military time) Stop time: 1058

Point number: 17 Temp (°C): 14 Wind speed (m/s): 10 Cloud cover 5%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMGO	30	5	1	
UNPA#1	30	5E	/	POSSIBLE SPARROWS CHIP NOTES HEARD
EUST	60	_5	7	PLYOVERS
NOFL	15	W	1	
AMGO	150	NNW	4	
WBNU	150	NNW	/	
BLJA	200	W	2	
DOWO	100	WNW	2	
EAPH	100	WNW	/	

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SEVECA WF Survey type: PASS MG Date: 10-26-09

Observer: HKO Start time: 1030 (military time) Stop time: 1040

Point number: 06 Temp (°C): // Wind speed (m/s): 5 Cloud cover 5 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	57	E	1	
AMRO	0-100	E+W	15	ON ROAD
BLJA	50	W	/	
AMRO	70	W	50	
BCCH	50	NE	1	
RWBL	40	55	10	
NOFL	30	E	1	
AMRO	0-200	5+E	150	
CEDW	60	E	5	
YRWA	50	NE	4)
UNWA	50	NE	1	UNID WARBLER
BLJA	70	N	1	
NOFL	80	E	2	
WTSP	75	E	4	
CEDW	75	E	16	
CEDW	110	NE	6	
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OHIO DEPARTMENT OF NATURAL RESOURCES

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FORM WD02 6/27/08

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-02-09

Observer: HKO Start time: 734 (military time) Stop time: 744

Point number: 05 Temp (°C): 2 Wind speed (m/s): 0 Cloud cover 20%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behav	vior/notes
BLJA	125	55W	1		
WBNU	40	W	1		
EUST	25	E	4	FLYOU	ERS
CEDW	57	5W	2		1
AMRO	0		40	FLYOVER	25
AMCR	0	_	2	Л	
AMRO	50	5W	/		
AMRO	100	55W	1		
AMRO	30	W	Z	FLYO	IVERS
AMED	20	W	1	11	
RWBL	30	E	6		
RWBL	50	E	70	H	
RWBL	30	E	45	1	De grand de
PIWO	160	W	/		Fall Wee
RWBL	20	E	5	ч	MET WATER
AMRO	20	W	2	и	
RWBL	10-> 100	W ->E	70	4	
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OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass Mig Date: 11-2-09

Observer: HKU Start time: 7/5 (military time) Stop time: 725

Point number: 04 Temp (°C): / Wind speed (m/s): 0 Cloud cover 20%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
RTHA	100	W	/	
BLJA	70	E	/	
EABL	100	E	2	
EABL	50	N	1	
AMCR	150	E	2	340
BLJA	150	NW	2	
BDOW	30	E	/	BARRED OWL
BLJA	80	5	1	
WBNU	75	E	1	
WBNU	125	E	/	
BCCH	75	ESE	1	
HOSP	150	E	3	
RBWO	100	ESE-	1	
RHUD	70	ESE	2	
	5			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name	SENECA W	Surve	ey type: //	255 MIC	5_D	ate:_//-0	12-09
Observer:	HKO	_Start time:	801	_(military	time) S	Stop time:_	8/7
Point number	r: <i>07_</i> Temp	o (°C):/	_Wind spe	eed (m/s):_	4	_Cloud cov	/e r50 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
HOLA-	100	55E	/	ir in
HOSP	100	S SE ESE	2	
HOLA HOLA HOLA	150	W5W W W5W	2	
UNPA#1	120	W	/	FLYING
HOLA	120	W5W	4	
HOCA	70	5	3	
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6/27/08

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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass Mic Date: 11-02-09

Observer: HKO Start time: 740 (military time) Stop time: 750

Point number: 06 Temp (°C): 2 Wind speed (m/s): 0 Cloud cover 5%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	90	W	50	
BLJA	75	W	2	
AMRO	20	5	5	
NOFL	10	5	/	
WBNU	40	N	1	
AMRU	80	W	5	
BOCH	25	W	1	
BCCH	30	NW	/	4
AMRU	40	\mathcal{N}	/	
RWBL	100	ω	10	
AMRU	15-75	5W	8	
BUTA	70	WNW	1	
WTSP	80	W	,	
EUST	125	W	50	FLYING
EUST	100	W	2	
NOCA	75	WNW	1	
RTHA	125	NNW	1	
5	1			
	5			

SEWFPG 414 OHIO DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-02-09

Observer: 4KO Start time: 823 (military time) Stop time: 833

6/27/08

Point number: <u>8</u> Temp (°C): / Wind speed (m/s): 8 KN Cloud cover 55%

Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
150	NE	,	
100	E	3	FLYOVERS
100	N	2 .	FLYOVERS
150	NE	1	
200	N	2	
5			
	/57 //50 //00 //50	distance (m) (bearing) 150	distance (m) (bearing) in flock 150 NE 1 100 E 3 100 N 2 150 NE 1

SEWFP4415 OHIO DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SEVECA WF Survey type: PASS MIG Date: 11-02-09

Observer: HKO Start time: 843 (military time) Stop time: 953

Point number: __/7 Temp (°C): __2 ° Wind speed (m/s): __7 __ Cloud cover <u>60</u> %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	30	SW	1	
RWBL	10	W	/	FLYOVER
Dowo	40	5W	1	
RTHA	10	5	1	
DOWO	75	5	1	
GCKI	20	E	1	
UNPA#1	60	5	1	
1	5	(
MOWIN	6 BERM	AT END OF	SURVEY	PERIOD
RE-C	COUNTED	11-03-09		
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-02-09

Observer: HKO Start time: 924 (military time) Stop time: 934

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	40	NW	1	FLYING
RBWO	35	N	2	1000 30
AMCR	100	N	3	
BLIA	20	N	1	FLY/NG
AMGO	60	W	1	FLYOVER
NOFL	50	W	1	
AMRO	35	W5W	2	
NOFL	50	SE	1	
BLJA	160	W	2	
RTHA	125	NW	1	
AMRO	80	SW	2	
AMRO	100	NW	4	
RWBL	30	W	80	FLYOURS
WBNU	50	N	1	
RWBL	100	E	60	FLYOUELS
AM60	70	E	2	
BCCH	25	E	2	
	/			

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OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE

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BIRD SURVEY FORM

Project Name: SEVECA WF Survey type: PASS MIC Date: 11-02-09

Observer: HKO Start time: 900 (military time) Stop time: 910

Point number: 03 Temp (°C): 4° Wind speed (m/s): 5 Cloud cover 85%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
DOWO	45	E	/	
DEJU	10	N	3	
NOFL	50	SE	1	
BUTA	100	5	1	
NOCA	35	N	2	
RWBL	50	N	2	
CEDW	45	NE	1	FLYOUER
AMGO	25	E	1	
				1

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Senech WF Survey type: Pass MR Date: 11-03-09

Observer: HKO Start time: 748 (military time) Stop time: 758

Point number: 16 Temp (°C): 0° Wind speed (m/s): 2 KW Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	200	WNN	5	
RBWO	30	SE	1	
WBNU	50	5	,	
EABL	150	E	4	
BCCH	60	ESE	1	
DEJU	75	E	3	
DOWO	80	ESE	1	
EUST	200	ENE	5	
WBNU	100	ESE	/	
DEJU	150	E	2	
BUTA	50	S	1	
AMGO	30	N	2	
	(

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-03-09

Observer: HKO Start time: 7/5 (military time) Stop time: 725

(REPEAT)

Point number: 17 Temp (°C): 2 Wind speed (m/s): 4KN Cloud cover 0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	50	5W	1	
AMCR	200	5W	1	
AMGO	50	W	/	
AMGO	25	5	/	
BCCH	30	NW	1	
DOWO	30	5	1	
AMCR	158	E	1	
BLJA	200	SE	1	
AMGO	40	N	2	
DOWO	50	NNE	1	
TUTI	40	N	1	
AMGO	60	N	2	
	\	-		
	5			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass MIG Date: 11-03-09

Observer: HKO Start time: 825 (military time) Stop time: 835

Point number: /2 Temp (°C): 3° Wind speed (m/s): 7 Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	200	5	/	
BLJA	150	NNE	1	
WBNY	60	NE	1	
WBNU	15	NW	1	
WBNU	1.80	5W	1	
TUTI	35	NW	/	
EUST	200	WSW	2	
DEJU	80	E	1	
EUST	150	E	4	
RBGU	70	E	/	FLYOUTH
RBWO	100	ESE	1	
RWBL	80	ϵ	4	FLYOUERS
EU57	70	E	1	14
NOFL	100	E	/	
WENU	110	E	2	
RBWO	100	SE	1	
WOCA	100	ESE	,	
WTSP	150	E	2	
PIWO	150	E	1	FLYING
GCKI	40	E	2	
)	1			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: Pass Mis Date: 11-03-09 Observer: HKO Start time: 8/0 (military time) Stop time: 820

Point number: 13 Temp (°C): 2° Wind speed (m/s): 2 Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
MODO	20	5W	3	
DOWO	30	SW	/	
MODO	40	NW	10	
Dowo	50	NW	ı	
CEDW	75	N	Z	FLYING
AMRO	50	NW	2	
RWBL	40	N	6	FLYOUTRS
RBWD	45	NW	1	
HAWO	60	5W	1	
HOLA	40	SE	ſ	
AMGO	35	SE	3	FLYOUERS
AMGO	60	5W	1	
AMRO	50	60	1	
WBNU	75	WNW	1	
BUTA	100	W	1	
RWBL	5	E	15	FLYOUTES

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES **DIVISION OF WILDLIFE**

6/27/08

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MI6 Date: 11-03-09

Observer: HKO Start time: 847 (military time) Stop time: 857

Point number: // Temp (°C): 4° Wind speed (m/s): 8 Cloud cover 0 %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
NOCA	75	5W	1	*
RBWO	100	55W	1	
WBNU	30	ESE	1	
DOWO	30	E	1	
EUST .	90	SE	3	
BCCH	100	5	1	
WBNU	110	5E	1	
EUST	90	5	3	
UNPAT	110	5	2	DEJU? WISP?
WISP	80	SE	2	
ATSP	80	SE	1	AMERICAN TREE SPARROW
DOW	120	5	1	

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Saveca UF Survey type: Pass Mig Date: 11-03-09

Observer: HKO Start time: 905 (military time) Stop time: 915

Point number: 18 Temp (°C): 7° Wind speed (m/s): 6 Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	200	5	2	
TUTI	15	W	1	
WBNU	30	W	a	
HOSP	200	5	1	
NOFL	40	5W	1	
RBWO	60	NW	1	
AMGO	125	5W	2	
RWBL	75	50	1	FLYDUER
NOFL	60	W	/	
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES **DIVISION OF WILDLIFE**

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-02-09

Observer: HKO Start time: 940 (military time) Stop time: 950

Point number: 02 Temp (°C): // Wind speed (m/s): 6 KbCloud cover 85%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
COGR	80	NE	200	FORAGING
RTHA	150	E	1	*
ROPI	200	SW	7-	
EUST	200	SW	4	

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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS Mi6 Date: //-03-09

Observer: HKO Start time: 925 (military time) Stop time: 935

Point number: <u>09</u> Temp (°C): <u>8</u> Wind speed (m/s): <u>8</u> Cloud cover <u>0</u> %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	60	SE	1	
EUST	75	E	3	
DOWO	25	NE	/	
WBNU	10	E	/	
TUTI	10	N	3	
RBWO	10	W	2	
AMRO	75	E	1	
RWBL	40	N	35	FLYING, PROJOUSCY IN WOOD
DOWO	5	_5	1	
TUTI	50	W	1	
BLJA	60	N	1	
BLJA	100	E	2	FLYING
DOWO	35	EVE	1	
AMCR	100	SE	1	
1	(
1	1			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES

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DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name:	SENECA	WF	_Survey type:_	PASS MIG	Date:	11-09-09
	1			,		-

Observer: 4KO Start time: 756 (military time) Stop time: 806

Point number: // Temp (°C): // Wind speed (m/s): 6 Cloud cover/65%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	75	55W	4	
BLJA	70	554)	1	
BLJA	110	5W	1	
RBWD	30	S	1	
AMCR	100	5W	1	
EAME	70	5w	/	
EUST	100	55W	3	
COGR	70	55W	2	FLYOVERS
BUTA	110	5W	2	
WBNU	80	5W.	1	
DOWO	60	SE	1	
EUST	100	ESE	2	
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OHIO DEPARTMENT OF NATURAL RESOURCES FORM WD02 6/27/08

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name:	SENECA	Survey type:	PASSMIO	Date: 11-09-09
Troject Manne.		John Durvey type.	/ /200 / 1/0	Duto. / / 2 /

Observer: HKO Start time: 815 (military time) Stop time: 825

Point number: /2 Temp (°C): // Wind speed (m/s): 3 Cloud cover /00%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	50	E	2	
BLJA	80	E	/	
NOFL	70	5	/	
AMCR	200	5	/	
BRCR	100	SE	2	BROWN CLEEPER
BCCH	50	N	4	
DOWO	58	N	1	
RBWO	150	E	/	
RBWO	175	55	/	
NOCA	180	E	/	
EUST	100	E	4	FLYOUERS
UNSP	150	E	2	UNID SPARROW
AMCR	10	W	/	FLYOVER
/	1			

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name	e: SENECA (Surve	ey type: /	DSS MIG	D	Date: //- C	19-09
Observer:	HKO	_Start time:	924	_(military t	ime) S	Stop time:_	934
Point numbe	r: <u>07</u> Tem	p (°C):	_Wind sp	eed (m/s):	6	_Cloud cov	ver <i>[00</i> %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
EUST	125	SE	3	
HOLA	175 50-80 175	SE-SW SE-SW NW	6	
HOSP	175	SE	14	
HOLA	150	NW	2	
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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES Page of _/ DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENEC	9 WF Surve	ey type:	PASS M	16 Date: _/	1-09-09
Observer: HK	_Start time:_	910	(military	time) Stop tin	me: <i>920</i>
Point number: 08 Tem	in (°C)· /2	Wind s	need (m/s):	6 KI Cloud	d cover 100%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
MODO	90	E	2	
MODO UNPA#1 DOWO	80	5	2	FOR AGING IN CORN STUBBLE UNID PASS UNSER
DOWO	0		1	FLYING
	-(-			
		11		

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FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES

6/27/08

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WE Survey type: Pass Mis Date: 11-09-09 Observer: HKO Start time: 7/5 (military time) Stop time: 725 Point number: 16 Temp (°C): 7° Wind speed (m/s): 1 Cloud cover 60%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BCCH	10	SW	3.1	
TUTI	15	N	1	
WBNU	50	SE		
RTHA	0	1	1	
BOCH	15	N	/	
AMCR	200	5	1	
DOWO	60	5	/	
505P	25	\mathcal{N}	2	
WBNU	50	SE	/	
Dowd	30	SE	/	
AMCR	150	NE	/	FLYOUER
AMCR	200	NE	,	el
AMED	0	· ·	10	n
AMCR	100	NW	2	
AMCR	60	N	7	
BLJA	150	W	2	
AMRO	35	SW	2	
BLJA	40	5	1	
AMGO	30	N	/	_
SOSP	25	NW	2	
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BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-09-09	Project Name: SENECA	WF Survey type:	PASS MIG	Date: //-09-09
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Observer: HKO Start time: 742 (military time) Stop time: 752

Point number: 18 Temp (°C): 10 Wind speed (m/s): 3 Cloud cover 100%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	100	SE	/	FLYOUER
EUST	200	52)	6	
AMCR	150	5	/	FLYOVER
HOSP	200	5W	8	
AMCR	200	5W	3	
RBWI	40	N	/	
DOWS	50	N	/	
AMBO	200	E	/	FLYING
WBNU	30-70	W	4	
EABL	200	NE	/	
ROPI	0		4	FLYOVER
1	(
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FORM WD02

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OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENE	CA WF Surve	y type: 🖊	ASS MIG	Date: 1/-09-09
Observer: /4KO	Start time:	945	_(military time	e) Stop time: 955
Point number: 06 T	emp (°C):/ //	_Wind spe	eed (m/s): 5	Cloud cover/W%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
DETU	65	W	/	
BCCH	55	WNW	2	
BCCH	75	WSW	2	
TUTI	90	W	1	
EUST	100	WSW	3	
RBWO	80	WSW	1	
TUTI	70	W	3	
AMRO	150	W	3	
NOFL	75	WSW	1	
DEJU	75	W	2	
WBNU	80	WSW	/	
DETU	60	W	8	FORAGING INCORN
DOWO	75	W	2	
NOCA	80	W	Z	
BLJA	90	ω	1	
NOCA	70	WSW	1	
DEJU	100	W	5	
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DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Nam	ne: SENE C	A WF Survey type: PASS MIG Date: 11-12-09
Observer:	HKO	Start time: 728(military time) Stop time: 738
Point number	er: <i>02</i> Te	mp (°C): -3° Wind speed (m/s): / Cloud cover / %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
RBWO	75	NNE	/	
AMGD	100	W	/	
AMRO	30	W	/	
HOSP	200	5W W	/	
BLJA	150	W	/	
	1			
A)				

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES

6/27/08

DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-12-09

Observer: HKO Start time: 744 (military time) Stop time: 754

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
BLJA	60	W	/	
RBGU	125	6)	/	FLYOVER
UNPA#1	60	E	2	n
EUST	25	E	4	И
DOWS	50	N	/	
AMGO	80	E	/	
WBNU	100	SE	1	
NOCA	90	E	2	
BUTA	100	W	4	
DOWO	50	5W	/	
	4			

GENFOIT

6/27/08

VD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

Page of

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS, MIG Date: 11-12-09

Observer: HKO Start time: 827 (military time) Stop time: 837

Point number: 17 Temp (°C): 2° Wind speed (m/s): 5 Kt loud cover / %

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	100	SW	1	
AMGO	35	W	/	
DOWO	60	5W	/	
RWBL	50	ω	2	FLYOVERS
DOWO	150	NW	/	
AMGO	30	N	1	
1				

ENFO03

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES
6/27/08 DIVISION OF WILDLIFE

SENFPLA436

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-12-09

Observer: HKO Start time: 808 (military time) Stop time: 818

Point number: 23 Temp (°C): 2 Wind speed (m/s): / Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
RWBL	20-100	NE-W-SW	30	FORAGING IN CORN
DOWO	30	SE	1	
DEJU	50	5	4	
RBWO	70	SSE	1	
WBNU	150	5	2	
UNPAHI	75	N	2	FLYING
BLJA	200	5	/	
	7			
/				
)				
-/-				
	7			

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: Seve CA WF Survey type: Pass Mis Date: 11-12-09

Observer: HKO Start time: 845 (military time) Stop time: 855

Point number: 25 Temp (°C): 3° Wind speed (m/s): 3 Cloud cover 0%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	25	NW	1	
DOWS	20	NW	1	
TUTI	30	NE	1	
BUTA	80	NNE	/	
WBNU	75	E	/	
BCCH	50	E	/	
AMCR	108	E	1	
AMCR	125	NE	1	
Dowo	75	E	1	
BUA	200	ESE	1	
DEJU	70	E	1	
AMGO	30	N	/	
BLJA	70	W	1	
AMRO	125	E	17	FLYOVERS
AMRO	100	E	/	
WBNU	100	SE	/	
5				
	5			

SENFOOT

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES 6/27/08 DIVISION OF WILDLIFE

Page / of /

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-12-09

Observer: HKO Start time: 902 (military time) Stop time: 912

Point number: <u>04</u> Temp (°C): <u>2</u> Wind speed (m/s): <u>7</u> Cloud cover <u>0</u>%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	35	5W	/	
DOWO	40	5	1	
AMCR	18	W	/	FLYIVER
RWBL	0		1	FCYING
RBWO	70	SE	/	
Dowd	2	N	/	
BLJA	100	5W	/	
BCCH	150	W	/	
WBNU	120	W	1	1
BLTA	150	NW	/	
((
)				

FORM WD02 OHIO DEPARTMENT OF NATURAL RESOURCES DIVISION OF WILDLIFE

BIRD SURVEY FORM

Project Name: SENECA WF Survey type: PASS MIG Date: 11-09-09

Observer: HKO Start time: 832 (military time) Stop time: 842

Point number: 13 Temp (°C): // Wind speed (m/s): 6 KNCloud cover 68/0

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
AMCR	125	W	1	
MODO	20	W	2	
HOLA	75+	E		
NOCA	30	5	2	
NOCA	200	SE.	/	
AMGO	100	NNW	/	
RWBL	25	-	6	FLYOUERS
RWBL	30	W	2	И
RBWO	100	NW	1	
DOWS	40	WSW	/	
AMGO	180	SE	2	
EUST	180	SE.	3	
AMGO	60	WSW	2	

OHIO DEPARTMENT OF NATURAL RESOURCES Page / of / DIVISION OF WILDLIFE

SENFPG440

BIRD SURVEY FORM

Project Name: SENECA WI	Survey type: PASS MIG	Date: //-09-09
7		

Observer: HKO Start time: 855 (military time) Stop time: 905

Point number: <u>09</u> Temp (°C): <u>/3°</u> Wind speed (m/s): <u>3 kU</u>Cloud cover/20%

Species	Estimated distance (m)	Direction (bearing)	Flyover # in flock	Behavior/notes
WBNU	60	N	/	
EUST	50	NE	4_	
DO 608	15	W	/	FLYING
FUST	100	5W 5E 5E	3	
BCCH	40	SE	3	
TUTI	40	5E	2	
	>			

APPENDIX 11. BAT MIST-NETTING STUDY

INDIANA BAT (Myotis sodalis) SURVEY REPORT

SENECA WIND FARM SENECA COUNTY, OHIO

Prepared for:

RMT, INC. 3754 RANCHERO DRIVE ANN ARBOR, MICHIGAN 48108

Prepared by:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 333 BALDWIN ROAD PITTSBURGH, PA 15205

CEC Project 090-568

November, 2009

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APPENDICES

Appendix A – Agency Correspondence Appendix B – Scientific Collection Permit

Appendix C – Bat Survey Data Forms
Appendix D – Photographs

1.0 INTRODUCTION

This report presents the findings of an Indiana bat (<u>Myotis sodalis</u>) presence/probable absence mist net survey conducted for RMT, Inc. (RMT) by Civil & Environmental Consultants, Inc. (CEC). The survey was completed for the proposed Seneca Wind Farm project located within Seneca County, Ohio (Figure 1).

The proposed project site is located on the Watson, Fireside, Flat Rock, Tiffin South, Bloomville, Attica, Centerton, Sycamore, Lykens, and Chatfield, Ohio 7.5' U.S.G.S. Quadrangle maps in the southeastern portion of Seneca County, OH. The proposed project site consists of an approximate 200 mile² land tract (Figure 1). The approximate 200 mile² project site consists of agricultural fields, and approximately 2,000 acres of forested habitat. For the most part, the forested habitat is located along the creeks and streams within the project area as well as isolated woodlots. Figure 2 provides an aerial view of the project area and also shows the location of the mist-net sites.

The purpose of the study was to confirm the presence or probable absence of the Indiana bat within the project area and to determine species composition. The survey was based on CEC's professional judgment and interpretation of the technical criteria outlined in the U.S. Fish and Wildlife Service (USF&WS) (Region 3) agency draft document titled *Indiana bat* (*Myotis sodalis*) *Draft Revised Recovery Plan: First Revision*, dated April 2007. CEC also adhered to the guidance provided in the Ohio Department of Natural Resources (Ohio DNR) *On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio*.

2.0 METHODOLOGY

CEC biologists traversed the project area by vehicle and on foot to identify potential bat habitat (roosting areas, feeding areas, drinking pools, and flight corridors). Initially field reconnaissance trips were completed in order to establish mist net sites that would maximize the success of the mist net survey. In addition, CEC conducted the reconnaissance in order to determine if there were any open portals within the project area. Given the size, shape, and amount of forested habitat within the project area, a total of 15 mist net sites were completed for the site. Refer to Appendix A for USF&WS and Ohio DNR correspondence relating to the number of proposed mist net sites and proposed net nights.

CEC identified 15 mist net sites within the project area that contained at least two of the following bat habitats: roosting areas, feeding areas, drinking pools, and/or flight corridors. The sites identified during the reconnaissance had the highest potential to capture an Indiana bat (Figure 2).

The mist net sites selected by CEC included at least four mist net sets, placed a minimum of 30 meters apart. All mist nets used during the survey were brand new Avinet - USA made 75/2 38mm mesh, polyester, reduced "bag" for bats (Avinet Inc. - Dryden, New York). The mist nets measure 2.6 meters high, contain four shelves, and are various lengths ranging from 3 meters to 18 meters. CEC used Avinet stackable poles for single high net sets and custom built net poles that allow up to three nets to be stacked on top of each other (triple high). These custom-built net poles reach a maximum of 30 feet into the canopy. The custom-built net poles and CEC mist net surveying techniques are based upon Gardner, et al. 1989, and Nagorsen, et al. 1980.

The Indiana bat mist net survey was completed under strict adherence to the USF&WS *Indiana* bat (<u>Myotis sodalis</u>) Draft Revised Recovery Plan: First Revision, dated April 2007, and the Ohio DNR On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio. The survey was authorized by the USF&WS under Federal Fish and Wildlife Permit - TE118259 and by the Ohio Department of Natural Resources,

Wildlife Division, Wild Animal Permit – 12-44 (Appendix B). All captured bats were identified by an authorized Collection Permit holder. All collections made during the survey were recorded on field data sheets, which are presented in Appendix C. Photographs of each mist net site and representative species of bats captured during the survey are presented in Appendix D.

For bat telemetry work, CEC used Holohil System radio transmitters within the 172 MHz range (Holohil Systems Ltd. – Carp, Ontario Canada). The Holohil LB-2N transmitter weighs 0.35 grams and has a 12-day battery life. These transmitters are activated by twisting two small external power leads and then soldering them together. Lastly, the protective wax used to encase the radio transmitter is softened with a soldering iron and the soldered power leads are embedded in the wax to ensure the transmitter remains active and has a weatherproof seal. Once the transmitter was activated, the telemetry receivers, antennae, and transmitter were tested from a distance of at least 500 meters. This test was performed to ensure that the activated transmitter was working properly and that the radio receivers and antennas were receiving the signal properly.

Prior to the affixing the activated transmitter to the bat, a small amount of hair was trimmed from the mid-dorsal region of the bat. This was done to ensure that the transmitter was securely attached to the hair and skin of the bat. The transmitter was then affixed to the bat using surgical glue as specified by the manufacture. The transmitter was located on the bats' mid-dorsal region to minimize disturbance to the bat during flight and roosting activities.

Tracking of the bats was accomplished by using up to three tracking crews and public access points. During the tracking, several different receivers/antenna set-ups were utilized. Model TRX-1000S telemetry receivers with 3-element Yagi directional antennas (Wildlife Materials, Inc., Murphysboro, Illinois), Model LA12-Q telemetry receivers with 3-element Yagi directional antennas (AVM Instrument Company Ltd., Colfax, California - Wildlife Materials, Inc., Murphysboro, Illinois). These receiver and antenna combinations were used as hand-held units. The telemetry crews were equipped with GPS units with real-time feed into laptop computers

loaded with digital topographic maps for location information or handheld GPS mapping backgrounds and hard copy field maps.	S units	with

3.0 RESULTS

3.1 Mist Net Survey Results

CEC sampled a total of 120 net nights (15 locations x 4 nights per survey site x 2 net sets per site = 120 net nights) from July 6 to July 29, 2009. The survey sites were sampled starting at sunset and lasted for a minimum of five hours. No severe weather (precipitation, strong winds, and/or temperatures below 50 degrees Fahrenheit) was encountered during the surveys.

The following section provides a detailed description of the mist net sites and presents the results of the trapping effort at each site. A table summarizing the survey results follows the site descriptions.

Site 1

Mist net Site 1 was sampled over a 2 day period from July 6 to July 8, 2009. On the initial survey night, one mist net set (one 18-meter long, triple high net) was erected in a flight corridor over a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a stream, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over an unimproved road, and one mist net set (one 9-meter long, double high net) was erected in a foraging area in a pasture field. A total of 17 Little Brown bats (*Myotis lucifugus*) and three Big Brown bats (*Eptesicus fuscus*) were collected during the first survey night.

On the second survey night, one mist net set (one 18-meter long, triple high net) was erected in a flight corridor over a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a stream, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over an unimproved road, and one mist net set (one 12-meter long, single high net) was erected in a foraging area in a pasture field. One Eastern Red bat (*Lasiurus borealis*), two Northern Myotis bats (*Myotis septentrionalis*), two Big Brown bats, and eight Little Brown bats were collected during the second survey night at Site 1.

Site 2

Mist net Site 2 was sampled over a 2 day period from July 6 to July 8, 2009. On the initial survey night, one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 18-meter long, triple high net) was erected in a foraging/drinking area over a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 12-meter long, double high net) was erected in a foraging/drinking area over a stream. A total of 15 Little Brown bats and five Big Brown bats were collected during the first survey night.

On the second survey night, one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 18-meter long, triple high net) was erected in a foraging/drinking area over a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 12-meter long, double high net) was erected in a foraging/drinking area over a stream. One Eastern Red bat and 10 Little Brown bats were collected during the second survey night at Site 2.

Site 3

Mist net Site 3 was sampled over a 2 day period from July 6 to July 8, 2009. On the initial survey night, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 12-meter long, double high net) was erected in a flight corridor over a walking trail, one mist net set (one 6-meter long, single high net) was erected over a drinking area above a vernal pool, and one mist net set (one 6-meter long, single high net) was erected over a drinking area above a vernal pool. One Northern Myotis bat was collected during the first survey night.

On the second survey night, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 12-meter long, double high net) was

erected in a flight corridor over a walking trail, one mist net set (one 6-meter long, single high net) was erected over a drinking area above a vernal pool, and one mist net set (one 6-meter long, single high net) was erected over a drinking area above a vernal pool. One Northern Myotis bat was collected during the second survey night at Site 3.

Site 4

Mist net Site 4 was sampled over a 2 day period from July 7 to July 9, 2009. On the initial survey night, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor over a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 12-meter long, single high net) was erected in a flight corridor over a logging road. A total of 38 Little Brown bats, two Big Brown bats, and one Tri-colored bat (*Perimyotis subflavus*) were collected during the first survey night. A total of 26 reproductively active female Little Brown bats were captured during the first night at Site 4. As required by the Ohio DNR protocol, one Little Brown bat was affix with a radio transmitter and released. Details of the radio telemetry are provided in Section 3.2 of this report.

On the second survey night, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor over a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 12-meter long, single high net) was erected in a flight corridor over a logging road. One Eastern Red bat, one Tricolored bat, one Northern Myotis bat, four Big Brown bats, and seven Little Brown bats were collected during the second survey night at Site 4. A total of four reproductively active female Little Brown bats were captured during the second night at Site 4, resulting in a total of 30 reproductively active females captured at this site. As required by the Ohio DNR protocol a second Little Brown bat was affix with a radio transmitter and released.

Site 5

Mist net Site 5 was sampled over a 2 day period from July 7 to July 9, 2009. On the initial survey night, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 9-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a dry stream. Nine Big Brown bats, six Northern Myotis bats, two Eastern Red bats, and one Little Brown bat were collected during the first survey night.

On the second survey night, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 9-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a dry stream. One Eastern Red bat and one Big Brown bat were collected during the second survey night at Site 5.

Site 6

Mist net Site 6 was sampled over a 2 day period from July 7 to July 9, 2009. On the initial survey night, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a walking trail, and one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road. Two Big Brown bats, two Eastern red bats, and one Northern Myotis bat were collected during the first survey night.

On the second survey night, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high

net) was erected in a flight corridor over a walking trail, and one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road. One Northern Myotis bat and five Big Brown bats were collected during the second survey night at Site 6.

Site 7

Mist net Site 7 was sampled over a 2 day period from July 10 to July 12, 2009. On the initial survey night, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high net) was erected over a drinking area along a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road. Two Big Brown bats and one Northern Myotis bat were collected during the first survey night.

On the second survey night, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high net) was erected over a drinking area along a stream, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected over a drinking area along a stream. No bats were collected during the second survey night at Site 7.

Site 8

Mist net Site 8 was sampled over a 2 day period from July 10 to July 14, 2009. On the initial survey night, one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road. One Big Brown bat and four Northern Myotis bat were collected during the first survey night.

On the second survey night, one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road. No bats were collected during the second survey night at Site 8.

Site 9

Mist net Site 9 was sampled over a 2 day period from July 10 to July 12, 2009. On the initial survey night, one mist net set (one 12-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a walking trail, and one mist net set (one 9-meter long, double high net) was erected in a flight corridor over a walking trail. Nine Northern Myotis bats, two Big Brown bats and one Eastern Red bat were collected during the first survey night.

On the second survey night, one mist net set (one 12-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, triple high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a walking trail, and one mist net set (one 9-meter long, double high net) was erected in a flight corridor over a walking trail. Two Northern Myotis bats and two Little Brown bats were collected during the second survey night at Site 9.

Site 10

Mist net Site 10 was sampled over a 3 day period from July 20 to July 29, 2009. The additional survey night was agreed to by the USF&WS in lieu of a second night at Site 13, where access was denied (see correspondence in Appendix A). On the initial survey night, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over an unimproved road, one

mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 12-meter long, single high net) was erected over a drinking pool within a stream channel, and one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road. One Hoary bat (*Lasiurus cinereus*), one tri-colored bat, three Northern Myotis bats, four Little Brown bats, four Eastern Red bats, and 21 Big Brown bats were collected during the first survey night.

On the second survey night, one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over an unimproved road, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 12-meter long, single high net) was erected over a drinking pool within a stream channel, and one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road. Two Hoary bats, three Eastern Red bats, four Little Brown bats, five Northern Myotis bats, and 31 Big Brown bats were collected during the second survey night at Site 10.

A third survey night was complete at Site 10 instead of the second night at mist net site 13. On this night one mist net set (one 9-meter long, triple high net) was erected in a flight corridor over an unimproved road, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, one mist net set (one 12-meter long, single high net) was erected over a drinking pool within a stream channel, and one mist net set (one 9-meter long, single high net) was erected in a flight corridor over a logging road. Two Hoary bats, three Eastern Red bats, seven Little Brown bats, and 25 Big Brown bats were collected during the third survey night.

Site 11

Mist net Site 11 was sampled over a 2 day period from July 11 to July 14, 2009. On the initial survey night, one mist net set (one 6-meter long, single high net) was erected over a drinking area along an intermittent stream channel, one mist net set (one 6-meter long, single high net) was erected over a drinking area along an intermittent stream channel, one mist net set (one 6-meter long).

meter long, double high net) was erected over a drinking area along an intermittent stream channel, and one mist net set (one 18-meter long, triple high net) was erected in a foraging area perpendicular to the tree line within a cultivated field. Two Northern Myotis bats, three Eastern Red bats, and 16 Big Brown bats were collected during the first survey night.

On the second survey night, one mist net set (one 6-meter long, single high net) was erected over a drinking area along an intermittent stream channel, one mist net set (one 6-meter long, single high net) was erected over a drinking area along an intermittent stream channel, one mist net set (one 6-meter long, double high net) was erected over a drinking area along an intermittent stream channel, and one mist net set (one 18-meter long, triple high net) was erected in a foraging area perpendicular to the tree line within a cultivated field. Two Northern Myotis bats, two Eastern Red bats, and 15 Big Brown bats were collected during the second survey night at Site 11.

Site 12

Mist net Site 12 was sampled over a 2 day period from July 11 to July 13, 2009. On the initial survey night, one mist net set (one 18-meter long, triple high net) was erected in a foraging area perpendicular to the tree line within a cultivated field, one mist net set (one 6-meter long, double high net) was erected over a drinking area along a stream channel, one mist net set (one 6-meter long, single high net) was erected over a drinking area along a stream channel, and one mist net set (one 3-meter long, single high net) was erected over a drinking area along a stream channel. One Little Brown bat, two Eastern Red bats, three Hoary bats, and three Big Brown bats were collected during the first survey night.

On the second survey night, one mist net set (one 18-meter long, triple high net) was erected in a foraging area perpendicular to the tree line within a cultivated field, one mist net set (one 6-meter long, double high net) was erected over a drinking area along a stream channel, one mist net set (one 6-meter long, single high net) was erected over a drinking area along a stream channel, and one mist net set (one 3-meter long, single high net) was erected over a drinking area along a

stream channel. One Eastern Red bat, two Hoary bats, and six Big Brown bats were collected during the second survey night at Site 12.

Site 13

Mist net Site 13 was sampled on July 15, 2009. On the initial survey night, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor along an unimproved road, one mist net set (one 3-meter long, single high net) was erected over a drinking area above a vernal pool, one mist net set (one 6-meter long, double high net) was erected in a forested flight corridor between two pasture fields, and one mist net set (one 6-meter long, single high net) was erected in a forested flight corridor between two pasture fields. One Little Brown bat, two Northern Myotis bats, and three Big Brown bats were collected during the first survey night.

On the second survey night, the landowner denied CEC access to the property. After consultation with both the USF&WS and the Ohio DNR (see Appendix A) one additional night of netting was completed at mist net site 10. Mist net site 10 presented the highest likely hood of capturing an Indiana bat based both upon the surrounding habitat and the diversity of bat species previously captured at that site.

Site 14

Mist net Site 14 was sampled over a 2 day period from July 15 to July 25, 2009. On the initial survey night, one mist net set (one 12-meter long, single high net) was erected in a flight corridor within a mature forested area, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor within a mature forested area, one mist net set (one 6-meter long, single high net) was erected in a foraging area over a wetland complex, and one mist net set (one 9-meter long, double high net) was erected in a flight corridor within a mature forested area. A total of eight Northern Myotis bats and one Big Brown bat were collected during the first survey night.

On the second survey night, one mist net set (one 12-meter long, single high net) was erected in a flight corridor within a mature forested area, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor within a mature forested area, one mist net set (one 6-meter long, single high net) was erected in a foraging area over a wetland complex, and one mist net set (one 9-meter long, double high net) was erected in a flight corridor within a mature forested area. Seven Northern Myotis bats, one Eastern Red bat, and one Big Brown bat were collected during the second survey night at Site 14.

Site 15

Mist net Site 15 was sampled over a 2 day period from July 11 to July 13, 2009. On the initial survey night, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor over an unimproved road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road. A total of two Northern Myotis bats, two Big Brown bats, and six Little Brown bats were collected during the first survey night.

On the second survey night, one mist net set (one 12-meter long, triple high net) was erected in a flight corridor over an unimproved road, one mist net set (one 6-meter long, double high net) was erected in a flight corridor over a logging road, one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road, and one mist net set (one 6-meter long, single high net) was erected in a flight corridor over a logging road. A total of one Eastern Red bat, two Northern Myotis bats, and 12 Little Brown bats were collected during the second survey night at Site 15.

TABLE 1
MIST NET SURVEY SUMMARY

Common Name	Scientific Name	Site 1	Site 2	Site 3	Site 4	Site 5	Site 6	Site 7	Site 8	Site 9	Site 10	Site 11	Site 12	Site 13	Site 14	Site 15	Total Per Species
Eastern Red bat	Lasiurus borealis	1	1		1	3	2			1	10	5	3		1	1	29
Hoary bat	Lasiurus cinereus										5		5				10
Little Brown bat	Myotis lucifugus	25	25		45	1				2	15		1	1		18	133
Northern Myotis bat	Myotis septentrionalis	2		2	1	6	2	1	4	11	8	4		2	15	4	62
Big Brown bat	Eptesicus fuscus	5	5		6	10	7	2	1	2	77	31	9	3	2	2	162
Tri-colored bat	Perimyotis subflavus				2						1						3
	Total Per Site	33	31	2	55	20	11	3	5	16	116	40	18	6	18	25	399

3.2 Common Bat Telemetry Results

As required by the Ohio DNR in their *On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio*, two reproductively active bats were radio tagged at mist net site 04. The first bat, tagged during the night of July 7, 2009 was a lactating Little Brown bat. As specified in the Ohio DNR protocol, radio telemetry was completed during the following 8 days in order to identify the location of the maternity colony. On July 8, the day after the bat was radio tagged and released, the female Little Brown bat was located approximately 100 feet from mist net Site 4 in a large sycamore tree (*Platanus occidentalis*). Refer to the photo pages in Appendix D for a picture of the roost tree. An emergence count was attempted on the night of July 8, 2009 but due to thick tree foliage and lack of access to the adjacent field, no bats were observed emerging from the tree.

On July 9, 2009 the Little Brown bat was located 0.92 miles from Site 04 in the direction of an old barn and several sheds. Refer to Figure 3 for a detailed map of mist net Site 04 and the identified roosts.

Additionally, on the night of July 9, 2009 a second lactating Little Brown bat was radio tagged at mist net Site 04 and released. On July 10, 2009 both bats were located in the direction of the previously identified roost in the vicinity of the old barn complex. CEC did not have access to the property where the radio signals were coming from. Based upon the radio signals, the bats were roosting in one of the far sheds. For the next seven days, both bats were located roosting back in the barn/shed complex area during the day. On several occasions the day roost was checked from the road during the night to see if the bats had left for foraging. On July 11, no signal was found in the area of the barn complex. On July 14 one signal was found. Figure 3 shows a detailed map of mist net site 04 and the barn/shed complex. Photographs of the identified roost tree and barn/shed complex are included in Appendix D.

3.3 Potential Winter Bat Habitat Results

CEC completed an office review of potential winter bat habitat within the proposed project site prior to completing the field reconnaissance and mist net survey. CEC reviewed available public information including USGS mapping, abandoned mine maps, and karst area mapping. Figure 4 shows the mapped potential karst areas within the project site. Based upon the "Preliminary Map of Potentially Karstic Carbonate Rocks in the Central and Southern Appalachian States", a large portion of the project site consists of gently folded and flat-lying carbonates rocks. Carbonate rocks can produce large complex cave systems when strongly deformed. The two potential karst areas mapped within the project site GC (gently folded and flat laying carbonate rocks) and GCG (gently folded and flat laying carbonate rocks with glacial cover) have not been strongly deformed. Surface karst features (cave openings) within the project site and surrounding area are typically not present or are only visible as sinkholes. This can be attributed to the overburden of glacial sediments which covers the carbonate rock layers.

CEC investigated properties where access granted during the field reconnaissance. CEC also spoke with properties owners to identify potential caves on their properties of known caves on adjacent properties. During the field reconnaissance and mist netting, no potential winter bat habitat areas or cave entrances were observed or noted by landowners we talked too.

4.0 CONCLUSIONS

From July 6 to July 29, 2009, CEC conducted an Indiana bat (<u>Myotis sodalis</u>) presence/probable absence mist net survey within the approximate 200 mile² Seneca Wind Farm Project area located in Seneca County, Ohio. A total of 399 bats representing six species were captured and identified at 15 mist net sites within the project area. The mist net survey effort at the 15 sites consisted of a total of 120 net nights. All bats captured were identified, weighed, measured, and released alive. No Indiana bats were captured during the survey.

Lastly, no open portals/caves were identified during the office data review and no open portals/caves were observed within the project site during the field reconnaissance. Additionally, based on conversations with RMT representatives and local landowners; none are known to exist within the site.

5.0 LEVEL OF CARE

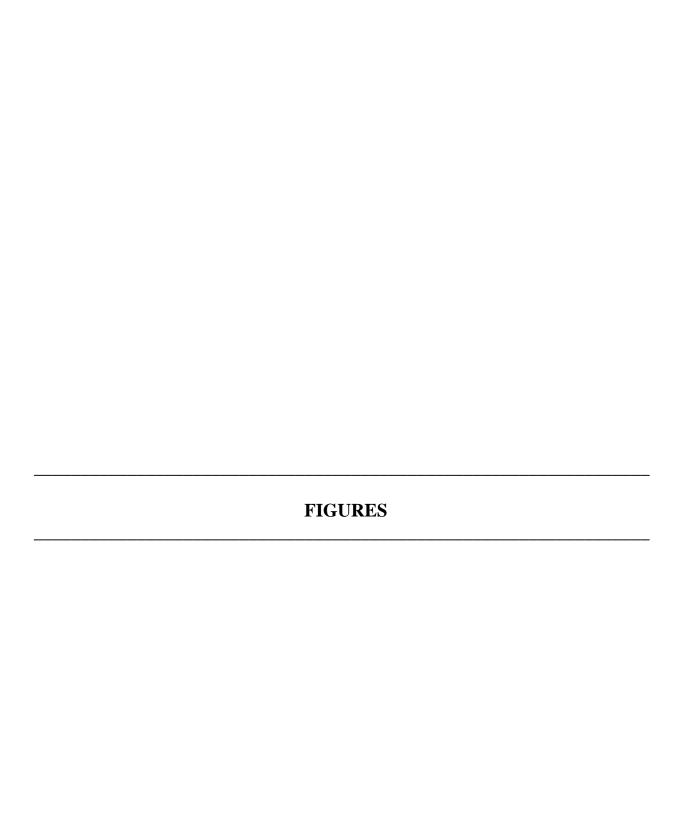
The Indiana bat survey services performed by CEC were conducted in a manner consistent with the criteria outlined in the USF&WS, Region 3 agency draft document titled *Indiana bat* (*Myotis sodalis*) *Draft Revised Recovery Plan: First Revision*, dated April 2007, and with the level of care and skill ordinarily exercised by members of the environmental consulting profession practicing contemporaneously under similar conditions in the locality of the project.

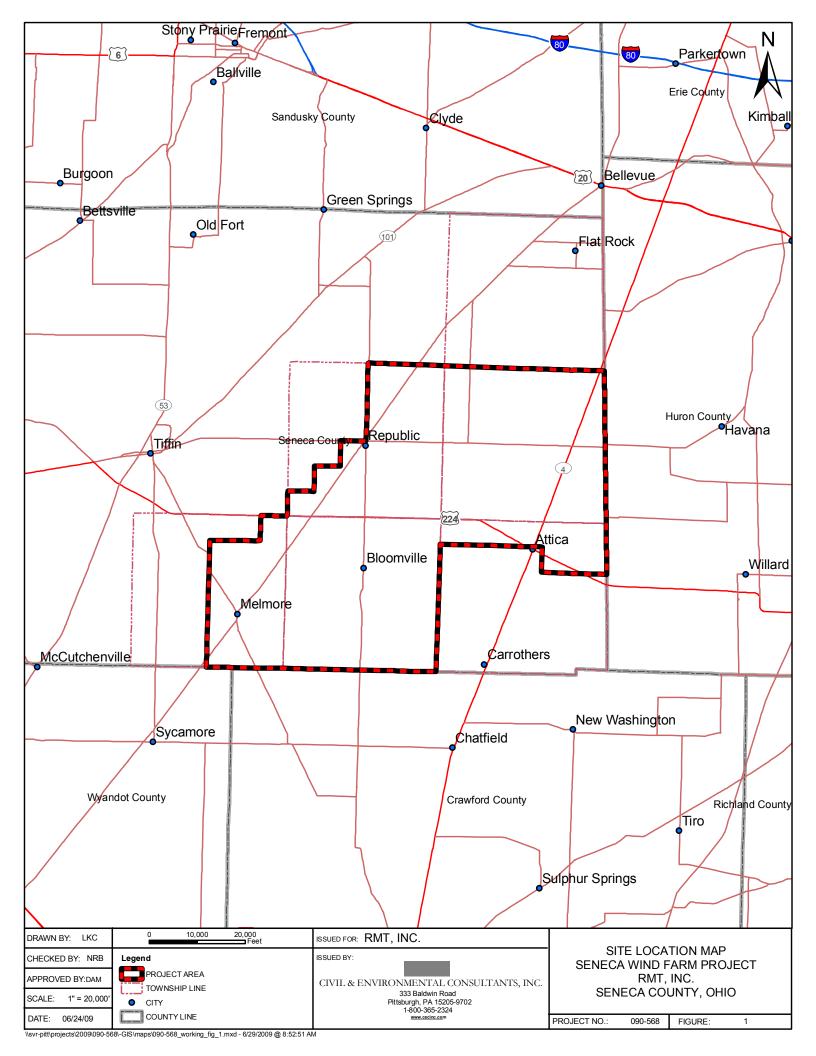
6.0 REFERENCES

Gardner, J. E., J. D. Garner, and J. E. Hofmann. 1989. A Portable Mist-Netting System for Capturing Bats with Emphasis on *Myotis sodalis* (Indiana bat). Bat Research News 30:1-8.

Nagorsen, D. W.; Peterson, R. L., 1980: Mammal Collectors Manual. A Guide for Collecting, Documenting, and Preparing Mammal Specimens For Scientific Research. Belonging to the unnumbered series: Life Sciences Miscellaneous Publications. Royal Ontario Museum, Toronto. ISBN: 0-88854-255-0 pa.

U.S. Fish and Wildlife Service. 2007. *Indiana bat* (<u>Myotis sodalis</u>) Draft Revised Recovery Plan: First Revision. U.S. Fish and Wildlife Service, Fort Snelling, MN. 258 pp.





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Summary: Application Appendix N Part 6 electronically filed by Teresa Orahood on behalf of Dylan F. Borchers