
Grassland Bird Surveys in Support of the Michigan Breeding Bird Atlas II: Year One Progress Report



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**MICHIGAN STATE
UNIVERSITY
EXTENSION**

Cover photos: Center: Grassland at Verona State Game Area. Lower left: Northern Harrier (*Circus cyaneus*). Lower right: Henslow's Sparrow (*Ammodramus henslowii*). All photos by Julie Gibson, MNFI.

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ABSTRACT

The original Michigan Breeding Bird Atlas project spanned the years from 1983 to 1988, and the primary goal of the project was to map the distribution of each bird species that breeds in Michigan (McPeek and Adams 1991). Information gathered during the first atlas project pointed to dramatic declines among some species guilds, including grassland birds. In addition to this apparent decline, information is lacking on the distribution, abundance, breeding phenology, and habitat use of grassland birds. In 2004 the Michigan Natural Features Inventory proposed to conduct systematic surveys for grassland birds to provide improved data for the MBBA II. A total of 175 bird surveys were conducted during the 2005 field season. MNFI staff conducted 131 surveys and the Kalamazoo Nature Center completed an additional 44 surveys. In addition, 40 incidental species observations were noted on federal, public, and private land, which contained select Michigan Species of Greatest Conservation Need. Fifty sites contained state listed grassland bird species, including Dickcissel (*Spiza americana*), Henslow's Sparrow (*Ammodramus henslowii*), Grasshopper Sparrow (*Ammodramus savannarum*), Northern Harrier (*Circus cyaneus*), and Sharp-tailed Grouse (*Tympanuchus phasianellus*).

INTRODUCTION

The original Michigan Breeding Bird Atlas project spanned the years from 1983 to 1988, and the primary goal of the project was to map the distribution of each bird species that breeds in Michigan (McPeek and Adams 1991). Such surveys should be conducted at regular intervals (10 to 25 years) to identify range and population changes (McPeek and Adams 1991), which

was the purpose for starting the Michigan Breeding Bird Atlas II (MBBA II) project in 2001.

Information gathered during the first atlas project pointed to dramatic declines among some species guilds, including grassland birds. In addition to this apparent decline, information is lacking on the distribution, abundance, breeding phenology, and habitat use of grassland birds. In 2004 the Michigan Natural Features Inventory (MNFI) proposed to conduct systematic surveys for grassland birds to provide improved data for the MBBA II. We expect that a three-year effort will be required to adequately survey the state for these species. Our objectives are to 1) provide improved data for the MBBA II project, 2) expand our knowledge of the distribution and abundance of grassland birds in Michigan, 3) collect baseline data using an accepted protocol that would allow for long-term monitoring of trends, and 4) gather information on the habitat use of grassland bird species at the landscape level. Informed management of these grasslands is required to enhance the long-term viability of native species inhabiting this ecological resource. Devising appropriate protection and restoration strategies relies on the availability of current status assessments of environmental features and associated biota.

Grassland birds, as a group, have suffered the most severe population declines of any other birds (Herkert 1995, Herkert et al. 1996). Urban sprawl and subdivisions, changes in agricultural practices such as row cropping and early harvested alfalfa, parasitism, predation, and succession continue to threaten habitat for these birds, especially area sensitive species. Many historic grasslands are fragmented and undergoing succession to shrubland and early successional forest. Most of the existing grasslands are managed wildlife

plantings and openings on state lands which have limited management funds to control woody vegetation. Many of these sites were originally designed to have increased linear edges to provide cover for gamebird species, which further fragments and isolates these habitats. None the less, these grasslands, and other public and private grasslands provide critical habitat for rare grassland birds, including area sensitive species and species of greatest conservation need, and thus hold great management potential.

This multi-year project will help public land managers and planners identify the grassland bird species, communities, and habitats of concern, both in their local areas and statewide. This first year (this report) focused on public lands in the Southern Lower Peninsula (SLP) and in the Eastern Upper Peninsula (EUP). The second year of surveys (2006) will be carried out at various locations in the Lower Peninsula (LP), and in the far EUP. With additional funding, the final year of surveys (2007) will be conducted in the Western Upper Peninsula (WUP) and various sites in the Northern Lower Peninsula (NLP). Sites where state listed grassland bird species were detected during the 2005 breeding season will be resurveyed in 2006 or 2007. These species include Dickcissel (*Spiza americana*), Henslow's Sparrow (*Ammodramus henslowii*), Grasshopper Sparrow (*Ammodramus savannarum*), Northern Harrier (*Circus cyaneus*), and Sharp-tailed Grouse (*Tympanuchus phasianellus*).

It is the intention of this project to identify the most critical sites in Michigan for the continued protection of grassland birds, and to supplement the MBBAII. Several projects (MSU graduate studies, Important Bird Areas Programs, and the Michigan Breeding Bird Atlas Project) have already studied grassland birds in Michigan. Most have been

limited in scope or have answered specific research questions, therefore lacking the statewide perspective needed to identify critical grasslands. New and updated inventories and ecological assessments of these grasslands will provide valuable data describing 1) the status of important resident grassland bird communities and species, 2) habitat associations of several species of greatest conservation need, and 3) conservation management needs for grassland bird species. The inventories will help to fill the information gaps that currently exist and will provide a much stronger foundation for devising sound conservation and management strategies.

The MNFI is prepared to undertake research to: 1) gather reports and other records for nesting grassland birds in grasslands throughout the state, 2) conduct targeted grassland bird surveys on public and private lands where reports and records exist and update element occurrences for these grassland bird species, 3) collect ecological data at survey sites to characterize critical habitats and communities necessary for sustaining viable populations of grassland birds in Michigan, and 4) disseminate this information to key land management partners.

This progress report presents the results of the first year of a multi-year project to conduct systematic inventories of statewide grasslands to identify critical nesting habitat for rare grassland birds. In this compilation of year one efforts, we provide the results of grassland bird inventories conducted by zoologists, focused on public and private lands in the SLP and the EUP. Important grassland bird species, including one state threatened, and four species of concern are depicted as 2005 detection maps. Also provided are brief descriptions of the survey

sites, results of bird surveys, and research priorities for 2006.

METHODS

Study Area

The study area for this project includes grasslands within the entire state of Michigan, including the UP and LP. Ownership includes federal, state, and county, as well as non-governmental preserves and private lands enrolled in easement programs. Grassland types surveyed include both warm and cool season grass plantings, and combinations of the two, old/abandoned fields and slash cuts, young pine plantations, and grasslands associated with airports, metroparks, etc.

Point Counts

Grassland birds which are currently listed as Michigan endangered, threatened, or of special concern were the primary targets of surveys (Table 1), although all detected species were recorded. The Natural Heritage Biological and Conservation Database (BCD) was consulted for known occurrences or rare grassland birds throughout the study area. Information on various species was gathered by consulting expert ornithologists, zoologists, wildlife biologists, pertinent unpublished reports, and a variety of published sources. Survey sites for each target species or group were selected based on historical occurrence records, air photo interpretation, current land cover maps, and by consulting with individuals knowledgeable about the specific grasslands of Michigan. In addition MNFI zoologists identified potential survey sites.

Sites were surveyed once during the breeding season, initiating in mid-May in the SLP, and ending in the UP in early July. We located grassland bird point-count stations at least 300 m apart and 100 m from forest edge. All point count stations were off road, except when access was limited by water-filled ditches or when the effective habitat spanned both sides of a quiet gravel or dirt road. Small grasslands (<40 ac.) were generally excluded from the survey, unless the effective habitat was larger, for example where a small grassland was flanked by adequate shrubland, marsh, or agricultural fields, or when a request was made to survey a specific site. We conducted surveys between sunrise and approximately 10:00 am. Heavy precipitation and winds greater than or equal to 20 km/hr (13 mph, equivalent to Beaufort Scale 4) were avoided. We noted the time of survey and collected data on cloud cover, precipitation level and type, and wind speed at each station.

The point counts consisted of a ten-minute silent period in which all birds heard and/or seen within the grassland were recorded. For each observation we recorded the species, sex (if discernable), time period during which the response was first observed, and estimated location. Locations of birds were approximated (initially using a range finder) by estimating the distance away from the observer. For all rare bird occurrences standard Natural Heritage Special Animal Forms were completed. Data from all sightings included numbers of individuals seen or heard and the extent and quality of occupied habitat. These data were then entered into the BCD. In addition, for every survey point a grassland bird survey form, developed by MNFI, was completed.

Table 1. Target federal and state listed grassland bird species and their associated ranks.

State Listed Grassland Bird Species and Ranks						
Scientific Name	Common Name	Family	US Status*	State Status**	Global Rank***	State Rank***
<i>Ammodramus henslowii</i>	Henslow's sparrow	Emberizidae		T	G4	S2S3
<i>Ammodramus savannarum</i>	Grasshopper sparrow	Emberizidae	PS	SC	G5	S3S4
<i>Asio flammeus</i>	Short-eared owl	Strigidae		E	G5	S1
<i>Botaurus lentiginosus</i>	American bittern	Ardeidae		SC	G4	S3S4
<i>Chondestes grammacus</i>	Lark sparrow	Emberizidae		X	G5	SX
<i>Circus cyaneus</i>	Northern harrier	Accipitridae		SC	G5	S3
<i>Lanius ludovicianus migrans</i>	Migrant loggerhead shrike	Laniidae		E	G4T3Q	S1
<i>Spiza americana</i>	Dickcissel	Cardinalidae		SC	G5	S3
<i>Sturnella neglecta</i>	Western meadowlark	Icteridae		SC	G5	S4
<i>Tympanuchus phasianellus</i>	Sharp-tailed grouse	Phasianidae		SC	G4	S3S4

****State Status**

E = endangered

T = threatened

SC = special concern

***Federal Status**

PS = partial status (federally listed in only part of its range)

*****Ranking**

GRANK

The priority assigned by The Association for Biodiversity Information's national office for data collection and protection based upon the element's status throughout its entire world-wide range. Criteria not based only on number of occurrences; other critical factors also apply. Note that ranks are frequently combined.

G3 = either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g. a single western state, a physiographic region in the East) or because of other factor(s) making it vulnerable to extinction throughout its range; in terms of occurrences, in the range of 21 to 100.

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

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

Q = taxonomy uncertain.

T = subspecies.

SRANK

The priority assigned by the Michigan Natural Features Inventory for data collection and protection based upon the element's status within the state. Criteria not based only on number of occurrences; other critical factors also apply. Note that ranks are frequently combined.

S1 = critically imperiled in the state because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extirpation in the state.

S2 = imperiled in state because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extirpation from the state.

S3 = rare or uncommon in state (on the order of 21 to 100 occurrences).

S4 = apparently secure in state, with many occurrences.

Vegetation Sampling

Vegetation survey forms were completed at most 2005 survey sites either on the day of the bird survey, or later in the summer, through mid-August. Both bird and vegetation data were collected on the same form (Appendix 1). Several vegetation characteristics were measured or estimated, and averaged at each site, including vegetation height, vegetation density, litter layer depth, dominant grass species, grass to forb ratio, percent shrub, and whether shrubs were generally scattered or clumped. When possible, digital photographs were taken of rare birds and of survey sites to supplement the MNFI digital library, and to aid in future categorization of grassland types.

Atlas Breeding Status

Breeding status was determined by survey block according to methods set forth in the MBBA II Project Handbook (KNC 2004). MBBA II survey blocks are based on quarter-townships and consist of nine legal sections (KNC 2004). While data was not collected along traditional Breeding Bird Survey (BBS) routes, we summarized this information by MBBA II block. Singing birds were treated as singing males for the purposes of assigning breeding criteria codes and we considered the species a probable breeder for that survey

Data Analysis

Due to small sample sizes from the first year of survey results, landscape level analyses will not be conducted. We will use an ArcView Geographic Information System (GIS) to investigate species distribution and

landscape scale habitat associations among select species at the patch, landscape, and ecoregional scales using data from all three years of surveys (2005-2007). Likewise, statistical analysis of microhabitat characteristics will not be conducted until the completion of all three years of surveys (2005-2007).

RESULTS and DISCUSSION

Study Area

The study sites for the first year of the grassland bird inventory included grasslands associated with the Upper and Lower Peninsulas of Michigan. Several sampling locations or points within 32 counties were visited on at least one occasion by MNFI staff within federal, state, county, non-governmental organizations, and private parcels.

Point Counts

A total of 175 grassland bird surveys were conducted within 32 counties and 81 Breeding Bird Atlas Blocks during the 2005 field season. MNFI staff conducted 131 surveys and the Kalamazoo Nature Center (KNC) completed an additional 44 surveys.

Data from the KNC are also summarized in this report. This first year focused on state and federal public lands in the Southern Lower Peninsula (SLP) and in the Eastern Upper Peninsula (EUP), in addition, ten privately owned parcels enrolled in the Land Owner Incentive Program (LIP) were surveyed. A total of 134 point counts were conducted in the SLP, eight in the NLP, and 33 in the UP (Figure 1).

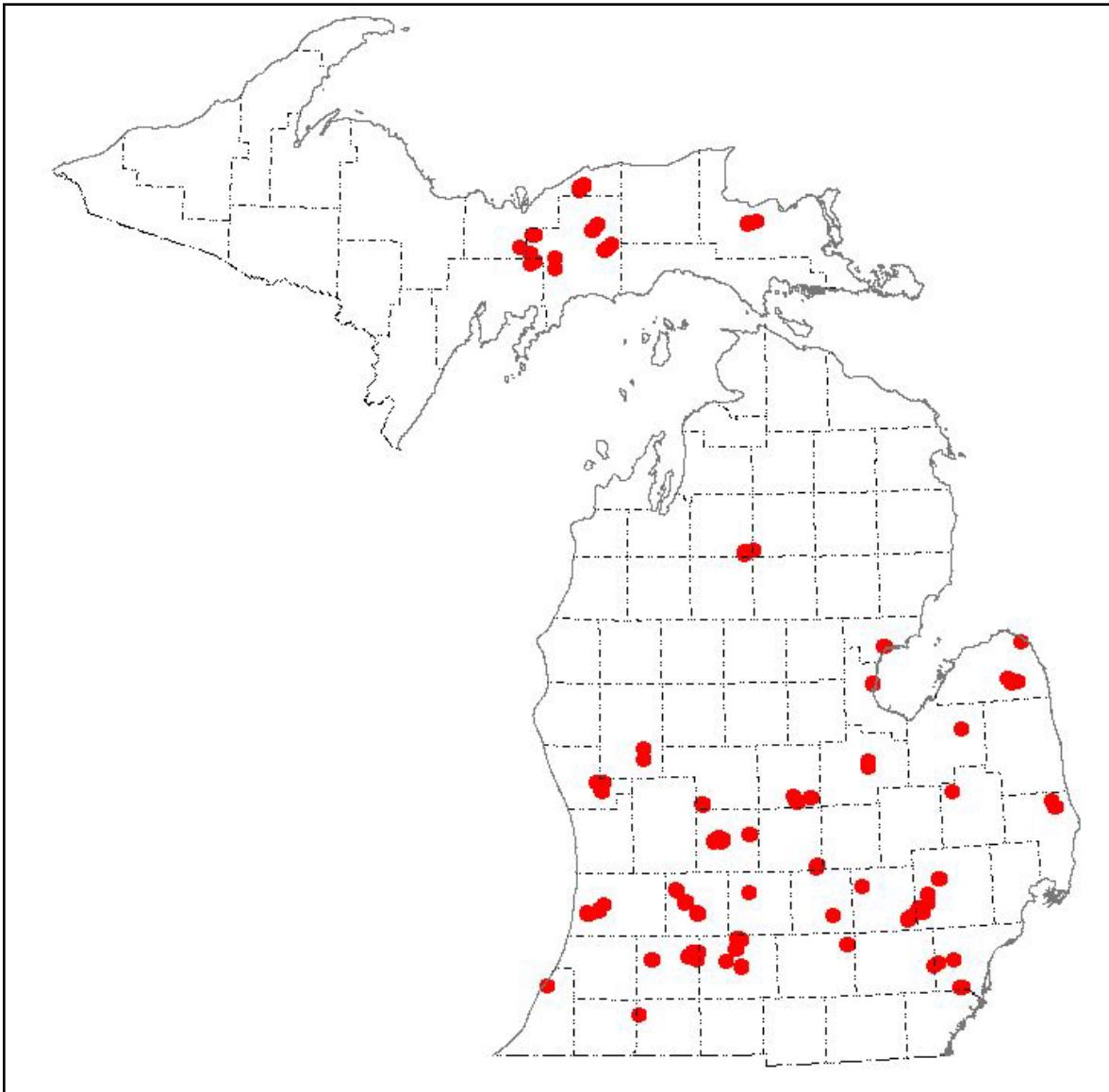


Figure 1. Locations of 175 grassland bird surveys conducted in Michigan during the 2005 breeding season.

In addition, 40 incidental observations of Species of Greatest Conservation Need were noted in 18 counties, and 29 Breeding Bird Atlas Blocks, including 21 sites in the SLP, 11 in the NLP, and eight in the UP (Figure 2). Although standard point counts were not conducted at these locations, habitat data

was collected when possible. Pending permission on privately owned lands, standard point counts may be conducted at these sites during the 2006 or 2007 field season. A list of counties where incidental species observations were made can be found in Appendix 2.

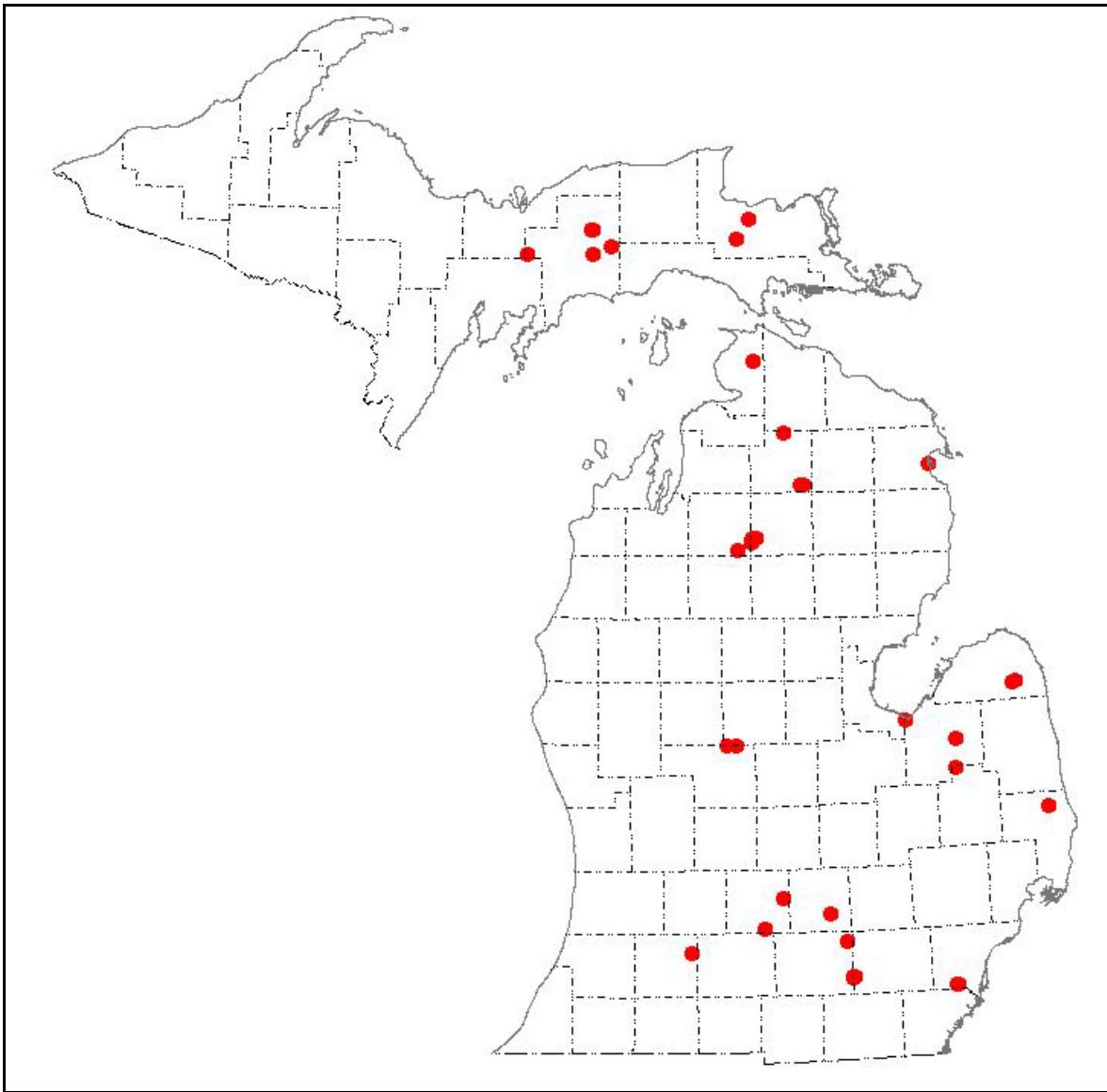


Figure 2. Locations of 40 incidental species observations collected during the 2005 breeding season.

State listed grassland bird species, including Dickcissel, Henslow's Sparrow, Grasshopper Sparrow, Northern Harrier, and Sharp-tailed Grouse were detected at 50 sites, including 39 survey sites and 11

incidental observation sites during the 2005 breeding season (Figure 3). Site names and counties for each state listed species detection are listed in Appendix 3.

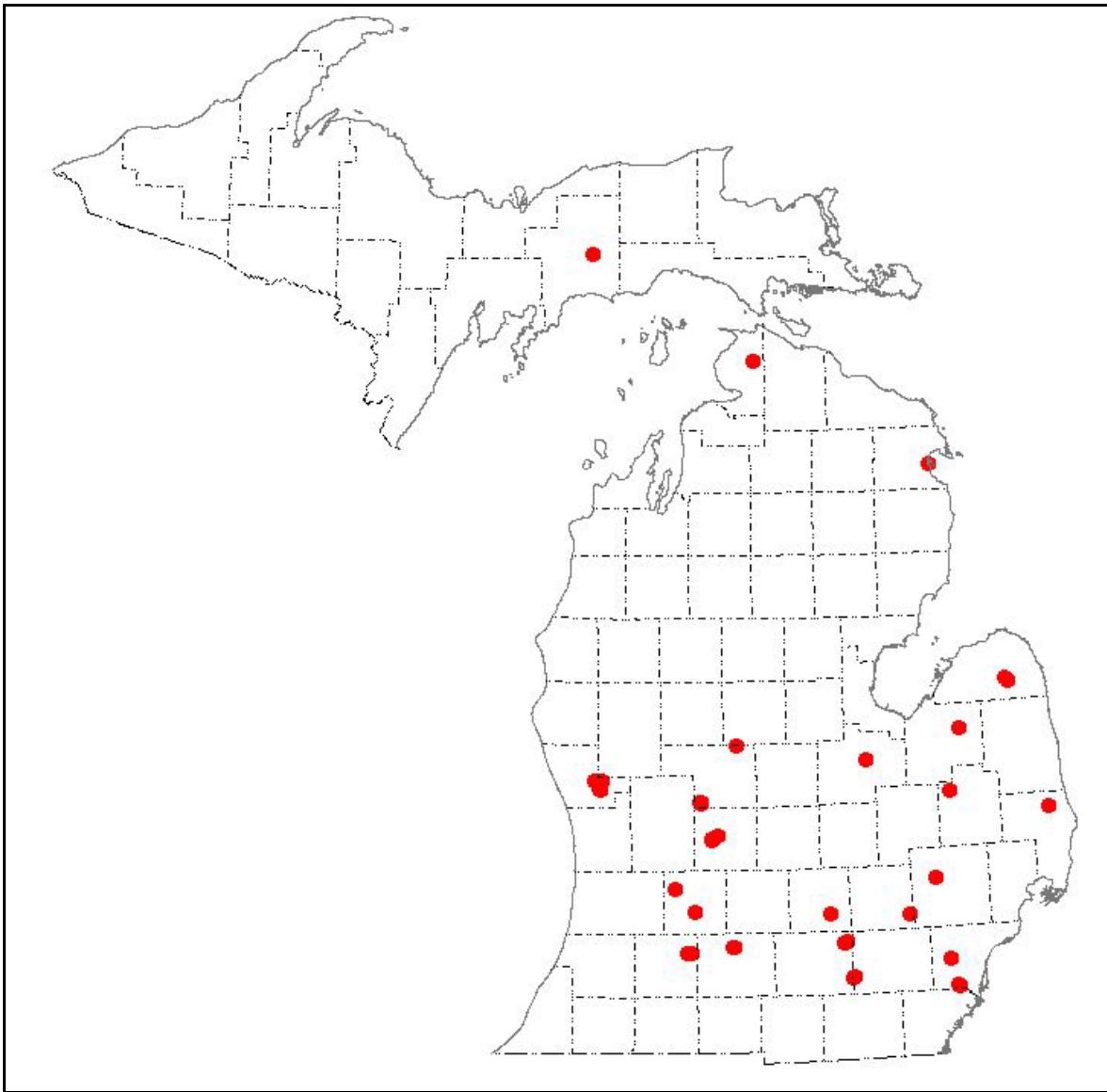


Figure 3. Sites containing state threatened, endangered, or species of special concern collected during the 2005 breeding season.

Among these 50 sites, 26 Dickcissels (state Species of Concern) were detected at six sites in three counties and four Breeding Bird Atlas Blocks (Figure 4), 20 Henslow's Sparrows (state threatened) were detected at 18 sites in 11 counties and 13 Breeding Bird

Atlas Blocks (Figure 5), 51 Grasshopper Sparrows (state species of concern) were detected at 26 sites in 11 counties and 15 Breeding Bird Atlas Blocks (Figure 6), four Northern Harriers (state species of concern) were detected at four sites in three counties

and three Breeding Bird Atlas Blocks (Figure 7), and one site contained Sharp-tailed Grouse (state species of concern) (Figure 8). We plan to re-survey these 50 sites in 2006 to determine future species occupancy and to shed light on the value of these grasslands to breeding, state listed grassland bird species. A complete list of species associated with all 175 survey sites and 40 incidental observations of Species of Greatest Conservation can be found in Appendix 4.

Several targeted grassland associated species were not detected during 2005 surveys, including LeConte's Sparrow (*Ammodramus leconteii*), species of greatest conservation need: American Bittern (*Botaurus lentiginosus*) (state species of concern) and Western Meadowlark (*Sturnella neglecta*) (state species of concern), and two state endangered birds: Loggerhead Shrike (*Lanius ludovicianus*) and Short-eared Owl (*Asio flammeus*).

At this time, small sample sizes preclude analysis of habitat associations among detected grassland bird species. It is anticipated that adequate sample sizes will be procured by the third year of this study and a full analysis will be conducted. Although grassland bird habitat association studies specific to Michigan are scarce, a literature review was recently compiled (Lamp et al. 2004). This review, along with other literature describing grassland bird species in the Midwest help shed light on

life history traits and conservation of several focal species (Bajema et al. 2001, Eastman 2000, Herkert et al. 1996, Johnson et al. 2004, Sample and Mossman 1997, etc.).

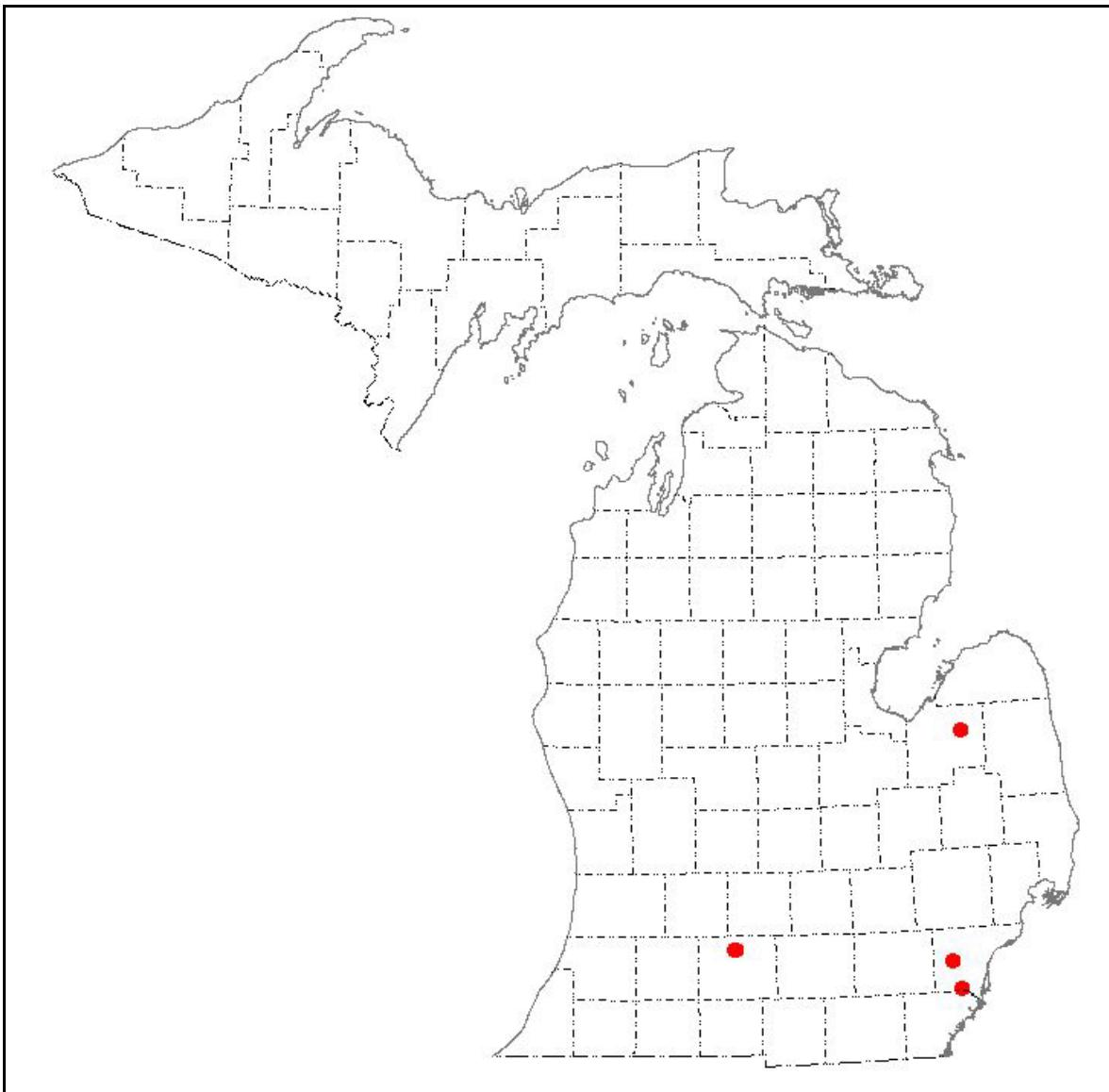


Figure 4. Dickcissel detections.

For example, Dickcissel reportedly breed in tall grass prairie, old fields, and planted prairies containing intermediate to high vegetation density, a medium to thick litter layer, and the presence of scattered perches.

Dickcissel abundance and nest site fidelity are irregular and this species is generally single-brooded. Threats include early mowing, pesticide use, cowbird parasitism, etc.

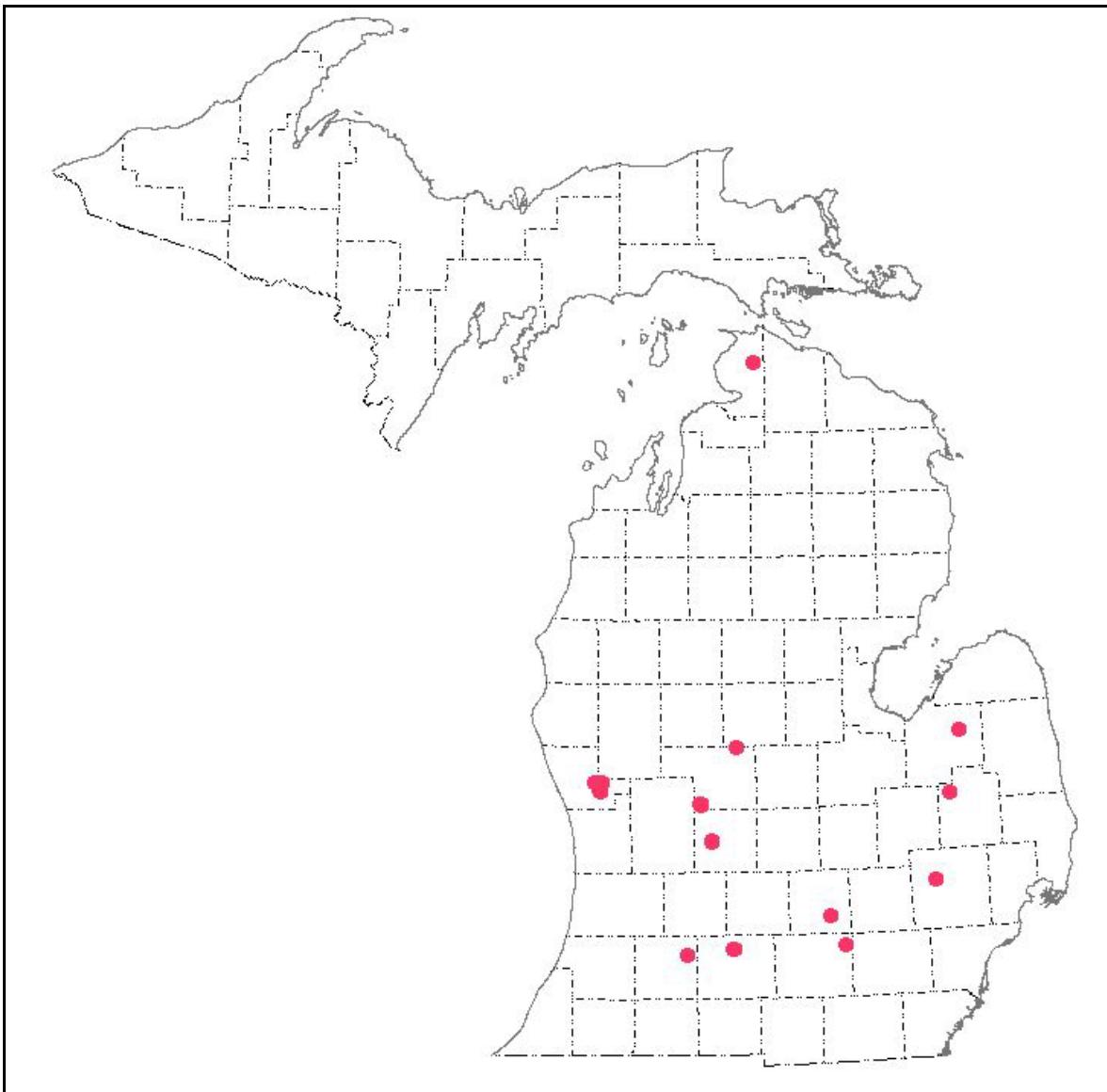


Figure 5. Grasshopper Sparrow detections.

Grasshopper Sparrow breeding habitat may include old fields, hay fields, native prairie, recent burns, and capped landfills with patchy, bare ground. Vegetation density is low to intermediate with none to thin litter layer. Nest site fidelity is irregular and abundance fluctuates annually. First-time breeders have one brood, while experienced

breeders are often double-brooded. Threats on breeding grounds include fragmentation, early season mowing, fire suppression, succession, and conversion to row crops. Management recommendations include mowing after July, periodic burning every two years, or a combination of both.

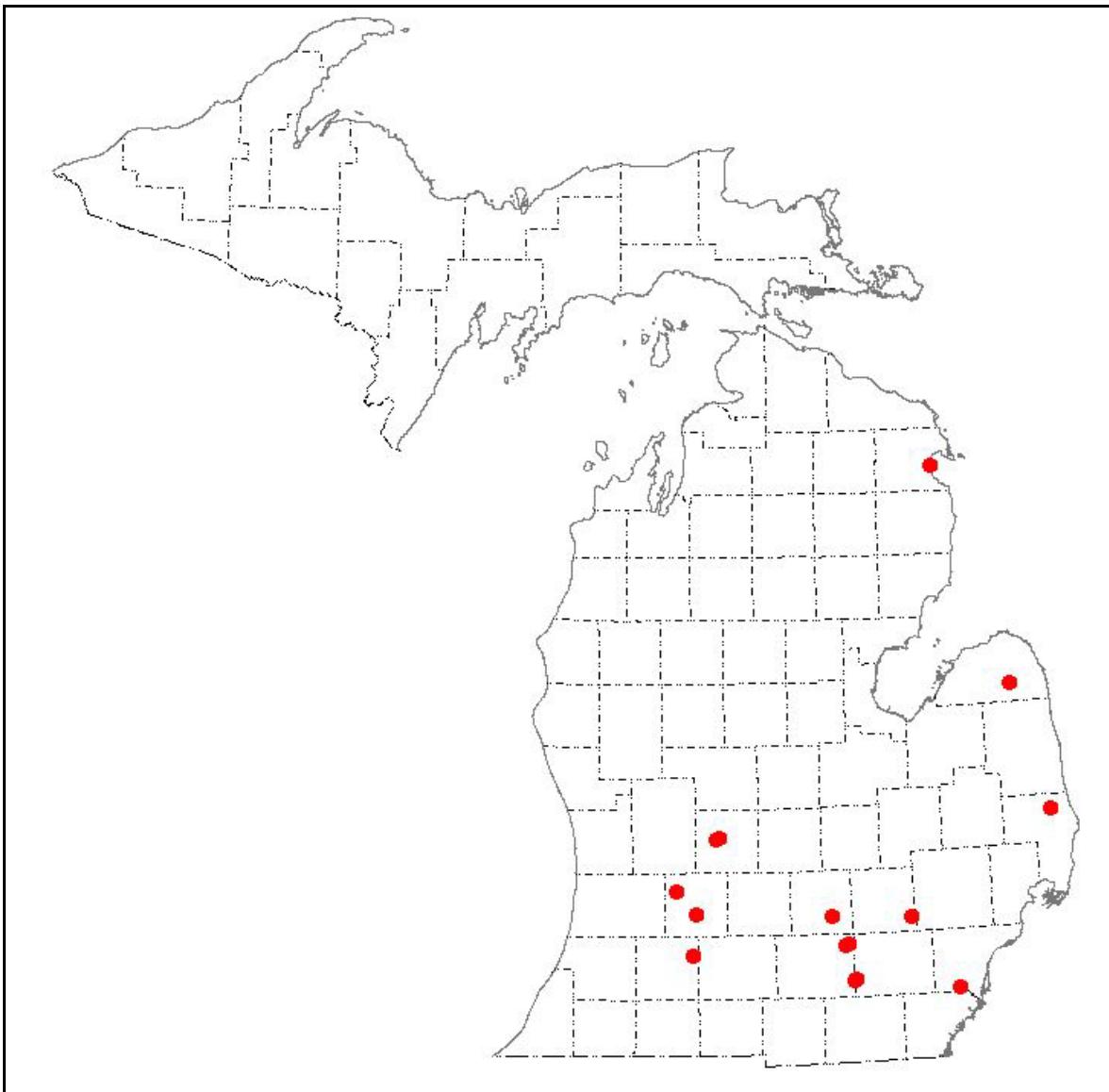


Figure 6. Henslow's Sparrow detections.

Although many gaps in knowledge exist regarding Henslow's Sparrow, reported nesting habitat includes wet meadows and rank grasses, hayfields, old fields, wildlife plantings of smooth brome (*Bromus inermis*) and switch grass (*Panicum virgatum*), and tall grass prairie. Most reports generally agree this species prefers intermediate to high vegetation density, a

moderate to thick litter layer, and little to no woody vegetation. Nest site fidelity is irregular, abundance fluctuates annually, and this species is generally double-brooded. Threats on breeding grounds include early mowing, fire suppression, succession, fragmentation, and conversion to row crops. Management includes mowing after July and infrequent burning.

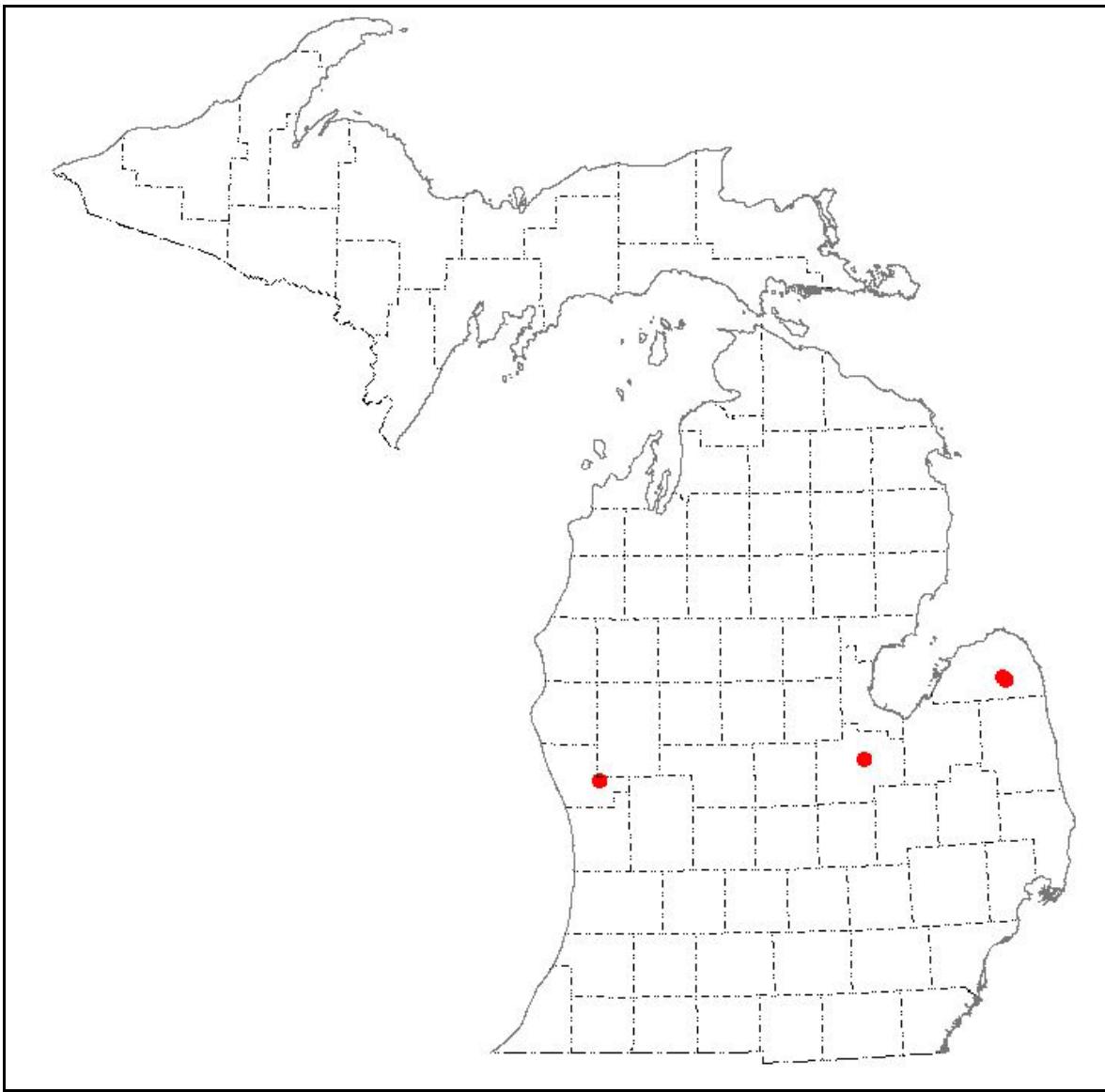


Figure 7. Northern Harrier detections.

Northern Harrier nesting habitat includes wet meadows and rank grasses, marshes, and prairies. Vegetation density is reportedly intermediate to high, with a medium litter layer depth. This species is single-brooded, and although abundance fluctuates annually due to cycles in prey abundance, nest site

fidelity is regular. Threats on breeding grounds include wetland loss, fire suppression, succession, and pesticides. Management recommendations for harriers include mowing after July, periodic burning, wetland conservation, and the placement of perching posts in open habitat.



Figure 8. Sharp-tailed Grouse detections.

Sharp-tailed Grouse prefer undisturbed, large grasslands with an intermediate vegetation density, a medium litter layer depth, and little woody vegetation. Threats on breeding grounds include habitat loss and fragmentation, fire suppression, and succession. Periodic burning is preferred over mowing when managing for this declining species.

The location shown in Figure 8 is a Sharp-tailed Grouse lek site at Seney NWR (pers. comm. Greg Corace). An individual was also observed by a MNFI Zoologist in the refuge within about a half mile of the lek site.

ACKNOWLEDGEMENTS

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Moran, who acted as a guide at the Muskegon Waste Water System, Greg Corace, who assisted with site selection in the Upper Peninsula, Keith Saylor and several contributors to the Northern Michigan Birding website, which provided several site leads and species observations, David Cuthrell, who secured funding for this project, and to the MNFI staff, who contributed many site leads and species observations.

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APPENDIX 1

Grassland Bird and Vegetation Survey Form

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Point Month Day Year County

BIRD DATA

Species	Abun	Sex	Distance	Time
		M,F	m	0-3=1
		U,P		3-5=2
				5-10=3

	1	2		1	2	
	3	4		3	4	

Time	Wind	Temp	Sky	Observer
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VEGETATION DATA

Standing Dead Veg. ____ % ____ Height

		DENSITY	%COVER		%GRASS /FORB	LITTER
max /average		cm	L	D		mm
120						
240						
360						

%SHRUB			
0 1 3 5 8 +			
S	C	Dom. Veg. 1	
		Dom. Veg. 2	
		Dom. Veg. 3	

APPENDIX 2

Counties Containing Incidental Species Observations

Counties Containing Incidental Species Observations

County

Chippewa
Crawford
Eaton
Emmet
Gratiot
Huron
Ingham
Jackson
Kalamazoo
Kalkaska
Lapeer
Montcalm
Otsego
Schoolcraft
St. Clair
Tuscola
Washtenaw
Wayne

APPENDIX 3

Michigan State Listed Species Detections

Michigan State Listed Species Detections

Dickcissel Locations

Site Name	Ownership	County
Deford State Game Area	State	Tuscola
Dunn*	Private	Calhoun
Encourse Road	Private	Wayne
Kidder*	Private	Calhoun
Oakwoods Metropark	County	Wayne

Grasshopper Sparrow Locations

Site Name/Type	Ownership	County
Allegan State Game Area	State	Allegan
Dansville State Game Area	State	Ingham
Deford State Game Area	State	Tuscola
Dunn*	Private	Calhoun
Edmore State Game Area	State	Montcalm
Ely Road (Pellston area)	Private	Emmet
Fort Custer State Recreation Area	State	Kalamazoo
Greenville Municipal Airport & vicinity	Public	Montcalm
Indian Springs Metropark	County	Oakland
Ionia State Recreation Area	State	Ionia
Kidder*	Private	Calhoun
Lapeer State Game Area	State	Lapeer
Muskegon Waste Water System	County	Muskegon
Waterloo State Recreation Area	State	Jackson

Henslow's Sparrow Locations

Site Name/Type	Ownership	County
Barry State Game Area	State	Barry
Dansville State Game Area	State	Ingham
Fort Custer Military Reserve	Federal	Kalamazoo
Ionia State Recreation Area	State	Ionia
Island Lake State Recreation Area	State	Livingston
Oakwoods Metropark	County	Wayne
Pierce Cedar Creek*	Private	Barry
Port Huron State Game Area	State	St. Clair
Sharonville State Game Area	State	Washtenaw
Verona State Game Area	State	Huron
Waterloo State Recreation Area	State	Jackson
Squaw Bay	Private	Alpena

Northern Harrier Locations

Site Name/Type	Ownership	County
Muskegon Waste Water System	County	Muskegon
Shiawassee National Wildlife Refuge	Federal	Saginaw
Verona State Game Area	State	Huron

Sharp-tailed Grouse

Site Name/Type	Ownership	County
Seney National Wildlife Refuge	Federal	Schoolcraft

* = site enrolled in Landowner Incentive Program

APPENDIX 4

Grassland Bird Survey Results

Grassland Bird Survey Results																	
Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County	
ALFL	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo	
AMCR	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston	
AMCR	2	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston	
AMCR	3	#	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson	
AMCR	2	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun	
AMCR	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun	
AMCR	3	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun	
AMCR	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun	
AMCR	2	#	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham	
AMCR	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland	
AMCR	2	#	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland	
AMCR	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland	
AMCR	2	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry	
AMCR	2	O	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry	
AMCR	2	O	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan	
AMCR	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan	
AMCR	2	O	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan	
AMCR	4	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan	
AMCR	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun	
AMCR	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun	
AMCR	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun	
AMCR	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo	
AMCR	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo	
AMCR	2	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo	
AMCR	2	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo	
AMCR	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo	
AMCR	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo	
AMCR	1	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo	
AMCR	1	#	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston	
AMCR	2	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry	
AMCR	2	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry	
AMCR	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun	
AMCR	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland	
AMCR	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland	
AMCR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland	
AMCR	1	#	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton	
AMCR	1	#	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia	
AMCR	1	#	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia	
AMCR	1	#	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia	
AMCR	1	#	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia	
AMCR	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia	
AMCR	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph	
AMCR	1	#	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia	
AMCR	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia	
AMCR	2	#	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia	
AMCR	1	#	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia	
AMCR	3	#	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St. Clair	
AMCR	2	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot	
AMCR	2	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm	
AMCR	2	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm	
AMCR	1	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm	
AMCR	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer	
AMCR	2	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon	
AMCR	1	#	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw	
AMCR	1	#	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo	

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
AMCR	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
AMCR	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
AMCR	2	#	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
AMCR	1	#	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
AMCR	1	#	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
AMCR	4	#	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
AMCR	1	#	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
AMCR	23	#	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
AMCR	1	#	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
AMCR	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
AMCR	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
AMCR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
AMCR	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
AMCR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
AMCR	1	#	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
AMCR	4	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
AMGO	2	O	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
AMGO	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
AMGO	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
AMGO	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
AMGO	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
AMGO	1	O	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
AMGO	3	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
AMGO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
AMGO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
AMGO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMGO	3	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMGO	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMGO	2	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
AMGO	2	P	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
AMGO	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
AMGO	7	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
AMGO	4	#	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
AMGO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
AMGO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
AMGO	2	#	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
AMGO	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
AMGO	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
AMGO	3	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
AMGO	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
AMGO	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
AMGO	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
AMGO	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
AMGO	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
AMGO	6	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
AMGO	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
AMGO	2	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
AMGO	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
AMGO	3	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
AMGO	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
AMGO	4	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
AMGO	4	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
AMGO	2	P	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
AMGO	2	O	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
AMGO	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
AMGO	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
AMGO	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
AMGO	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
AMGO	1	O	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
AMGO	2	P	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
AMGO	1	O	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
AMGO	3	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
AMGO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
AMGO	2	#	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
AMGO	1	#	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
AMGO	1	O	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
AMGO	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
AMGO	2	P	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
AMGO	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
AMGO	2	#	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
AMGO	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
AMGO	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
AMGO	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
AMGO	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
AMGO	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
AMGO	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
AMGO	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
AMGO	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
AMGO	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
AMGO	2	O	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
AMGO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
AMGO	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
AMGO	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
AMGO	3	P	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
AMGO	1	#	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
AMGO	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
AMGO	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
AMGO	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
AMGO	2	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
AMGO	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
AMGO	2	O	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
AMGO	1	#	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
AMGO	1	#	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
AMGO	1	#	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
AMGO	1	#	Point count	06/25/2005	2005	Julie Gibson	0.17	8	N	16	E	3	Yes	20	Grant	St.Clair
AMGO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
AMGO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
AMGO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
AMGO	3	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
AMGO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
AMGO	3	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
AMGO	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
AMGO	2	P	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
AMGO	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
AMGO	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
AMGO	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
AMGO	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
AMGO	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
AMGO	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
AMGO	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
AMGO	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
AMGO	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
AMGO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
AMGO	2	P	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
AMGO	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
AMGO	2	P	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
AMGO	1	P	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
AMGO	2	O	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
AMGO	3	O	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
AMGO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
AMGO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
AMGO	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
AMGO	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
AMGO	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
AMGO	1	#	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
AMGO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
AMGO	4	P	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
AMGO	1	O	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
AMGO	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
AMGO	1	#	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
AMGO	1	O	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
AMGO	2	O	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
AMGO	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
AMGO	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
AMGO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
AMGO	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
AMGO	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
AMGO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
AMGO	1	X	Casual	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
AMGO	1	O	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	28	Superior	Chippewa
AMGO	2	O	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
AMGO	2	P	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
AMGO	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
AMGO	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
AMKE	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
AMKE	1	O	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		7	Beaver Creek	Crawford
AMKE	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
AMRO	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
AMRO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
AMRO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
AMRO	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
AMRO	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
AMRO	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
AMRO	3	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
AMRO	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
AMRO	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
AMRO	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
AMRO	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMRO	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMRO	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMRO	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMRO	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
AMRO	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
AMRO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
AMRO	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
AMRO	2	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
AMRO	4	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
AMRO	4	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2				

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
AMRO	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
AMRO	2	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
AMRO	2	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
AMRO	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
AMRO	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
AMRO	2	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
AMRO	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
AMRO	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
AMRO	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
AMRO	4	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
AMRO	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
AMRO	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
AMRO	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
AMRO	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
AMRO	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
AMRO	3	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
AMRO	2	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
AMRO	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
AMRO	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
AMRO	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
AMRO	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
AMRO	1	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
AMRO	1	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
AMRO	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
AMRO	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	2	Fredonia	Calhoun
AMRO	3	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
AMRO	3	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
AMRO	1	X	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
AMRO	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
AMRO	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
AMRO	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
AMRO	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
AMRO	1	#	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
AMRO	2	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
AMRO	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
AMRO	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
AMRO	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
AMRO	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
AMRO	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
AMRO	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
AMRO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
AMRO	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
AMRO	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
AMRO	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
AMRO	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
AMRO	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
AMRO	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
AMRO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
AMRO	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
AMRO	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
AMRO	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
AMRO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
AMRO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
AMRO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
AMRO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
AMRO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
AMRO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
AMRO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
AMRO	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
AMRO	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
AMRO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
AMRO	1	#	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
AMRO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
AMRO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
AMRO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
AMRO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
AMRO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
AMRO	1	#	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
AMRO	1	#	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
AMRO	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
AMRO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
AMRO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
AMRO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
AMRO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
AMRO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
AMRO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
AMRO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
AMRO	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
AMRO	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
AMRO	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
AMRO	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
AMRO	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
AMRO	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
AMRO	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
BAEA	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
BANS	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
BAOR	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
BAOR	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
BAOR	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
BAOR	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BAOR	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
BAOR	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
BAOR	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
BAOR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
BAOR	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
BAOR	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
BAOR	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
BAOR	1	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
BAOR	1	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
BAOR	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
BAOR	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
BAOR	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
BAOR	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
BAOR	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
BAOR	2	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
BAOR	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
BAOR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
BAOR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
BAOR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
BARS	6	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convvis	Calhoun
BARS	8	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convvis	Calhoun
BARS	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
BARS	4	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
BARS	4	O	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
BARS	3	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BARS	4	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BARS	3	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
BARS	2	O	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
BARS	2	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
BARS	2	O	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BARS	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BARS	2	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
BARS	2	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
BASW	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
BCCH	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
BCCH	2	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convvis	Calhoun
BCCH	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convvis	Calhoun
BCCH	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
BCCH	3	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
BCCH	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
BCCH	4	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
BCCH	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
BCCH	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BCCH	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BCCH	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
BCCH	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
BCCH	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
BCCH	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
BCCH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
BCCH	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
BCCH	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
BCCH	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
BCCH	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
BCCH	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
BGGN	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
BHCO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
BHCO	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
BHCO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convvis	Calhoun
BHCO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convvis	Calhoun
BHCO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convvis	Calhoun
BHCO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convvis	Calhoun
BHCO	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convvis	Calhoun
BHCO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convvis	Calhoun
BHCO	2	P	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
BHCO	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
BHCO	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
BHCO	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
BHCO	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
BHCO	3	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
BHCO	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
BHCO	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
BHCO	3	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
BHCO	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
BHCO	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BHCO	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
BHCO	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BHCO	2	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
BHCO	2	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
BHCO	2	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
BHCO	2	P	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
BHCO	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
BHCO	2	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
BHCO	2	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
BHCO	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
BHCO	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
BHCO	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
BHCO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BHCO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BHCO	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
BHCO	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
BHCO	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
BHCO	2	P	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
BHCO	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
BHCO	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
BHCO	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
BHCO	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
BHCO	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
BHCO	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
BHCO	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
BHCO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
BHCO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
BHCO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
BHCO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
BHCO	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
BHCO	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
BHCO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
BHCO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
BHCO	1	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
BHCO	2	P	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
BHCO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
BHCO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
BHCO	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
BHCO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
BHCO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
BHCO	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BHCO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
BHCO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
BLJA	2	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
BLJA	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
BLJA	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
BLJA	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
BLJA	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
BLJA	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
BLJA	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
BLJA	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
BLJA	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
BLJA	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
BLJA	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
BLJA	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
BLJA	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
BLJA	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
BLJA	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
BLJA	2	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
BLJA	2	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
BLJA	2	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
BLJA	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
BLJA	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
BLJA	1	#	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
BLJA	1	O	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
BLJA	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BLJA	3	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BLJA	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BLJA	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
BLJA	5	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
BLJA	5	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
BLJA	3	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
BLJA	2	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
BLJA	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
BLJA	1	#	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
BLJA	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
BLJA	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
BLJA	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
BLJA	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
BLJA	1	#	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
BLJA	1	#	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
BLJA	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
BLJA	1	#	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
BLJA	2	#	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
BLJA	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
BLJA	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
BLJA	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
BLJA	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
BLJA	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
BLJA	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
BLJA	1	#	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
BLJA	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
BLJA	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
BLJA	1	#	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
BLJA	1	#	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
BLJA	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
BLJA	2	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
BLJA	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
BOBO	1	X	Casual	06/00/2005	2005	Mike Sanders	0.17	1	N	4	W	3	Yes	3	Brookfield	Eaton
BOBO	10	X	Casual	05/22/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	26	Waterloo	Jackson
BOBO	2	#	Casual	05/22/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	26	Waterloo	Jackson
BOBO	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
BOBO	1	X	Casual	06/00/2005	2005	Mike Sanders	0.17	3	N	3	W	4	Yes	4	Windsor	Eaton
BOBO	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
BOBO	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
BOBO	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
BOBO	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
BOBO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BOBO	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BOBO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BOBO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BOBO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
BOBO	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BOBO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BOBO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
BOBO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
BOBO	2	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
BOBO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
BOBO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BOBO	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BOBO	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BOBO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BOBO	2	P	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BOBO	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BOBO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
BOBO	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
BOBO	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
BOBO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
BOBO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
BOBO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
BOBO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
BOBO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
BOBO	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
BOBO	2	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
BOBO	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
BOBO	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
BOBO	1	X	Casual	08/15/2005	2005	Julie Gibson	0.17	12	N	6	W	1	Yes	1	Home	Montcalm
BOBO	2	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	15	N	14	E	2	Yes	5	Paris	Huron
BOBO	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
BOBO	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
BOBO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
BOBO	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
BOBO	2	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
BOBO	2	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
BOBO	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
BOBO	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
BOBO	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
BOBO	2	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
BOBO	2	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	2	P	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	2	P	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	5	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	2	P	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	2	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	2	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	3	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
BOBO	3	X	Casual	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
BOBO	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
BOBO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
BOBO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
BOBO	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
BOBO	2	P	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
BOBO	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
BOBO	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	29	Garfield	Kalkaska
BOBO	2	P	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	29	Garfield	Kalkaska
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
BOBO	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
BOBO	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
BRBL	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
BRBL	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
BRBL	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
BRBL	12	P	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
BRTH	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
BRTH	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
BRTH	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
BRTH	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
BRTH	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
BRTH	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BRTH	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
BRTH	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BRTH	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
BRTH	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
BRTH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
BRTH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
BRTH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
BRTH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
BRTH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
BRTH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
BRTH	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
BRTH	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
BRTH	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	44	N	17	W	4	No	36	Thompson	School
BRTH	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
BRTH	1	X	Casual	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
BRTH	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	28	Superior	Chippewa
BRTH	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
BRTH	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
BRTH	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
BWWA	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
BWWA	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
BWWA	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
BWWA	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
BWWA	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
BWWA	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
BWWA	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
BWWA	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
BWWA	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BWWA	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
BWWA	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
BWWA	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
BWWA	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
BWWA	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
BWWA	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
CAGO	2	O	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
CAGO	14	#	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
CAGO	20	O	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
CAGO	2	O	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
CAGO	9	O	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
CAGO	2	O	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
CAGO	5	#	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
CAGO	6	#	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
CAGO	4	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
CAGO	12	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
CAGO	6	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
CAGO	10	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
CAGO	15	#	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
CAGO	3	#	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
CAGO	2	#	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
CCSP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
CCSP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
CCSP	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
CCSP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
CCSP	1	X	Casual	06/23/2005	2005	Kerry Fitzpatrick	0.17	29	N	1	W	3		21	Charlton	Otsego
CCSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	44	N	17	W	4	No	36	Thompson	School
CCSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	44	N	17	W	4	No	36	Thompson	School
CCSP	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
CCSP	1	X	Casual	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
CEDW	2	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
CEDW	2	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
CEDW	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
CEDW	2	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun

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CEDW	2	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convvis	Calhoun
CEDW	2	P	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convvis	Calhoun
CEDW	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
CEDW	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
CEDW	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
CEDW	2	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
CEDW	2	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
CEDW	4	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
CEDW	2	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
CEDW	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
CEDW	3	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
CEDW	2	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
CEDW	2	NB	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
CEDW	3	P	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
CEDW	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
CEDW	3	P	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
CEDW	6	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
CEDW	2	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
CEDW	3	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
CEDW	2	#	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
CEDW	2	P	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
CEDW	2	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
CEDW	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
CEDW	1	O	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
CEDW	1	#	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
CEDW	4	O	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
CEDW	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
CEDW	2	#	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
CEDW	2	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	8	Germfask	School
CEDW	5	#	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
CEDW	3	#	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
CHSP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
CHSP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
CHSP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
CHSP	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convvis	Calhoun
CHSP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
CHSP	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
CHSP	2	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
CHSP	2	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
CHSP	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
CHSP	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
CHSP	3	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
CHSP	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
CHSP	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
CHSP	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
CHSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
CHSP	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
CHSP	2	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
CHSP	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
CHSP	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
CHSP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
CHSP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
CHSP	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
CHSP	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
CHSP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
CHSP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
CHSP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
CHSP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
CHSP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
CHSP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
CHSP	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
CHSP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
CHSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
CHSP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
CHSP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
CHSP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
CHSP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
CHSP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
CHSP	2	X	Point count	06/21/2005	2005	Julie Gibson	0.17	44	N	17	W	4	No	36	Thompson	School
CHSP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
CHSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
CHSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
CHSP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
CHSP	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	28	Superior	Chippewa
CHSP	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
CHSP	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
CHSP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
CHSP	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
CHSP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
CHSP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
CHSW	1	O	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
COGR	1	O	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
COGR	2	O	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
COGR	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
COGR	2	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
COGR	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
COGR	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
COGR	2	O	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
COGR	3	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
COGR	6	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
COGR	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
COGR	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
COGR	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
COGR	1	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
COGR	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
COGR	1	#	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
COGR	3	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
COGR	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
COGR	2	O	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COGR	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
COGR	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
CONI	1	O	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
CORA	4	O	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
CORA	2	#	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	28	Superior	Chippewa
CORA	3	#	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
CORA	2	#	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
COYE	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
COYE	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
COYE	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
COYE	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
COYE	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
COYE	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
COYE	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
COYE	3	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
COYE	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
COYE	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
COYE	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
COYE	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
COYE	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
COYE	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
COYE	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
COYE	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
COYE	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
COYE	2	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
COYE	2	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
COYE	4	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
COYE	4	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
COYE	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
COYE	3	P	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
COYE	3	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
COYE	3	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
COYE	2	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
COYE	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
COYE	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
COYE	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
COYE	1	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
COYE	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
COYE	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
COYE	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
COYE	3	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
COYE	4	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
COYE	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
COYE	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
COYE	4	P	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
COYE	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
COYE	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
COYE	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
COYE	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
COYE	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
COYE	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
COYE	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
COYE	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
COYE	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
COYE	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
COYE	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
COYE	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
COYE	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	8	N	16	E	3	Yes	20	Grant	St.Clair
COYE	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	8	N	16	E	3	Yes	20	Grant	St.Clair
COYE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
COYE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
COYE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
COYE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
COYE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
COYE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
COYE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
COYE	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
COYE	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
COYE	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
COYE	2	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
COYE	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
COYE	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
COYE	2	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
COYE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
COYE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
COYE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
COYE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
COYE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
COYE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
COYE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	3	Yes	32	Sigel	Huron
COYE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
COYE	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
COYE	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
COYE	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
COYE	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
COYE	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
COYE	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
COYE	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
COYE	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
DCCO	1	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
DEJU	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
DEJU	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	8	Germfask	School
DEJU	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	44	N	17	W	4	No	36	Thompson	School
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	44	N	17	W	4	No	36	Thompson	School
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
DEJU	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
DEJU	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
DEJU	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
DEJU	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
DEJU	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
DEJU	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
DICK	4	X	Point count	07/06/2005	2005	Brian Nelson	0.17									

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
DICK	4	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
DICK	5	P	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
DICK	4	P	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
DICK	2	X	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
DICK	2	P	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
DICK	2	P	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
DOWO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
DOWO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
DOWO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
DOWO	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
DOWO	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
DOWO	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
DOWO	2	P	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
DOWO	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
DOWO	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
DOWO	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
DOWO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
DOWO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
DUCK	2	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
EABL	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
EABL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
EABL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
EABL	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
EABL	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
EABL	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
EABL	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
EABL	2	NY	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
EABL	1	NY	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
EABL	1	NY	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
EABL	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
EABL	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
EABL	2	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
EABL	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
EABL	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EABL	4	#	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
EABL	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
EABL	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
EABL	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
EABL	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EABL	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
EABL	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
EABL	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
EABL	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
EABL	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
EABL	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
EABL	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	29	Garfield	Kalkaska
EABL	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
EABL	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
EABL	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
EABL	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
EABL	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
EABL	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
EABL	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	44	N	17	W	4	No	36	Thompson	School
EABL	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
EABL	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
EABL	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
EABL	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
EABL	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
EABL	1	#	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
EABL	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
EABL	2	P	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
EABL	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
EABL	2	P	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
EABL	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
EABL	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
EABL	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
EAKI	2	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
EAKI	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
EAKI	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
EAKI	2	P	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
EAKI	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
EAKI	1	#	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
EAKI	2	O	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
EAKI	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
EAKI	2	P	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
EAKI	2	P	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
EAKI	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	7	E	1	Yes	13	Ypsilanti	Wayne
EAKI	1	#	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
EAKI	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EAKI	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EAKI	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
EAKI	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
EAKI	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
EAKI	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
EAKI	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
EAKI	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
EAKI	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
EAKI	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAKI	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
EAKI	1	P	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
EAKI	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
EAKI	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		6	Beaver Creek	Crawford
EAKI	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
EAKI	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
EAKI	2	P	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
EAKI	1	#	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
EAME	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
EAME	2	P	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
EAME	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
EAME	1	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
EAME	2	P	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
EAME	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
EAME	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
EAME	1	#	Casual	08/10/2005	2005	Julie Gibson	0.17	3	S	3	E	3	Yes	31	Sharon	Jackson
EAME	1	X	Casual	08/10/2005	2005	Julie Gibson	0.17	3	S	3	E	3	Yes	31	Sharon	Jackson
EAME	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
EAME	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	7	E	1	Yes	13	Ypsilanti	Wayne
EAME	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	8	E	2	Yes	8	Van Buren	Wayne
EAME	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	8	E	2	Yes	8	Van Buren	Wayne
EAME	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
EAME	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
EAME	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
EAME	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
EAME	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
EAME	1	X	Casual	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	27	Huron	Wayne
EAME	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
EAME	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
EAME	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
EAME	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
EAME	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
EAME	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
EAME	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
EAME	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
EAME	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
EAME	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
EAME	3	P	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
EAME	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
EAME	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
EAME	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
EAME	1	P	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EAME	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EAME	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EAME	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EAME	2	P	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EAME	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
EAME	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
EAME	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
EAME	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
EAME	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
EAME	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
EAME	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
EAME	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
EAME	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
EAME	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
EAME	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
EAME	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
EAME	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
EAME	2	P	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
EAME	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EAME	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EAME	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EAME	2	P	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EAME	1	X	Casual	06/09/2005	2005	Julie Gibson	0.17	10	N	10	E	2	Yes	9	Rich	Lapeer
EAME	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
EAME	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	2	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
EAME	2	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
EAME	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
EAME	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
EAME	2	#	Casual	08/15/2005	2005	Julie Gibson	0.17	12	N	6	W	1	Yes	1	Home	Montcalm
EAME	1	X	Casual	08/15/2005	2005	Julie Gibson	0.17	12	N	6	W	2	Yes	5	Home	Montcalm
EAME	1	X	Casual	06/09/2005	2005	Julie Gibson	0.17	12	N	10	E	2	Yes	17	Wells	Tuscola
EAME	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
EAME	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
EAME	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
EAME	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
EAME	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
EAME	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
EAME	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
EAME	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
EAME	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
EAME	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
EAME	2	P	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	29	Garfield	Kalkaska
EAME	2	P	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
EAME	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	1	No	10	Germfask	School
EAME	1	X	Casual	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
EAPH	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
EATO	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
EATO	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
EATO	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
EATO	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
EATO	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
EATO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
EATO	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
EATO	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
EATO	2	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
EATO	4	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
EATO	5	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
EATO	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
EATO	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
EATO	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
EATO	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
EATO	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
EATO	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
EATO	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
EATO	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
EATO	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
EATO	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
EATO	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
EATO	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
EATO	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EATO	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EATO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
EATO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
EATO	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
EAWP	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
EAWP	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
EAWP	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
EAWP	2	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
EAWP	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
EAWP	1	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
EAWP	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
EUST	6	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
EUST	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
EUST	14		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
EUST	37	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
EUST	3	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
EUST	50	FL	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
EUST	2	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
EUST	1	O	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
EUST	2	O	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
EUST	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
EUST	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
EUST	1	O	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
EUST	1	O	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
EUST	1	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
EUST	1	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
EUST	5	#	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
EUST	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
FISP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
FISP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
FISP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
FISP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
FISP	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
FISP	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
FISP	3	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
FISP	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
FISP	4	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
FISP	3	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
FISP	4	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
FISP	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
FISP	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
FISP	1	X	Casual	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
FISP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
FISP	1	X	Casual	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
FISP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
FISP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
FISP	3	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
FISP	2	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
FISP	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
FISP	4	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
FISP	5	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
FISP	2	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
FISP	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
FISP	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
FISP	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
FISP	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
FISP	4	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
FISP	3		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
FISP	6	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
FISP	5	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
FISP	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
FISP	2	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
FISP	4	FY	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
FISP	3		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
FISP	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
FISP	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
FISP	2	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
FISP	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
FISP	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
FISP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
FISP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
FISP	4	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
FISP	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
FISP	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
FISP	1	X	Casual	08/10/2005	2005	Julie Gibson	0.17	3	S	3	E	3	Yes	31	Sharon	Jackson
FISP	5	FL	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
FISP	3	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
FISP	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
FISP	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
FISP	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
FISP	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
FISP	2	P	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
FISP	2	P	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
FISP	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
FISP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
FISP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
FISP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
FISP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
FISP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
FISP	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
FISP	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
FISP	2	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
FISP	2	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
FISP	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
FISP	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
FISP	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
FISP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
FISP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
FISP	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
FISP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
FISP	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
FISP	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
FISP	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
FISP	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	8	N	16	E	3	Yes	20	Grant	St.Clair
FISP	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
FISP	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
FISP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
FISP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
FISP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
FISP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
FISP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
FISP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
FISP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
FISP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
FISP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
FISP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
FISP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
FISP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
FISP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
FISP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
FISP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
FISP	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
FISP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		7	Beaver Creek	Crawford
FISP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
FISP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
FISP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
FISP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
FISP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
FISP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
FISP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
FISP	2	X	Casual	06/23/2005	2005	Julie Gibson	0.17	26	N	4	W	3		32	Grayling	Crawford
FISP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	26	N	4	W	3		32	Grayling	Crawford
FISP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	26	N	4	W	3		32	Grayling	Crawford
FISP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
FISP	1	X	Casual	06/19/2005	2005	Julie Gibson	0.17	45	N	5	W	3	No	33	Trout Lake	Chippewa
FLYC	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
FLYC	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
FLYC	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
FLYC	2	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
FLYC	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
FLYC	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
FLYC	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
FLYC	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
FLYC	2	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
FLYC	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
FLYC	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
FLYC	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
FLYC	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
FLYC	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
FLYC	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
FLYC	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
FLYC	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
FLYC	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
FLYC	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
FLYC	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
GBHE	1	O	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
GBHE	1	O	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
GBHE	3	O	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
GBHE	2	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
GBHE	2	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
GBHE	1	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
GBHE	1	O	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
GBHE	1	O	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
GBHE	1	O	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
GCFL	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
GCFL	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
GCFL	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
GCFL	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
GCFL	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
GRCA	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
GRCA	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
GRCA	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
GRCA	3	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
GRCA	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
GRCA	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
GRCA	3	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
GRCA	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
GRCA	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
GRCA	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
GRCA	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
GRCA	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
GRCA	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
GRCA	2	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
GRCA	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
GRCA	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
GRCA	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
GRCA	3	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
GRCA	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
GRCA	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
GRCA	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
GRCA	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
GRCA	1	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
GRCA	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
GRCA	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
GRCA	3	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
GRCA	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
GRCA	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
GRCA	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
GRSP	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
GRSP	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
GRSP	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
GRSP	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
GRSP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
GRSP	2	P	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
GRSP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
GRSP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
GRSP	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
GRSP	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
GRSP	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
GRSP	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
GRSP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
GRSP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
GRSP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
GRSP	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
GRSP	2	P	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
GRSP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
GRSP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
GRSP	2	P	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
GRSP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
GRSP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
GRSP	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
GRSP	2	P	Casual	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
GRSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
GRSP	1	X	Casual	08/15/2005	2005	Brad Yocom	0.17	12	N	6	W	1	Yes	1	Home	Montcalm

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
GRSP	2	P	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
GRSP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
HAWO	2	P	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
HESP	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
HESP	1	X	Casual	07/02/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	26	Waterloo	Jackson
HESP	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
HESP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
HESP	1	X	Casual	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
HESP	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
HESP	1	X	Casual	06/08/2005	2005	Julie Gibson	0.17	2	S	9	W	1	Yes	11	Charleston	Kalamazoo
HESP	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
HESP	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
HESP	2	X	Casual	08/10/2005	2005	Julie Gibson	0.17	3	S	3	E	3	Yes	31	Sharon	Jackson
HESP	1	X	Casual	08/10/2005	2005	Julie Gibson	0.17	3	S	3	E	3	Yes	31	Sharon	Jackson
HESP	1	X	Casual	08/10/2005	2005	Julie Gibson	0.17	3	S	3	E	3	Yes	31	Sharon	Jackson
HESP	2	X	Casual	08/10/2005	2005	Julie Gibson	0.17	3	S	3	E	3	Yes	31	Sharon	Jackson
HESP	2	P	Casual	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
HESP	1	X	Casual	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
HESP	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
HESP	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
HESP	1	X	Casual	06/21/2005	2005	Mike Petrucha	0.17	8	N	16	E	3	Yes	3	Grant	St. Clair
HESP	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
HETH	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
HETH	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
HETH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
HETH	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
HETH	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
HETH	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
HETH	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
HETH	2	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
HETH	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
HETH	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
HETH	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
HETH	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
HOFI	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
HOFI	1	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
HOLA	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
HOLA	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
HOLA	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
HOLA	1	#	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
HOLA	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
HOLA	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
HOLA	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
HOLA	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
HOLA	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
HOLA	2	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
HOLA	2	P	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
HOLA	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
HOLA	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
HOLA	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
HOSP	4	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
HOSP	3	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
HOSP	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
HOSP	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
HOWR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
HOWR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
HOWR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
HOWR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
HOWR	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
HOWR	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
HOWR	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
HOWR	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
HOWR	1	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
HOWR	2	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
INBU	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
INBU	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
INBU	3	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
INBU	5	P	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
INBU	4	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
INBU	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
INBU	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
INBU	4	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
INBU	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
INBU	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
INBU	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
INBU	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
INBU	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
INBU	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
INBU	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
INBU	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
INBU	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
INBU	2	C	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
INBU	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
INBU	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
INBU	5	P	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
INBU	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
INBU	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
INBU	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
INBU	3	P	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
INBU	1	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
INBU	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
INBU	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
INBU	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
INBU	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
INBU	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
INBU	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
INBU	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
INBU	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
INBU	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
INBU	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
INBU	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
KILL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
KILL	1	#	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
KILL	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
KILL	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
KILL	1	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
KILL	1	O	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
KILL	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	7	E	1	Yes	13	Ypsilanti	Wayne
KILL	2	#	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
KILL	1	#	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
KILL	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
KILL	1	#	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
KILL	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
KILL	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
KILL	1	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
KILL	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
KILL	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
KILL	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
KILL	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
KILL	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
KILL	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
KILL	1	#	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
KILL	1	#	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
KILL	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
KILL	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
KILL	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	28	Superior	Chippewa
KILL	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
MALL	2	O	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
MALL	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
MALL	2	P	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
MALL	1	O	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
MALL	2	O	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
MALL	3	O	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
MALL	3	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
MALL	1	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
MALL	1	#	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
MALL	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
MAWR	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
MODO	3	O	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
MODO	2	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
MODO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
MODO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
MODO	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
MODO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
MODO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
MODO	2	O	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
MODO	3	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
MODO	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
MODO	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
MODO	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
MODO	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
MODO	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
MODO	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
MODO	2	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
MODO	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
MODO	3	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
MODO	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
MODO	3	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
MODO	2	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
MODO	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
MODO	5	#	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
MODO	2	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
MODO	1	#	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
MODO	1	#	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
MODO	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
MODO	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
MODO	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
MODO	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
MODO	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
MODO	1	O	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
MODO	2	P	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
MODO	2	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
MODO	2	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
MODO	4	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
MODO	2	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
MODO	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
MODO	1	O	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
MODO	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
MODO	1	O	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
MODO	1	O	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
MODO	1	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
MODO	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
MODO	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
MODO	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
MODO	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
MODO	2	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
MODO	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
MODO	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
MODO	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
MODO	3	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
MODO	1	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
MODO	1	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
MODO	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
MODO	1	#	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
MODO	1	#	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
MODO	1	#	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
MODO	1	#	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
MODO	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
MODO	1	O	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
MODO	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
MUSW	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
NAWA	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
NAWA	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
NAWA	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
NAWA	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
NAWA	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
NAWA	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
NAWA	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
NAWA	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
NAWA	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
NOBO	3	P	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Freドonia	Calhoun
NOBO	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Freドonia	Calhoun
NOBO	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
NOBO	1	#	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
NOBO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
NOCA	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
NOCA	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
NOCA	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
NOCA	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
NOCA	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
NOCA	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
NOCA	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
NOCA	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
NOCA	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
NOCA	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
NOCA	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
NOCA	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
NOCA	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
NOCA	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
NOCA	1	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
NOCA	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
NOCA	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
NOCA	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
NOCA	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
NOCA	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
NOCA	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
NOCA	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
NOCA	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
NOCA	2	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
NOCA	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
NOCA	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
NOCA	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
NOCA	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
NOCA	1	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
NOCA	1	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
NOCA	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
NOCA	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
NOCA	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
NOCA	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
NOCA	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
NOCA	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
NOCA	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
NOCA	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
NOCA	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
NOCA	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
NOCA	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
NOCA	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
NOCA	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
NOCA	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
NOCA	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
NOCA	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
NOCA	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
NOFL	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
NOFL	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
NOFL	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
NOFL	2	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
NOFL	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
NOFL	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
NOFL	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
NOFL	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
NOFL	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
NOFL	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	8	N	16	E	3	Yes	20	Grant	St.Clair
NOFL	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
NOFL	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
NOFL	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
NOHA	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	7	Moorland	Muskegon
NOHA	1	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
NOHA	1	#	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
NOHA	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
NUTH	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
NUTH	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
OSPR	2	P	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
OVEN	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
OVEN	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
OVEN	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
PIWO	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
PIWO	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
RBGR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
RBGR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
RBGR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
RBGR	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
RBGR	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
RBGR	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
RBGR	2	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
RBGR	1	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
RBGR	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
RBGR	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
RBGR	1	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
RBGR	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
RBGR	2	P	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
RBGU	5	O	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
RBGU	18	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
RBGU	31	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
RBGU	3	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
RBGU	5	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
RBGU	6	O	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
RBGU	7	O	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
RBWO	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
RBWO	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
RBWO	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
RBWO	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
RBWO	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
RBWO	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
RBWO	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
RBWO	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
RBWO	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
RBWO	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
RBWO	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
RBWO	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
RBWO	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
RBWO	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
RBWO	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
REVI	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
REVI	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
REVI	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
REVI	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
RPHE	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
RPHE	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
RPHE	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
RPHE	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
RPHE	1	#	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
RPHE	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
RPHE	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RPHE	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
RPHE	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
RPHE	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
RPHE	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RPHE	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RPHE	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
RPHE	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
RPHE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
RPHE	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
RPHE	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
RPHE	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
RPHE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
RPHE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
RPHE	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
RPHE	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
RPHE	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
RPHE	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
RTHA	1	UN	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
RTHA	2	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
RTHA	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
RTHA	1	#	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
RTHA	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
RTHA	1	#	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
RTHA	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
RTHA	2	P	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
RTHA	1	#	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
RTHA	1	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
RTHU	1	O	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
RTHU	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
RTHU	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
RTHU	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
RTHU	1	O	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
RWBL	2	P	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
RWBL	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
RWBL	2	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
RWBL	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
RWBL	1	P	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
RWBL	1	P	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
RWBL	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
RWBL	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
RWBL	2	P	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
RWBL	3	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
RWBL	3	O	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
RWBL	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
RWBL	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
RWBL	5	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
RWBL	5	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
RWBL	7	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
RWBL	6	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
RWBL	5	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
RWBL	4	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
RWBL	4	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
RWBL	8	P	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
RWBL	3	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
RWBL	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
RWBL	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
RWBL	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
RWBL	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
RWBL	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
RWBL	2	P	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
RWBL	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
RWBL	3	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
RWBL	4	P	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
RWBL	3	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
RWBL	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
RWBL	4	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
RWBL	4	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
RWBL	13	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
RWBL	17	P	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
RWBL	14	P	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
RWBL	6	P	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
RWBL	4	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
RWBL	10	FL	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
RWBL	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
RWBL	7	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
RWBL	7	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
RWBL	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
RWBL	6	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
RWBL	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
RWBL	9	P	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
RWBL	11	FL	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
RWBL	2	P	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RWBL	2	P	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RWBL	2	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RWBL	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RWBL	2	P	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RWBL	2	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RWBL	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
RWBL	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
RWBL	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
RWBL	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
RWBL	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
RWBL	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
RWBL	4	O	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
RWBL	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
RWBL	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
RWBL	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
RWBL	6	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
RWBL	8	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
RWBL	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
RWBL	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
RWBL	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
RWBL	7	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
RWBL	4	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
RWBL	1	X	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
RWBL	2	X	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
RWBL	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
RWBL	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
RWBL	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
RWBL	2	O	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
RWBL	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
RWBL	1	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
RWBL	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
RWBL	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
RWBL	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
RWBL	1	O	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
RWBL	2	P	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
RWBL	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
RWBL	3	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
RWBL	1	#	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
RWBL	3	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
RWBL	1	#	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
RWBL	2	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
RWBL	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
RWBL	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RWBL	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RWBL	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RWBL	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RWBL	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RWBL	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RWBL	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
RWBL	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
RWBL	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
RWBL	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
RWBL	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
RWBL	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
RWBL	9	P	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
RWBL	8	O	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
RWBL	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
RWBL	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
RWBL	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
RWBL	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
RWBL	2	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
RWBL	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
RWBL	2	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
RWBL	2	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
RWBL	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
RWBL	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
RWBL	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
RWBL	2	P	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
RWBL	1	O	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
RWBL	2	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
RWBL	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
RWBL	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
RWBL	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
RWBL	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
RWBL	3	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
RWBL	4	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
RWBL	3	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
RWBL	2	P	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
RWBL	2	P	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
RWBL	2	P	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
RWBL	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SACR	1	O	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
SACR	2	#	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
SACR	3	#	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
SACR	2	P	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	14	Convis	Calhoun
SACR	2	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
SACR	2	#	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SACR	2	O	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SACR	3	O	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SACR	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
SACR	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
SACR	2	O	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
SACR	2	O	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
SACR	2	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
SACR	1	O	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
SACR	2	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
SACR	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
SACR	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SACR	1	O	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
SACR	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
SACR	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
SACR	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
SACR	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
SACR	2	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
SACR	1	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
SACR	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SACR	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SACR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
SACR	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
SACR	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	8	Germfask	School
SACR	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	8	Germfask	School
SACR	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
SACR	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
SACR	2	P	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
SACR	2	P	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
SACR	2	P	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
SACR	2	P	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
SACR	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SACR	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SACR	1	#	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
SACR	2	P	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
SACR	2	O	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
SACR	2	P	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
SACR	2	O	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
SACR	2	P	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
SACR	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
SAVS	2	P	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
SAVS	2	P	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
SAVS	2	P	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
SAVS	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SAVS	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SAVS	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
SAVS	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
SAVS	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
SAVS	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
SAVS	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
SAVS	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	7	E	1	Yes	13	Ypsilanti	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	7	E	1	Yes	13	Ypsilanti	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	7	E	1	Yes	13	Ypsilanti	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	8	E	2	Yes	8	Van Buren	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	8	E	2	Yes	8	Van Buren	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	3	S	8	E	2	Yes	8	Van Buren	Wayne
SAVS	2	P	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
SAVS	1	X	Point count	07/02/2005	2005	Julie Gibson	0.17	3	S	9	E	2	Yes	8	Romulus	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
SAVS	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
SAVS	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
SAVS	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
SAVS	2	P	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
SAVS	1	#	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
SAVS	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
SAVS	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
SAVS	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
SAVS	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
SAVS	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	2	Yes	8	Washington	Gratiot
SAVS	1	#	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
SAVS	2	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
SAVS	2	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	31	Moorland	Muskegon
SAVS	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
SAVS	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
SAVS	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
SAVS	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
SAVS	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
SAVS	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
SAVS	2	P	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
SAVS	2	P	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
SAVS	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
SAVS	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
SAVS	1	#	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SAVS	1	#	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SAVS	3	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SAVS	1	#	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
SAVS	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
SAVS	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
SAVS	2	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
SAVS	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
SAVS	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SAVS	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SAVS	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SAVS	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SAVS	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SAVS	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
SAVS	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SAVS	2	P	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SAVS	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SAVS	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SAVS	1	#	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SAVS	2	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SAVS	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
SAVS	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
SAVS	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
SAVS	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
SAVS	2	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
SAVS	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
SAVS	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
SAVS	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
SAVS	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
SAVS	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
SAVS	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	8	Germfask	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	8	Germfask	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	14	W	1	Yes	13	Doyle	School
SAVS	1	X	Casual	07/08/2005	2005	Julie Gibson	0.17	44	N	14	W	3	No	29	Doyle	School
SAVS	1	#	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SAVS	2	P	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SAVS	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SAVS	1	X	Casual	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SAVS	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
SAVS	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
SAVS	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
SAVS	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	28	Superior	Chippewa
SAVS	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
SAVS	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
SAVS	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
SAVS	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
SAVS	2	P	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
SAVS	1	#	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
SAVS	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
SAVS	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
SAVS	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
SAVS	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	46	N	14	W	4	No	27	Seney	School
SAVS	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
SAVS	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
SAVS	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
SAVS	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
SAVS	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
SAVS	1	#	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
SAVS	2	P	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
SCTA	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
SCTA	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
SCTA	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
SEWR	4	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
SEWR	3	P	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
SEWR	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SEWR	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SEWR	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
SEWR	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
SEWR	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	4	Yes	27	Washington	Gratiot
SEWR	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	23	Marathon	Lapeer
SEWR	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	15	N	14	E	2	Yes	5	Paris	Huron
SEWR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SEWR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SEWR	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SEWR	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SEWR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
SEWR	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
SEWR	1	X	Casual	07/08/2005	2005	Julie Gibson	0.17	44	N	14	W	3	No	28	Doyle	School
SEWR	1	X	Casual	07/08/2005	2005	Julie Gibson	0.17	44	N	14	W	3	No	29	Doyle	School
SEWR	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
SEWR	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
SEWR	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
SORA	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
SOSP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	11	Green Oak	Livingston
SOSP	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
SOSP	1	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
SOSP	4	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
SOSP	2	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
SOSP	4	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	2	Yes	9	Convis	Calhoun
SOSP	4	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
SOSP	4	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
SOSP	5	O	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SOSP	3	FL	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SOSP	5	X	Point count	07/06/2005	2005	Brian Nelson	0.17	1	S	6	W	3	Yes	33	Convis	Calhoun
SOSP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
SOSP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
SOSP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
SOSP	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
SOSP	2	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
SOSP	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
SOSP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
SOSP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
SOSP	3	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
SOSP	2	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
SOSP	5	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
SOSP	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
SOSP	6	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
SOSP	2	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
SOSP	4	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
SOSP	3	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
SOSP	3	X	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
SOSP	6	P	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
SOSP	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
SOSP	5	FL	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
SOSP	2	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
SOSP	3	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
SOSP	3	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
SOSP	2		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
SOSP	2	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
SOSP	5	FY	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
SOSP	3	P	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
SOSP	5	P	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
SOSP	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
SOSP	2	P	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
SOSP	2	P	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
SOSP	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
SOSP	2	P	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
SOSP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
SOSP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
SOSP	5	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
SOSP	4	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
SOSP	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	3	Yankee Springs	Barry
SOSP	8	P	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
SOSP	2	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
SOSP	5	X	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
SOSP	2	P	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
SOSP	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
SOSP	1	#	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	35	Springfield	Oakland
SOSP	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
SOSP	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
SOSP	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
SOSP	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SOSP	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	2	P	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	26	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
SOSP	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	35	Bath	Clinton
SOSP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
SOSP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
SOSP	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
SOSP	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
SOSP	2	P	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
SOSP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
SOSP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
SOSP	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
SOSP	1	X	Point count	06/26/2005	2005	Julie Gibson	0.17	15	N	13	E	1	Yes	1	Bingham	Huron
SOSP	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SOSP	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SOSP	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
SOSP	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
SOSP	2	P	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	22	Verona	Huron
SOSP	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SOSP	2	X	Point count	06/26/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
SOSP	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
SOSP	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
SOSP	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
SOSP	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
SOSP	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
SPAR	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	1	Yes	1	Brooks	Newaygo
STGR	1	#	Casual	07/08/2005	2005	Julie Gibson	0.17	44	N	14	W	3	No	29	Doyle	School
STGR	1	C	Casual	06/22/2005	2005	Grag Corace	0.17	45	N	14	W	2	No	8	Doyle	School
SWAL	2	#	Point count	06/07/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
SWAL	2	O	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
SWAL	2	O	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
SWAL	1	O	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
SWAL	1	O	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
SWAL	2	O	Point count	05/27/2005	2005	Julie Gibson	0.17	3	N	5	W	2	Yes	17	Chester	Ingham
SWAL	5	O	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
SWAL	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SWAL	1	O	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
SWAL	1	O	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
SWAL	2	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
SWAL	2	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
SWAL	3	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
SWAL	4	O	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
SWAL	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
SWAL	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
SWAL	3	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
SWAL	3	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
SWAL	2	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
SWAL	2	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
SWAL	1	O	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SWAL	5	O	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SWAL	1	O	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SWAL	1	O	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	23	Verona	Huron
SWAL	4	O	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
SWSP	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
SWSP	2	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
SWSP	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
SWSP	3	P	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
SWSP	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
SWSP	1	X	Casual	06/13/2005	2005	Julie Gibson	0.17	14	N	7	E	3	Yes	30	Wisner	Tuscola
SWSP	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SWSP	1	#	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
SWTH	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
TRES	1	O	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
TRES	1	O	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
TRES	1	O	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
TRES	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
TRES	4	NY	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
TRES	4	NY	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo
TRES	5	P	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
TRES	5	O	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
TRES	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	34	Huron	Wayne
TRES	1	O	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
TRES	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
TRES	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
TRES	2	P	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
TRES	2	O	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
TRES	2	O	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
TRES	2	O	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
TRES	3	O	Point count	06/25/2005	2005	Julie Gibson	0.17	8	N	16	E	3	Yes	20	Grant	St.Clair
TRES	1	#	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
TRES	1	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	11	Egelston	Muskegon
TRES	5	O	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
TRES	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
TRES	1	O	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
TRES	1	#	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
TRES	4	O	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
TRES	2	#	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
TRES	3	O	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	8	Doyle	School
TRES	7	O	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
TRES	2	P	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
TRES	6	O	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
TUTI	2	X	Point count	05/18/2005	2005	Julie Gibson	0.17	1	S	2	E	4	Yes	27	Waterloo	Jackson
TUTI	2	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
TUTI	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
TUTI	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
TUTI	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
TUTI	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	4	Yes	24	Charleston	Kalamazoo
TUTI	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
TUTI	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
TUVU	1	O	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	2	Green Oak	Livingston
TUVU	1	O	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
TUVU	1	O	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
UPSA	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
UPSA	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
UPSA	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
UPSA	2	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
UPSA	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
UPSA	1	#	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
UPSA	1	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	3	Yes	30	Moorland	Muskegon
UPSA	2	P	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	15	W	1	Yes	14	Egelston	Muskegon
UPSA	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		6	Beaver Creek	Crawford
UPSA	2	P	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
UPSA	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
UPSA	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
UPSA	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	26	N	4	W	3		32	Grayling	Crawford
UPSA	2	P	Casual	06/23/2005	2005	Kerry Fitzpatrick	0.17	29	N	1	W	3		20	Charlton	Otsego
UPSA	1	X	Casual	06/23/2005	2005	Kerry Fitzpatrick	0.17	32	N	2	W	2	Yes	8	Corwith	Otsego
UPSA	1	#	Casual	06/23/2005	2005	Kerry Fitzpatrick	0.17	32	N	2	W	2	Yes	8	Corwith	Otsego

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
UPSA	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
UPSA	1	#	Casual	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
UPSA	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
UPSA	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
UPSA	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
UPSA	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
UPSA	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
UPSA	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
UPSA	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
UPSA	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
VEER	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
VEER	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
VESP	1	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	20	Clyde	Allegan
VESP	2	P	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm
VESP	1	X	Casual	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
VESP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
VESP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
VESP	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
VESP	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	13	N	10	E	4	Yes	22	Ellington	Tuscola
VESP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		6	Beaver Creek	Crawford
VESP	2	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		6	Beaver Creek	Crawford
VESP	3	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		6	Beaver Creek	Crawford
VESP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		7	Beaver Creek	Crawford
VESP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		7	Beaver Creek	Crawford
VESP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	2		7	Beaver Creek	Crawford
VESP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
VESP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	28	Garfield	Kalkaska
VESP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
VESP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
VESP	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
VESP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	26	N	4	W	3		32	Grayling	Crawford
VESP	1	X	Casual	06/23/2005	2005	Julie Gibson	0.17	26	N	4	W	3		32	Grayling	Crawford
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
VESP	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	19	W	1	No	10	Munising	Alger
VESP	1	X	Casual	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	20	Superior	Chippewa
VESP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
VESP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	4	No	27	Superior	Chippewa
VESP	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
VESP	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
VESP	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
VESP	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
VESP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
VESP	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	31	Superior	Chippewa
VESP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	46	N	14	W	3	No	33	Seney	School
VESP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger
VESP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	11	Burt	Alger

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
VESP	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
VESP	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
VESP	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
VESP	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
VESP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
VESP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	2	No	16	Burt	Alger
VESP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
VESP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
WAVI	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
WAVI	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
WBNU	2	P	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
WBNU	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
WBNU	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
WBNU	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
WBNU	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
WBNU	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
WBNU	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
WBNU	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	2	Yes	16	Charleston	Kalamazoo
WBNU	2	P	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
WBNU	1	#	Point count	07/06/2005	2005	Brian Nelson	0.17	3	S	6	W	1	Yes	2	Fredonia	Calhoun
WHIP	1	X	Point count	07/08/2005	2005	Julie Gibson	0.17	48	N	15	W	1	Yes	15	Burt	Alger
WIFL	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
WIFL	2	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
WIFL	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
WIFL	1	X	Point count	06/28/2005	2005	Brian Nelson	0.17	2	N	15	W	3	Yes	19	Clyde	Allegan
WIFL	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
WIFL	1	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
WIFL	1	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
WIFL	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
WIFL	2	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
WITU	1	X	Point count	05/28/2005	2005	Julie Gibson	0.17	2	N	1	E	4	Yes	35	Ingham	Ingham
WITU	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
WITU	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
WITU	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
WITU	1	X	Point count	06/09/2005	2005	Julie Gibson	0.17	9	N	9	E	4	Yes	24	Marathon	Lapeer
WITU	2	X	Point count	06/01/2005	2005	Julie Gibson	0.17	10	N	14	W	2	Yes	8	Moorland	Muskegon
WITU	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
WITU	1	X	Point count	05/31/2005	2005	Julie Gibson	0.17	12	N	12	W	4		35	Brooks	Newaygo
WITU	7	#	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
WIWR	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	4	No	22	Hiawatha	School
WOTH	1	X	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	10	Convis	Calhoun
WTSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	43	N	17	W	4	No	23	Thompson	School
WTSP	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	45	N	14	W	2	No	7	Doyle	School
WTSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
WTSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
WTSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
WTSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
WTSP	1	X	Point count	06/21/2005	2005	Julie Gibson	0.17	45	N	18	W	3	Yes	21	Hiawatha	School
WTSP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
WTSP	1	X	Point count	07/07/2005	2005	Julie Gibson	0.17	48	N	15	W	3	No	28	Burt	Alger
YBCU	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	19	Baltimore	Barry
YBCU	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
YBCU	2	P	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
YBCU	2	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
YBCU	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
YBCU	1		Point count	06/20/2005	2005	John Brenneman	0.17	2	S	8	W	2	Yes	6	Battle Creek	Kalamazoo
YBCU	1	#	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	1	Yes	3	Charleston	Kalamazoo

Species*	Count	EvidenceCode**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	Block	Priority	Section	Township Name	County
YBCU	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
YBCU	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
YBCU	1	#	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
YBCU	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	5	Fabius	St. Joseph
YBCU	1	#	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
YTVI	1	X	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
YTVI	1	X	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	14	W	2	Yes	6	Valley	Allegan
YTVI	1	#	Point count	06/29/2005	2005	Brian Nelson	0.17	2	N	15	W	1	Yes	14	Clyde	Allegan
YTVI	1	X	Point count	06/20/2005	2005	John Brenneman	0.17	2	S	9	W	1	Yes	10	Charleston	Kalamazoo
YTVI	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
YTVI	1	X	Point count	07/07/2005	2005	Brian Nelson	0.17	6	S	12	W	2	Yes	6	Fabius	St. Joseph
YTVI	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
YWAR	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	10	Green Oak	Livingston
YWAR	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	1	N	6	E	1	Yes	15	Green Oak	Livingston
YWAR	1	#	Point count	07/04/2005	2005	Brian Nelson	0.17	1	S	6	W	1	Yes	15	Convis	Calhoun
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	1	Yes	13	Milford	Oakland
YWAR	1	X	Point count	05/16/2005	2005	Julie Gibson	0.17	2	N	7	E	3	Yes	29	Milford	Oakland
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	2	N	7	E	4	Yes	34	Milford	Oakland
YWAR	1	#	Point count	07/01/2005	2005	Brian Nelson	0.17	2	N	8	W	3	Yes	30	Baltimore	Barry
YWAR	1	#	Point count	07/05/2005	2005	Brian Nelson	0.17	2	S	7	W	4	Yes	26	Emmett	Calhoun
YWAR	1	X	Point count	06/23/2005	2005	Brian Nelson	0.17	2	S	9	W	2	Yes	9	Charleston	Kalamazoo
YWAR	2	X	Point count	06/24/2005	2005	Brian Nelson	0.17	2	S	11	W	3	Yes	19	Kalamazoo	Kalamazoo
YWAR	1	X	Point count	06/07/2005	2005	Julie Gibson	0.17	3	N	3	E	1	Yes	2	Handy	Livingston
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	3	N	7	E	4	Yes	36	Highland	Oakland
YWAR	1	X	Point count	06/30/2005	2005	Brian Nelson	0.17	3	N	9	W	3	Yes	32	Rutland	Barry
YWAR	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
YWAR	1	X	Point count	05/29/2005	2005	Julie Gibson	0.17	3	N	10	W	1	Yes	11	Yankee Springs	Barry
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
YWAR	1	X	Point count	05/21/2005	2005	Julie Gibson	0.17	4	N	8	E	4	Yes	34	Springfield	Oakland
YWAR	1	X	Point count	06/27/2005	2005	Julie Gibson	0.17	4	S	9	E	4	Yes	35	Huron	Wayne
YWAR	1	X	Point count	05/23/2005	2005	Julie Gibson	0.17	4	S	18	W	2	Yes	8	Benton	Berrien
YWAR	1	X	Point count	05/17/2005	2005	Julie Gibson	0.17	5	N	1	W	4	Yes	23	Bath	Clinton
YWAR	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
YWAR	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
YWAR	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	6	N	7	W	1	Yes	2	Berlin	Ionia
YWAR	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	6	N	7	W	2	Yes	5	Berlin	Ionia
YWAR	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
YWAR	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	21	Lyons	Ionia
YWAR	1	X	Point count	05/27/2005	2005	Julie Gibson	0.17	7	N	5	W	3	Yes	28	Lyons	Ionia
YWAR	1	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
YWAR	1	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	3	Yes	33	Easton	Ionia
YWAR	2	X	Point count	06/06/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
YWAR	2	X	Point count	06/17/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	34	Berlin	Ionia
YWAR	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
YWAR	1	X	Point count	06/16/2005	2005	Julie Gibson	0.17	7	N	7	W	4	Yes	35	Berlin	Ionia
YWAR	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
YWAR	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
YWAR	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	4	Clyde	St.Clair
YWAR	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	7	N	16	E	2	Yes	5	Clyde	St.Clair
YWAR	1	X	Point count	06/25/2005	2005	Julie Gibson	0.17	8	N	16	E	3	Yes	20	Grant	St.Clair
YWAR	2	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	1	W	2	Yes	16	Elba	Gratiot
YWAR	1	X	Point count	05/22/2005	2005	Julie Gibson	0.17	9	N	2	W	3	Yes	21	Washington	Gratiot
YWAR	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	4	Yes	27	Eureka	Montcalm

Species*	Count	Evidence Code**	Survey Type	Obs. Date	Year	Obs. Name	Effort (hours)	Township	Township Dir.	Range	Range Dir.	MBBA Block	Priority	Section	Township Name	County
YWAR	1	X	Point count	05/30/2005	2005	Julie Gibson	0.17	9	N	8	W	3	Yes	28	Eureka	Montcalm
YWAR	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	1	Yes	15	Spaulding	Saginaw
YWAR	1	X	Point count	05/25/2005	2005	Julie Gibson	0.17	11	N	4	E	3	Yes	28	Spaulding	Saginaw
YWAR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
YWAR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
YWAR	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
YWAR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	16	N	4	E	1	Yes	13	Fraser	Bay
YWAR	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	25	Verona	Huron
YWAR	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	13	E	4	Yes	36	Verona	Huron
YWAR	1	X	Point count	06/10/2005	2005	Julie Gibson	0.17	16	N	14	E	3	Yes	32	Sigel	Huron
YWAR	1	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
YWAR	2	P	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
YWAR	2	X	Point count	06/12/2005	2005	Julie Gibson	0.17	18	N	5	E	1		3	Standish	Arenac
YWAR	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
YWAR	1	X	Point count	06/13/2005	2005	Julie Gibson	0.17	18	N	14	E	1	Yes	14	Huron	Huron
YWAR	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	4	W	3	Yes	19	Beaver Creek	Crawford
YWAR	1	X	Point count	06/23/2005	2005	Julie Gibson	0.17	25	N	5	W	3	Yes	33	Garfield	Kalkaska
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	4	Garden	Delta
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	9	Garden	Delta
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	1	No	10	Garden	Delta
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	43	N	18	W	2	Yes	17	Garden	Delta
YWAR	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	4	Germfask	School
YWAR	1	X	Point count	06/22/2005	2005	Julie Gibson	0.17	44	N	13	W	2	No	8	Germfask	School
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
YWAR	1	X	Point count	06/20/2005	2005	Julie Gibson	0.17	44	N	18	W	3	No	29	Inwood	School
YWAR	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa
YWAR	1	X	Point count	06/19/2005	2005	Julie Gibson	0.17	46	N	4	W	3	No	30	Superior	Chippewa

* **Species:** ALFL = Alder Flycatcher; AMCR = American Crow; AMGO = American Goldfinch; AMKE = American Kestrel; AMRO = American Robin; BAEA = Bald Eagle; BAOR = Baltimore Oriole; BANS = Bank Swallow; BARS = Barn Swallow; BCCH = Black-capped Chickadee; BLJA = Blue Jay; BGGN = Blue-gray Gnatcatcher; BWWA = Blue-winged Warbler; BOBO = Bobolink; BRTH = Brown Thrasher; BHCO = Brown-headed Cowbird; CAGO = Canada Goose; CEDW = Cedar Waxwing; CHSW = Chimney Swift; CHSP = Chipping Sparrow; CCSP = Clay-colored Sparrow; COGR = Common Grackle; CONI = Common Nighthawk; CORA = Common Raven; COYE = Common Yellowthroat; DEJU = Dark-eyed Junco; DICK = Dickcissel; DCCO = Double-crested Cormorant; DOWO = Downy Woodpecker; DUCK = Duck species; EABL = Eastern Bluebird; EAKI = Eastern Kingbird; EAME = Eastern Meadowlark; EAPH = Eastern Phoebe; EATO = Eastern Towhee; EAWP = Eastern Wood-Pewee; EUST = European Starling; FISP = Field Sparrow; FLYC = Flycatcher Species; GRSP = Grasshopper Sparrow; GRCA = Gray Catbird; GBHE = Great Blue Heron; GCFL = Great Crested Flycatcher; HAWO = Hairy Woodpecker; HESP = Henslow's Sparrow; HETH = Hermit Thrush; HOLA = Horned Lark; HOFI = House Finch; HOSP = House Sparrow; HOWR = House Wren; INBU = Indigo Bunting; KILL = Killdeer; MALL = Mallard; MAWR = Marsh Wren; MODO = Mourning Dove; MUSW = Mute Swan; NAWA = Nashville Warbler; NOBO = Northern Bobwhite; NOCA = Northern Cardinal; NOFL = Northern Flicker; NOHA = Northern Harrier; NUTH = Nuthatch species; OSPR = Osprey; OVEN = Ovenbird; RBWO = Red-bellied Woodpecker; REVI = Red-eyed Vireo; RTHA = Red-tailed Hawk; RWBL = Red-winged Blackbird; RBGU = Ring-billed Gull; RNPH = Ring-necked Pheasant; RBGR = Rose-breasted Grosbeak; RTHU = Ruby-throated Hummingbird; SACR = Sandhill Crane; SAVS = Savannah Sparrow; SCTA = Scarlet Tanager; SEWR = Sedge Wren; STGR = Sharp-tailed Grouse; SOSP = Song Sparrow; SORA = Sora; SPAR = Sparrow species; SWAL = Swallow species; SWSP = Swamp Sparrow; TRES = Tree Swallow; TUTI = Tufted Titmouse; TUUV = Turkey Vulture; UPSA = Upland Sandpiper; VEER = Veery; VESP = Vesper Sparrow; WAVI = Warbling Vireo; WHIP = Whip-poor-will; WBNU = White-breasted Nuthatch; WTSP = White-throated Sparrow; WITU = Wild Turkey; WIFL = Willow Flycatcher; WIWR = Winter Wren; WOTH = Wood Thrush; YWAR = Yellow Warbler; YBCU = Yellow-billed Cuckoo; and YTBI = Yellow-throated Vireo.

** **Breeding criteria codes:** # = species observed in suitable nesting habitat during its breeding season; C = courtship behavior or copulation; FL = recently fledged young incapable of sustained flight; FY = adult(s) with food for young or feeding young; NB = nest building by all except woodpeckers and wrens; NY = nest with young heard or seen; O = species observed during the breeding season, but no evidence of breeding in block (includes unlikely breeding habitat and flying over); P = pair observed in suitable nesting habitat during breeding season; UN = used nest or eggshells found; X = singing male present in suitable nesting habitat during its breeding season.