$Belle\ Isle\ Bird\ Surveys-2005$

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INTRODUCTION

Belle Isle is well known to most bird watchers (birders) in southeastern Michigan as an excellent site to view migrant and wintering water birds, and a few also know that Belle Isle is a good site to find migrant songbirds in spring (Chartier and Ziarno 2004). Almost no attention has been given to migrant songbirds on Belle Isle in the fall season. No systematic bird surveys have ever been conducted on Belle Isle at any season.

Bird surveys, funded by DTE Energy, were conducted once weekly from April – December 2005, excluding June. A total of 186 species was observed on these surveys, 128 species in spring (April-May), 72 species in summer (May-August, not all breeding), 160 species in fall (August-November), and 78 species in winter (December). Informal surveys were conducted in January-March (62 species), and observations were compiled from 25 additional observers who provided casual observations from the island. Results of the National Audubon Society's CBC conducted on January 1, 2005, and the NAMC conducted on May 14, 2005, are also incorporated into this survey.

The overall result was that 205 bird species was observed on Belle Isle during 2005. This is 48% of the total number recorded for the entire state (425 species, including accidentals as of December 31, 2004), and 68% of Michigan's number of annually occurring species (303 species). This is very impressive for such a small locale within a highly urbanized area, similar to New York's Central Park, which is famous among birders as great place to go bird watching (birding), and an excellent migrant trap. Among these 205 species were a number of rarities, including one of "casual" status statewide, and several species not recorded on Belle Isle prior to 2005.

Much of the increased interest in birding Belle Isle during 2005 among birders was often generated by my occasional posts of interesting bird sightings to local internet birding chat groups. This also generated the additional observations included herein. Results of the surveys are summarized below by season, and an annotated species list for the island (Appendix A) summarizes all bird sightings from 2005 and historical records, and thus may be considered an attempt at an "official" list of birds from Belle Isle, which has never formally been published. As interest in birding on Belle Isle increases, new species will undoubtedly be observed on the island.

SURVEY METHODS

Several survey methods were utilized.

During spring and fall migration, standardized transects were walked one per week beginning at sunrise, and numbers of all bird species seen and heard were recorded, taking care to avoid re-counting obvious duplicates by keeping track of the general movements of the birds. During spring two transects were walked, and during fall four transects were walked, always in the same order and at approximately the same time of day. Descriptions of these four transects are on the following page (for GPS Waypoints see Appendix D).

In addition to transects, the road encircling the perimeter of the island was slowly driven in all months, usually in segments between walking transects, covering 5.5 miles and carefully counting all birds, but mainly focusing on water birds. Data from all transects, and each township section, were tallied separately.

In summer, standardized transects were not walked, but all habitats and areas were covered to search for evidence of nesting. In addition, 17 five-minute point counts, using the standardized methodology developed for the Michigan Breeding Bird Atlas for 2002-2007 (GPS position taken for each, see Appendix E), were conducted to provide an index of abundance of breeding birds.

In December, surveys were conducted in a similar manner to spring and fall, with the exception that the West Transect was conducted by car, and the Blue Heron Lagoon Trail transect was walked only once (due to cold temperatures and wind in these open areas).

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East Transect (T2S, R12E, Section 1 - Block 1)

Spring. Start at the Nature Center Go west along Oakway Drive for a short distance to a trail on the left. Take this trail, crossing over to Central Avenue. Turn right and go west along Central Avenue for a short distance to Tanglewood Drive, an old closed roadbed on the left. Continue along Tanglewood Drive to the southeast corner of the zoo and turn right (north) along the east side of the zoo returning to Central Avenue. Turn east and go a short distance to the fork in the road, then turn left heading west crossing over the bridge over Sylvan Creek. Turn right here crossing field and parking lot to Oakway Drive. Turn right and return to the Nature Center. Fall. The route had to be altered because the cross trail between Oakway Drive and Central Avenue, and Tanglewood Drive, were both too overgrown to effectively conduct bird surveys. In fall, the route began at the Nature Center, went south along Lakeside Drive to Central Avenue, from there going west to the bridge over Sylvan Creek, and from there the same as in spring. In fall, the areas along Tanglewood Drive missed by altering the route were covered by walking a new transect along Nashua Creek.

Total distance: 2.1 miles in spring, 1.9 miles in fall.

West Transect (T2S, R12E, Section 11 - Block 1)

Spring and Fall. Start at the intersection of Central Avenue at Vista Avenue at the northwest corner of the zoo. Go west along Central Avenue to Casino Way and from here walk across the grassy area west to the eastern end of the Scott Memorial Fountain. Go south to Fountain Drive and go east past the Casino, crossing the bridge over the creek to the corner of Muse Road and Loiter Way. Go east along Loiter Way back to Kids Row at the southwest corner of the zoo. Return north to Central Avenue.

Total distance: 2.7 miles

Nashua Creek Trail (T2S, R12E, Section 12 & Section 1- Block 1)

Fall. Start from the parking area on Vista Way across from the Athletic Center. Go east along the paved trail along the south side of Nashua Creek, passing an old red bridge and a concrete bridge to a new red bridge at the east end of the trail. Cross over Nashua Creek at the new red bridge and continue to the left along the paved trail. Continue past the zoo to the old red bridge. Cross back over the creek and turn right, returning to the parking area.

Total distance: 1.2 miles.

Blue Heron Lagoon Trail (T2S, R13E, Section 6 - Block 2)

Fall. Start at the beginning of the trail on the east side of Lakeside Drive just past the Coast Guard Station. Go east along the paved trail along the shoreline to the lighthouse. Cross the bridge over the inlet at the east end of Blue Heron Lagoon and continue along the trail to the west, to its end. Return to the bridge over the inlet and to west along the south shoreline of Blue Heron Lagoon to the parking area back to Lakeside Drive.

Total distance: 2.0 miles

HABITAT DESCRIPTION

Belle Isle is a 983-acre, partially wooded island in the Detroit River, with an estimated 28% open grassy areas, 25% open wooded parkland, 20% mature swamp woods (old growth per Suzan Campbell, pers. comm.), 18% inland rivers and lakes, 8.5% buildings, roads, and parking lots. 0.5% sandy beach. A vegetation survey was not done, but would be desirable. See Figure 1 for a color map showing main features and general habitats. The breakdown per township section (1 square mile) is as follows (blocks are quarter-townships):

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T2S, R12E, Section 1 (Block 1)

37% open water of Detroit River, 3% mainland Detroit.

Remaining 60% is on island (30% mature swamp woodland, 10% open wooded parkland, 10% open grassy area, 5% inland rivers and lakes, 1% sandy beach, 4% buildings, roads, and parking lots).

T2S, R12E, Section 2 (Block 1)

60% open water of Detroit River, 35% mainland Detroit (including MacArthur bridge).

Remaining 5% on island (3% open grassy area, 2% open wooded parkland).

T2S, R12E, Section 10 (Block 1)

60% open water of Detroit River, 20% mainland Detroit, 10% mainland Windsor,

Remaining 10% on island (5% open water of fountain, 5% open grassy area).

T2S, R12E, Section 11 (Block 1)

45% open water of Detroit River, 10% mainland Windsor.

Remaining 45% on island (20% open wooded parkland, 15% open grassy area, 5% inland rivers and and lakes, 10% buildings, roads, and parking lots).

T2S, R12E, Section 12 (Block 1)

35% open water of Detroit River, 45% mainland Windsor.

Remaining 20% on island (5% mature swamp woodland, 5% open wooded parkland, 5% open grassy area, 5% inland rivers and lakes).

T2S, R13E, Section 6 (Block 2)

70% open water of Detroit River, 5% mainland Windsor.

Remaining 25% on island (10% open grassy area, 10% inland rivers and lakes, 5% open wooded parkland).

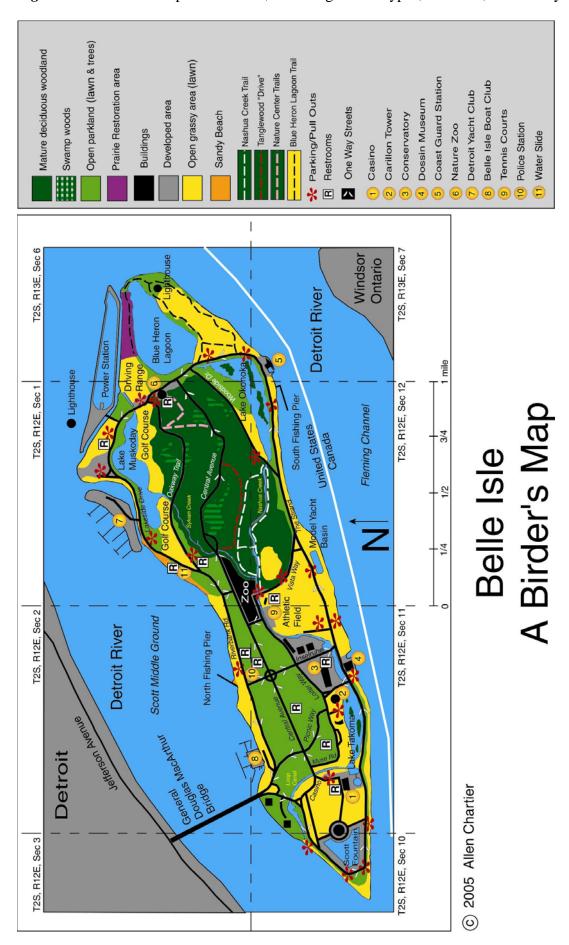
T2S, R13E, Section 7 (Block 2)

23% open water of Detroit River, 75% mainland Windsor.

Remaining 2% on island (1% inland rivers and lakes, 1% buildings, roads, and parking lots).

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Figure 1. A Birder's Map to Belle Isle, including habitat types, transects, and trail systems.



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SURVEY RESULTS

Bird names and sequence follows the A.O.U. (1998) and recent supplements (AOU 2000, Banks et al. 2002, 2003, 2004, and 2005). See Appendix A for scientific names of all birds recorded on Belle Isle.

Survey Results – Spring

A total of 128 species was found on spring surveys, 107 species on the East Transect, 68 species on the West Transect, and 112 species from other areas (see Appendix B). Given that migrants can linger for several days in an area, the totals should not be interpreted as an accurate tally, but they do provide an index of relative abundance of each species. Also, preliminary evidence of breeding for 49 species was obtained (see Survey Results – Breeding Birds below). The overall number of birds recorded on the West Transect is slightly greater than on the East Transect. But, a very high proportion of birds on the West Transect belong to only a few, mainly non-native species (i.e., Rock Pigeon, European Starling, House Sparrow), as well as loafing native species; Ring-billed Gulls (non-breeding) and Canada Geese. In fact, a significant majority of individuals recorded on the West Transect belonged to these five species, whereas these five species comprised significantly less of the total on the East Transect (Table 1).

There were 47 species recorded on the East Transect that were not recorded on the West Transect (Wood Duck, Redhead, Hooded Merganser, Common Loon, Pied-billed Grebe, Double-crested Cormorant, Virginia Rail, Solitary Sandpiper, Spotted Sandpiper, Belted Kingfisher, Red-bellied Woodpecker, Hairy Woodpecker, Willow Flycatcher, Eastern Phoebe, Yellow-throated Vireo, Philadelphia Vireo, Black-capped Chickadee, Tufted Titmouse, White-breasted Nuthatch, House Wren, Winter Wren, Golden-crowned Kinglet, Ruby-crowned Kinglet, Blue-gray Gnatcatcher, Veery, Gray-cheeked Thrush, Swainson's Thrush, Hermit Thrush, Wood Thrush, Black-throated Blue Warbler, Blackburnian Warbler, Bay-breasted Warbler, Black-and-white Warbler, Ovenbird, Northern Waterthrush, Common Yellowthroat, Wilson's Warbler, Canada Warbler, Eastern Towhee, Fox Sparrow, Lincoln's Sparrow, Swamp Sparrow, Dark-eyed Junco, Bobolink, Rusty Blackbird, Orchard Oriole, Purple Finch), which includes 21 Neotropical migrants, and several resident species that depend on large areas of woodland.

There were only 7 species recorded on the West Transect that were not recorded on the East Transect (Great Blue Heron, Herring Gull, Common Nighthawk, Bank Swallow, American Pipit, Orange-crowned Warbler, Savannah Sparrow), with only two of these being Neotropical migrants.

A total of 1428 individuals of 56 species of Neotropical migrants (not breeding locally) was recorded on spring surveys. Neotropical migrants were much more frequent on the East Transect than on the West Transect, particularly when open-country species (i.e., swallows) are factored out (see Table 1). Neotropical migrants found on neither East or West Transects included only shorebird species, which are rarely found on Belle Isle due to a lack of habitat. Shorebird species that were found in the Scott Fountain when it was drained for cleaning included Semipalmated Plover, Lesser Yellowlegs, Semipalmated Sandpiper, Least Sandpiper, and Dunlin.

Clearly, the swamp woodlands on the eastern end of Belle Isle are important for spring Neotropical migrants and woodland breeding species, and conversely the open parklands on the west end of Belle Isle are a haven for introduced species.

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Table 1. Spring migration species composition, comparison between East Transect (mostly swamp woods) and West Transect (mostly open parkland). Swallows are shown separately because they inhabit mainly open country, not woodland.

	East Transect	West Transect
Total species	107	68
Total Individuals	3034	3177
Canada Goose	5.3%	9.2%
Ring-billed Gull	7.9%	16.4%
Rock Pigeon	2.6%	8.6%
European Starling	18.0%	29.2%
House Sparrow	3.8%	9.4%
Total previous 5 species	37.7%	72.8%
Neotropical Migrants (species)	48 (44.8%)	30 (44.1%)
Swallows (species)	3 (2.8%)	4 (5.9%)
Non-swallows (species)	45 (42.0%)	26 (38.2%)
Neotropical Migrants (indiv.)	485 (16.0%)	294 (9.2%)
Swallows (indiv.)	37 (1.2%)	152 (4.8%)
Non-swallows (indiv.)	448 (14.8%)	142 (4.4%)

Survey Results – Fall

A total of 160 species was recorded on the fall surveys, 112 species on the East Transect, 75 species on the West Transect, 96 along Nashua Creek, 96 around Blue Heron Lagoon, and 81 species from other areas (see Appendix C). Given that migrants can linger for several days in an area, the totals should not be interpreted as an accurate tally, but they do provide an index of relative abundance of each species. During August, the presence of fledglings for several species provided confirmation of breeding.

As might be expected, the overall number of birds recorded in fall was higher than in spring, due at least in part to fledglings of locally breeding species. As in spring, the overall number of birds recorded in fall on the West Transect was greater than on the East Transect. And again, a significant majority of birds on the West Transect belonged to five species (i.e., non-native Rock Pigeon, European Starling, House Sparrow, as well as loafing native species; non-breeding Ring-billed Gulls and locally breeding Canada Geese. The proportion of these five species along the Nashua Creek transect, similar in habitat to the East Transect, was lower than either the East or West Transects. The habitat along the Blue Heron Lagoon transect is open, but different from the West Transect and these five species were in similar proportions to the East Transect (see Table 2).

There were 49 species recorded on the East Transect that were not recorded on the West Transect (Wood Duck, Osprey, Sharp-shinned Hawk, Merlin, American Woodcock, Bonaparte's Gull, Caspian Tern, Black-billed Cuckoo, Eastern Screech-Owl, Red-headed Woodpecker, Red-bellied Woodpecker, Hairy Woodpecker, Olive-sided Flycatcher, Eastern Wood-Pewee, Least Flycatcher, Eastern Phoebe, Blue-headed Vireo, Red-eyed Vireo, Tufted Titmouse, Carolina Wren, Marsh Wren, Eastern Bluebird, Veery, Gray-cheeked Thrush, Swainson's Thrush, Gray Catbird, Orange-crowned Warbler, Yellow Warbler, Chestnut-sided Warbler, Black-throated Blue Warbler, Blackburnian Warbler, Pine Warbler, Bay-breasted Warbler, Black-and-white Warbler, American Redstart, Ovenbird, Mourning Warbler, Common Yellowthroat, Wilson's Warbler, Canada Warbler, Scarlet Tanager, Eastern Towhee, Field Sparrow, Swamp Sparrow, Rose-breasted Grosbeak, Bobolink, Rusty Blackbird, Purple Finch, and Pine Siskin), which includes 27 Neotropical migrants, and several resident species that depend on large areas of woodland.

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There were only 12 species recorded on the West Transect that were not recorded on the East Transect (Greater White-fronted Goose, Snow Goose, American Black Duck, Black-crowned Night-Heron, Turkey Vulture, Northern Harrier, American Golden-Plover, Horned Lark, Purple Martin, Tree Swallow, Northern Roughwinged Swallow, and Savannah Sparrow), with only three Neotropical migrants.

The similar habitat of the Nashua Creek transect recorded similar species to the East Transect, with 10 species not recorded on either East or West Transects (Mute Swan, Green Heron, Yellow-billed Cuckoo, Northern Sawwhet Owl, Yellow-bellied Flycatcher, Wood Thrush, Brown Thrasher, Northern Parula, Northern Waterthrush, and Connecticut Warbler), of which 7 are Neotropical migrants. Thus, the two transects within the swamp woodlands held 59 species (34 Neotropical migrants) that were not recorded in the open parkland along the West Transect.

The Blue Heron Lagoon transect recorded 18 species not found on the other three transects (Tundra Swan, Gadwall, American Wigeon, Blue-winged Teal, Northern Shoveler, Northern Pintail, Canvasback, Redhead, Ring-necked Duck, Greater Scaup, Lesser Scaup, Common Goldeneye, Ruddy Duck, Pied-billed Grebe, American Coot, Spotted Sandpiper, Herring Gull, and Forster's Tern), all of them waterfowl as might be expected.

A total of 2150 individuals of 54 species of Neotropical migrants (not breeding locally) was recorded on fall surveys. As in spring, Neotropical migrants were much more frequent on the East Transect than on the West Transect (see Table 1). The proportion of Neotropical migrants recorded on the Nashua Creek transect was comparable to the East Transect (actually, slightly higher), as would be expected. The open habitat of the Blue Heron Lagoon transect showed comparable proportions of Neotropical migrants to the West Transect. Open country species (i.e., swallows) were much less prevalent during fall than in spring.

Clearly, the swamp woodlands on the eastern end of Belle Isle are important for fall Neotropical migrants and woodland breeding species, and conversely the open parklands on the west end of Belle Isle are a haven for introduced species. Blue Heron Lagoon is more important for short-distance migrants, and particulary waterfowl before freeze-up.

Table 2. Fall migration species composition, comparison of all transects. Swallows are shown separately because they inhabit mainly open country, not woodland.

-	East Transect	Nashua Creek	West Transect	Blue Heron Lagoon
Total species	112	96	75	96
Total Individuals	11,124	4970	17,501	9535
Canada Goose	7.0%	12.0%	51.0%	6.7%
Ring-billed Gull	0.5%	0.0%	4.6%	9.7%
Rock Pigeon	7.8%	0.3%	6.1%	4.4%
European Starling	12.4%	1.6%	21.6%	0.8%
House Sparrow	4.8%	0.2%	4.7%	< 0.1%
Total previous 5 species	26.2%	14.0%	81.6%	21.7%
Neotropical Migrant (species)	42 (37.5%)	42 (43.8%)	18 (24.0%)	22 (22.9%)
Swallows (species)	1 (0.9%)	2 (2.1%)	3 (4.0%)	2 (2.1%)
Non-swallows (species)	41 (36.6%)	41 (42.7%)	15 (20.0%)	20 (20.8%)
Neotropical Migrants (indiv.)	903 (8.1%)	415 (8.4%)	256 (1.4%)	270 (2.8%)
Swallows (indiv.)	16 (0.1%)	9 (0.2%)	104 (0.6%)	96 (1.0%)
Non-swallows (indiv.)	887 (8.0%)	406 (8.2%)	152 (0.8%)	174 (1.8%)

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Survey Results – Breeding Birds

A total of 72 species was recorded during breeding bird surveys (May-August), with evidence for 63 species breeding on the island. This is 28% of the total number of breeding species known for the entire state (222 species; 231 species including accidental and extinct breeding species). The species recorded on Belle Isle during breeding bird surveys in 2005, and their status, is shown in Table 3 below. During the Breeding Bird Atlas conducted from 1983-1988 (Brewer et al. 1991), 39.2% of all townships statewide recorded between 51-75 breeding species, with 45.6% recording 76-100+ species and 15.1% recording 0-50 species. Regionally (southern Lower Peninsula), 36.8% of townships recorded between 51-75 breeding species, with 53.1% recording 76-100+ species and 10.0% recording 0-50 species. Thus, the number of breeding species on Belle Isle is slightly below average, which would be expected for an island, as islands are well known to have fewer species than large expanses of contiguous habitat (this also applies to isolated patches of habitat in urbanized areas, not necessarily just true islands).

In 2002, effort was begun to reassess the breeding birds of Michigan to compare with the previous Breeding Bird Atlas. Field work for this newest effort will be complete in 2007, and data gathered during these surveys has been submitted to that effort. A new aspect that has been added to the recent Breeding Bird Atlas is an attempt to assess abundance. This is accomplished by conducting standardized 5-minute point counts. Points must be at least 300 meters apart and any "block" (quarter-township) with 15 or more points will be included in the statewide analysis of abundance. A total of 17 point counts was conducted on Belle Isle on July 7, 2005, thus Belle Isle will be included in this analysis (possibly the only locale within the city of Detroit to be included). The coordinates for these points, designated by letters (A-Q), can be found in Appendix E, and the data gathered on these point counts is presented in Table 4 below.

Among the more interesting breeding and potentially breeding species were the two juvenile or female Hooded Mergansers on Lake Takoma on 23 August, which could have been fledged locally or were extremely early migrants. Perhaps in summer 2006 breeding can be confirmed for this species, which is a very rare nesting bird in southern Michigan. Repeated observations of Black-crowned Night-Herons (threatened in Michigan), both adults and juveniles from May through November along Nashua Creek and Lake Okonoka suggest that breeding is possible here too, although this species travels long distances from nesting areas to feed. Both Sora and Virginia Rail were unexpected as the amount of cattail marsh on Belle Isle is extremely limited, so these both may have been migrants as each was detected on only a single day during May. The American Woodcock seen behind the Nature Center on four days from mid-July through early September was much too early to be a migrant; dawn surveys should be done in February-April 2006 to confirm whether any courtship activity is occurring.

The almost complete lack of Tufted Titmice and Black-capped Chickadees is a change from previous years and previous decades (pers. obs.), Only a single pair, or possibly two, of Tufted Titmouse was detected, and only a single singing Black-capped Chickadee was noted very infrequently during the summer. It is likely that West Nile Virus greatly reduced the numbers of these species breeding on Belle Isle beginning in 2001. Increased numbers of Black-capped Chickadees, beginning in late October, was due to an influx of migrants. Once every 3-4 years Black-capped Chickadees undergo irruptive migrations, similar to those more frequently observed among northern finches and owls, due to food shortages in northern portions of their breeding ranges. This is the first chickadee irruption since 2001, and perhaps some of these birds may linger to breed in summer 2006. In general, the swamp woods on Belle Isle supports a good population of woodpeckers due to the abundance of nest holes and hollows in some of the dead and dying trees, typical of a healthy and mature forest. Sadly, many of these nest holes were intensely contested by the abundant European Starlings, which may explain why Redheaded Woodpeckers have not occurred on Belle Isle for several years (they formerly nested).

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Table 3. Breeding status of birds on Belle Isle

Species	Observed	Possible	Probable	Confirmed
Canada Goose				FL
Mute Swan				FL
Wood Duck				FL
Mallard				FL
Hooded Merganser	О			12
Pied-billed Grebe		#		
Double-crested Cormorant	О			
Great Blue Heron	0			
Green Heron	0			
Black-crowned Night-Heron		#		
Cooper's Hawk			A	
Red-tailed Hawk		#	71	
American Kestrel		#		
Sora		X		
Virginia Rail		X		
Killdeer		11		FL
Spotted Sandpiper				FL
American Woodcock		#		LL
Ring-billed Gull	0	π		
Caspian Tern	0			
Forster's Tern	0			
			С	
Rock Pigeon				
Mourning Dove Eastern Screech-Owl			C T	
			I	171
Great Horned Owl				FL
Chimney Swift	О		D	
Belted Kingfisher			P P	
Red-bellied Woodpecker				
Downy Woodpecker			T	
Hairy Woodpecker			S	
Northern Flicker			N	TS7
Eastern Wood-Pewee			a	FY
Willow Flycatcher		37	S	
Eastern Phoebe		X	a	
Great Crested Flycatcher			S	
Eastern Kingbird				FY
Warbling Vireo				FY
Red-eyed Vireo			T	
Blue Jay				FY
American Crow	О			
Tree Swallow				FY
Northern Rough-winged Swallow				FY
Cliff Swallow				FY
Barn Swallow				FY
Black-capped Chickadee		X		
Tufted Titmouse				FY
White-breasted Nuthatch			S	
Carolina Wren		X		

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Table 3. Breeding status of birds on Belle Isle, continued.

Species		Observed	Possible	Probable	Confirmed
House Wren					FY
Wood Thrush				S	
American Robin					FL
Gray Catbird					FY
Brown Thrasher				S	
European Starling					FY
Cedar Waxwing					FY
Yellow Warbler					FY
Ovenbird			X		
Common Yellowthroat				P	
Scarlet Tanager				S	
Chipping Sparrow					FY
Savannah Sparrow					FY
Song Sparrow					FY
Swamp Sparrow			X		
Northern Cardinal					FY
Indigo Bunting					FY
Red-winged Blackbird					FY
Common Grackle					FY
Brown-headed Cowbird					FY
Baltimore Oriole					FY
House Finch				S	
American Goldfinch				T	
House Sparrow					ON
	Total	9	12	19	32

Key to Breeding Status codes:

Observed

O = Species observed during its breeding season, but no evidence of breeding.

Possible

- # = Species observed in suitable nesting habitat during its breeding season.
- X = Singing male present in suitable nesting habitat during its breeding season.

Probable

- S = Singing male present at same location on at least two dates at least 7 days apart, or multiple (5 or more) singing males on same date during the breeding season.
- P = Pair observed in suitable nesting habitat during breeding season.
- T = Territorial behavior (chasing individuals of the same species).
- C = Courtship behavior or copulation.
- N = Visiting probable nest site.
- A = Agitated behavior or anxiety calls from adult.
- B = Nest building by wrens or excavation of holes by woodpeckers.

Confirmed

NB = Nest building by all except woodpeckers and wrens.

DD = Distraction display or injury feigning.

FL = Recently fledged young (of altricial species) incapable of sustained flight, or downy young (of precocial species) restricted to the natal area by dependence on adults or limited mobility.

ON = Occupied nest – adults entering or leaving nest site in circumstances indicating occupied nest (includes high nest or nest-holes, the contents of which cannot be seen) or adult incubating or brooding.

FY = Adult(s) with food for young (carrying food) or feeding young.

NE = Nest with eggs.

NY = Nest with young seen or heard.

Table 4. Point Count data from July 7, 2005.

Poin	t A	В	С	D	Е	F	G	Н	I	J	K	L	М	Ν	0	Р	Q	Total
Canada Goose	8	40		35		50	7											140
Mallard		2				1								28		3		34
Great Blue Heron													1	1				2
Black-crowned Night-Heron			1															1
American Kestrel				1														1
Killdeer		2				4			1				1				2	10
Spotted Sandpiper													2					2
Ring-billed Gull	475	120	8	2	1	293	1	3	2	3			3	3	8	3	1	926
Forster's Tern															1			1
Rock Pigeon		1	17		19		2		23				1	7	1	3		74
Mourning Dove									3				-	-	-	1		4
Chimney Swift		1		1	1		1		5		2			2	1	1	3	18
Downy Woodpecker		1		2	3		3					1		_	1			11
Hairy Woodpecker		•		_	•			1							•			1
Northern Flicker			1		2			•										3
Eastern Wood-Pewee						1					2							3
Great Crested Flycatcher					1													1
Eastern Kingbird		1	1	2	2		2			1						1		10
Warbling Vireo		1	1	1	1		2			•			1			1		8
Red-eyed Vireo		•		•	•		_	2				2	•		1			5
Blue Jay		1		1			1	_		5	1	_			•		2	11
Tree Swallow		2	2	•						•	3							7
Northern Rough-winged Swallow	7	_	3			2					•				1		2	15
Cliff Swallow	3	2			1			4			3		50		2		15	80
Barn Swallow	18	_	12	6	10	6	6	2	4	1	•	1	4	15	1	6	1	93
White-breasted Nuthatch								1	•		1	-			•		-	2
House Wren							2	2	1	3	3	2			1			14
Wood Thrush									-	1		1			-			2
American Robin		1	2	2	4		2	1	3	2	1		1		3	1	2	25
Gray Catbird											1		1					2
European Starling	35		3	11	17	22	7		3	1			5	3	1		2	110
Cedar Waxwing		1			1					2		1	1	2	1		3	12
Yellow Warbler									1							4		5
Scarlet Tanager								1										1
Savannah Sparrow								-					2			4		6
Song Sparrow			1	1	1		1		2		2	1	2	1	1	1		14
Northern Cardinal			-	1			1	5	1	1	3	1		1	1			15
Indigo Bunting						1	•			1	3	2			•			7
Red-winged Blackbird	6	2	2		2		2		4	4	2	_	4	3		2	2	35
Common Grackle	3	3					_		1	2		2	1	5	1		_ <u>-</u>	19
Brown-headed Cowbird								1	2	1	1	_	•		•		-	5
Baltimore Oriole					3			1	1	•	1							6
American Goldfinch			1			1	3		3		•	2						10
House Sparrow	4	3		10		5			13			_		5	7		23	85
No. of Species				14	16		16	12		14	15	11	16			13	13	
ino. di opecies	, 3	17		17	10	1.1	٦	14	10	17	10		יי	13	1 /	٦	10	77

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Survey Results - Water birds

Surveys for waterfowl were conducted concurrently with other surveys, and mainly consisted of driving the perimeter of the island noting all individuals seen. In addition, geese were often more numerous along the West Transect as they fed on grass among the open parkland in the interior of the western portions of the island. This is where two of three goose rarities occurred (the third was on the driving range and golf course).

Thirty-one species of waterfowl (ducks, geese, swans) were recorded on surveys (standardized and nonstandard) and by other observers, during 2005. This included all regularly occurring species, plus rarities such as Greater White-fronted Goose, Snow Goose, and most rare, Ross's Goose. Numbers of wintering waterfowl increased at the end of January with the beginning of the thaw, with Common Goldeneye and Common Merganser most numerous, as is typical. Spring waterfowl migration peaked through March and tapered off considerably during April, with a few lingering individuals into May (with the exception of year-round resident Canada Goose, Mute Swan, and Mallard, and breeding Wood Duck). The earliest fall migrants were Hooded Mergansers in late August, which may have bred locally (see Survey Results – Breeding Birds above). Ring-necked Ducks were next to appear on 27 September, along with American Black Ducks. Gadwall and Canvasbacks first appeared on 6 October. By 25 October, 14 species of waterfowl were present and by 23 November 15 species was recorded. Diversity remained good through December with 15 species on the 29th, and the species typically over-wintering were present in good numbers, including Canvasback, Redhead, Common Goldeneye, Bufflehead, and Common Merganser. Unexpected this year was the large number of lingering Ring-necked Ducks, with 122 as late as 21 December and 85 on the 1 January 2006 CBC (only one was found on the 1 January 2005 CBC).

Loons and grebes were typically sparse in occurrence with only small numbers of Common Loons and Piedbilled and Horned Grebes recorded. Double-crested Cormorants were seen only on the Detroit River, offshore of Belle Isle, and five species of heron were recorded. American Coot occurred only as a fall migrant, and also were only offshore of Belle Isle.

Habitat for shorebirds, other than breeding Killdeer and Spotted Sandpiper (and possibly American Woodcock), is very limited at Belle Isle, and many years no species are recorded. The process of draining the Scott Fountain during spring migration in May resulted in shorebirds being attracted to the mudflats temporarily created there. A surprising 18 species was found on Belle Isle, with all but Sanderling and American Woodcock recorded in spring. American Golden-Plover (flyovers) and Short-billed Dowitcher were apparently the first ever recorded on Belle Isle. One wonders what other interesting shorebird species might turn up if the fountain were drained in September as well.

Ring-billed Gulls are common year-round on Belle Isle, including during summer though they apparently do not breed on the island. A total of 11 species of gull and tern were recorded on Belle Isle during 2005, including several rarities. Herring Gulls are mainly fairly common winter residents, with most departing by late March this year, though a few lingering individuals through late May could be wandering birds from small breeding colonies elsewhere along the Detroit River. The earliest fall arrivals were in late November, as is typical, though numbers remained atypically low through the end of December. Great Black-backed Gulls winter on the ice of the Detroit River in small numbers; the last spring birds were on 10 March with one straggler on 19 May; the first fall bird was on 10 December (E. Lewandowski, N. Gilbert). Bonaparte's Gulls migrate through the Detroit River corridor in small numbers, mainly in fall. During 2005, small numbers were recorded in April and again from late October through mid-December, with an unusually early individual on the 29 August survey. Caspian Terns and Forster's Terns were recorded along the Detroit River mainly from late spring through early fall, as they likely breed in small numbers in the area. Surprising was the absence of Common Terns, given that there is at least one colony on the Detroit River (on Grosse Ile). Black Terns have been declining for many years, and the lack of observations in 2005 is typical of perhaps the past decade. Rarities included birds recorded exclusively in late fall and winter: Thayer's Gull (first island records) on 25 November and 4 December;

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Iceland Gull (first on-island record) on 29 December; Lesser Black-backed Gull on 1 January, 23 February, 5 December, and 29 December likely involved at least two birds; Glaucous Gull (2) on January 1; and Black-legged Kittiwake (first island record) on the 1 December survey.

Details by species can be found in Appendix A.

IMPORTANCE OF BELLE ISLE TO BIRDS

Migrants

Mehlman et al. (2005) describe three stopover types for spring and fall migrants, which they term "fire escapes," "convenience stores," and "full service hotels." Fire escape stopover sites are infrequently used, but vital to migrants (primarily nocturnal) caught over inhospitable terrain with a shortage of cover. They are often small patches of marginal habitat along major flyways, typically adjacent to significant barriers such as large bodies of water, deserts, or intensively altered landscapes. These sites allow migrants to survive and continue migrating from the site. Indeed, in general this describes all of Belle Isle! More specifically, much of the open parkland on the western half of Belle Isle seems to serve as this type of stopover, as evidenced by the occasional recording of migrant warblers, sparrows, and kinglets during spring and fall surveys.

Convenience Store stopover sites are habitat blocks of varying size that allow birds to briefly rest (~2 days) and easily replenish some fat or muscle, or both. They are often isolated patches of habitat, larger and more varied in vegetation structure than Fire Escapes, and with some food resources available. Mehlman et al. (2005) describe the ideal Convenience Store stopover site as structurally heterogeneous, containing fresh water, and providing a variety of food resources (fruit and insects). The mature woodland that covers much of the eastern half of Belle Isle fits this description very well.

Full Service Hotel stopover sites are generally extensive areas of predominately forested habitat, where migrants can find abundant resources for survival, including food, water, and shelter, and tend to provide lower risk of predation. It is critical to conserve a netowrk of both Fire Escape and Convenience Store stopover sites, which serve as stepping stones for migrants from one Full Service Hotel site to another.

The entire corridor along the St. Clair and Detroit Rivers, and the western shore of Lake Erie, is highly altered by human development, and only provide patches of Fire Escape and Convenience Store stopover sites. Moore and Aborn (2000) note that "If high quality habitats are few in number or widely dispersed, fat-depleted migrants may be compelled to settle in a lower quality habitat, resulting in a longer stopover and delayed arrival on the breeding or wintering quarters." Thus, it is critical that the habitats at Belle Isle, especially the high quality mature woodland, be conserved to protect the many migrant (and breeding) birds that use this corridor for migration.

Such concentrations of migrants can attract visiting birders in the same manner as more famous locales such as Pt. Pelee National Park in Canada, and Central Park, NewYork. The City of Detroit Parks and Recreation Department should promote bird watching on Belle Isle, and should make every effort to protect the habitat that migrants and breeding birds use (a less vigorous mowing schedule would help grassland birds, for example, and drawing down the Scott Fountain during September as well as in May).

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Breeding Birds

The swamp woods at the eastern end of Belle Isle provides good breeding habitat for healthy populations of woodpeckers, and other woodland nesting species such as Wood Duck, White-breasted Nuthatches, Wood Thrushes, Red-eyed Vireos, and even Scarlet Tanagers, Eastern Wood-Pewees, and Indigo Buntings. In addition, there appears to be a healthy population of breeding birds of prey. These include a pair of Great Horned Owls, which successfully fledged at least two young in summer 2005, and perhaps 3-4 pairs of Eastern Screech-Owls which were detected using tape playback during their breeding season in mid-May on the NAMC. A pair of Cooper's Hawks undoubtedly nested within the swamp woods as they were detected through the summer of 2005, but an actual nest could not be located, and whether they succeeded is not known. At least one pair of Red-tailed Hawks was often detected throughout the year, including during the summer of 2005, but a nest could not be located. A single American Kestrel was detected on summer surveys during 2005 and may have nested, but no nest was located and the sighting involved just a single bird seen once. Kestrels nest in abandoned woodpecker holes, generally in more open areas, not in forest, so standing dead trees in open areas are important for this species to breed.

The open shrubby areas around Blue Heron Lagoon provides breeding habitat for Song Sparrows, Warbling Vireos, and good numbers of Yellow Warblers, as well as Willow Flycatcher, American Goldfinch, and Indigo Buntings.

The open grassland near the lighthouse at Blue Heron Lagoon allowed Savannah Sparrows to successfully breed this year, while territories near the Scott Fountain and the Athletic Fields apparently failed, likely due to the more aggressive mowing schedules at those locales.

The open parkland on the west end of the island provides breeding habitat for significantly fewer species than the swamp woodland, and unfortunately provides a prime breeding area for introduced pest species, including European Starling and House Sparrow, which compete intensely with native birds for breeding habitat on the edges of woodlands as well (even into the interior for European Starling). While many of the structures on Belle Isle are responsible for providing breeding areas for these detrimental species, other structures, including bridges and fishing piers, provides breeding habitat for swallows. The number of Cliff Swallows nesting on and around Belle Isle may be the largest breeding population in southeastern Michigan (though a nest count by boat should be done to assess the true numbers).

Belle Isle isn't just an island by geographic definition, it is a habitat island where dozens of bird species can breed in the midst of a highly urbanized and industrialized region. While actual data are not available, urban areas such as Windsor and Detroit likely do not provide breeding habitat for more than about 20 species of birds. Thus, the 60+ species found breeding on Belle Isle during 2005 point to the significance of the habitat here for birds to nest and raise young.

Water Birds

Field trips conducted by local Audubon Societies (Detroit, Grosse Pointe, Oakland Audubon chapters, and others) typically focus on the waterbird migration in late fall, as Belle Isle has long been recognized as a concentration point for these species. Perhaps more birders have visited Belle Isle at this time of year than at any other time. In particular, the population of Canvasbacks on Lake St. Clair and the Detroit River during fall and winter is globally significant. In recognition of this, the waters around Belle Isle have been included within the boundaries of the Detroit River International Wildlife Refuge, the first such refuge in the world, established in 2003.

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Winter Birds

Between 1990 and 2006 (data only available for 1990, 1993-1996, 2001, 2005 and 2006), at least 80 species of birds have been recorded on Belle Isle on CBCs. Annual counts have ranged from 44 species (1994 and 2005) to a high of 55 species in 2006. Variations in species diversity on these counts has in part been due to the extent of ice on the Detroit River on count day (always 1 January). Compared with "inland" bird counts, this is perhaps 25% higher (pers. obs.), while being fairly typical of sites along the Great Lakes with mixtures of water birds and land birds.

Quite a number of species of waterfowl linger on the Detroit River into, and sometimes through the winter (depending on how frequently the Detroit River freezes), so waterfowl are an important component of the winter avifauna on Belle Isle.

Predators have not been well covered in this report thus far, as they require large territories and tend to be in small numbers. In winter 2005, up to 3 Northern Saw-whet Owls took up residence along the Nashua Creek Trail in the swamp woods at the eastern end of Belle Isle. These tiny owls nest from mid-Michigan north, mainly in coniferous areas, using abandoned woodpecker holes for nesting. Northern Saw-whet Owls are highly migratory, occurring in numbers at locales such as Whitefish Point and Holiday Beach (Ontario). The fact that three of these predators wintered at Belle Isle indicates a healthy population of small mammal prey in the area. In March 2005 one was photographed and was apparently the second known record for Belle Isle, the first being at least 15 years ago (K. Overman, pers. comm.). This species probably occurs annually in migration, and perhaps annually in winter, and likely has been overlooked. Peregrine Falcons have been nesting in Detroit for a number of years, following their introduction. Peregrines have been noted on Belle Isle near concentrations of waterfowl, certainly an important food source for them during winter. The American Kestrel is a smaller falcon that feeds on small mammals and large insects, and sometimes birds. In winter, one or two typically can be found hunting for small mammals in the open areas on Belle Isle. Another open country predator, the Northern Shrike, has been recorded on Belle Isle in winter, but not in 2005. Red-tailed Hawks may have nested on Belle Isle this year, but this could not be confirmed. This species feeds on small to medium-sized mammals, and sometimes birds. The Bald Eagles that have been breeding on Peche Island (Canada) were detected a number of times throughout the year on Belle Isle, and particularly in the late fall and winter were seen hunting the waterfowl along the Detroit River.

It is clear from the surveys done in 2005, and from additional personal observations and historical records, that Belle Isle is important for birds year-round.

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APPENDIX A. Annotated list of bird species recorded on Belle Isle, including status during 2005, and with notes on historic bird records.

This list includes all birds known to, or thought to have occurred on Belle Isle through December 2005. A total of 232 species is listed (8 additional species listed as hypothetical or rejected are not included in this total). This is 54.5% of the total number of species recorded in Michigan (427), and 76.9% of the "regular" or annually occurring species (303). Vagrants (Casual and Accidental species – see MBRC 2005) comprise 29.0% of Michigan's total list, while Belle Isle has only recorded four true vagrants to date (1.7% of the Belle Isle list), though there have been a number of local rarities reported. Increased birder activity in 2005 resulted in a number of rarities added to the list, which underscores both how little coverage Belle Isle has received to date, and underscores the great potential for birds, and attracting birders. Belle Isle was recently included in a statewide bird finding guide (Chartier and Ziarno 2004). In 2005, evidence for 72 breeding species was found, 31% of the 231 species recorded breeding in Michigan (which includes both the extinct Passenger Pigeon and the extirpated Greater Prairie-Chicken). Historical records are included here both from published literature and from unpublished notes of several observers, including the author, but these accounts should by no means be considered complete. Unattributed observations are the author's.

Records of rarities should be well-documented in writing, and/or photographed, and this documentation should be kept on file at the Nature Center. Documentation should meet a reasonably high standard in order for a species to be accepted onto the Belle Isle list. Any species of statewide "Casual" or "Accidental" status should have gone through the peer review process and be accepted by the Michigan Bird Records Committee (MBRC) before being included on the list.

The species names, and sequence, follow the most recently published checklist and supplements of North American Birds by the American Ornithologists' Union (AOU 1998, AOU 2000, Banks et al. 2002, 2003, 2004, and 2005).

CBC = Christmas Bird Count

MBRC = Michigan Bird Records Committee

NAMC = North American Migration Count

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Belle Isle Bird List (December 2005)

ANSERIFORMES

ANATIDAE (Waterfowl)

Greater White-fronted Goose, Anser albifrons

Status: Rare spring and fall migrant.

Habitat: Open grassy areas.

2005 Surveys: One was found on the fall survey between 2-6 November.

Historical Records: One previous record from March (A. Chartier). One from 28 November-27 December

1992 (M. Mencotti).

Snow Goose, Chen caerulescens

Status: Rare spring and fall migrant.

Habitat: Open grassy areas.

2005 Surveys: One (white morph) during casual surveys between 10-16 March, and one (blue morph) on the fall survey on 11 October.

Historical Records: Kelley (1963) noted an early migrant on Belle Isle (blue morph), 19 September 1950. At least one previous record known from March (A. Chartier). One on 28 November 1992 (M. Mencotti), Two (white morph) on 7 October 2001.

Ross's Goose, Chen rossii

Status: Accidental (casual in Michigan).

Habitat: Open grassy areas.

2005 Surveys: One during casual surveys on 15-16 March (Found by A. Chartier on driving range on 15th - photographed; relocated by S. Jennex on golf course on 16th). Reviewed and accepted by MBRC.

Historical Records: None. This is the first known record for Belle Isle.

Cackling Goose, Branta hutchinsii

Status: Rare fall migrant.

Habitat: Open grassy areas, inland lakes.

2005 Surveys: One during a casual survey on 16 March. One on the 25 October survey near the Model Yacht Basin, and 5 reported on 3 November near the same locale (G. Norwood).

Historical Records: :Prior to July 2004 Cackling Goose was considered a subspecies of Canada Goose (Banks et al. 2004) and was likely overlooked on Belle Isle. One on 12 November 2004 (fide T. Smart) was apparently the first known record for Belle Isle.

Canada Goose, Branta canadensis

Status: Common to abundant year-round resident. (Breeding confirmed in 2005)

Habitat: Open grassy areas, inland lakes.

2005 Surveys: Found on all surveys, with greatest numbers in fall (max. 2253 on the 11 November survey) when numbers of generally non-migratory and introduced forms (*Branta canadensis maxima*) are supplemented with wild migratory individuals from James Bay breeding population (*Branta canadensis interior*). Numbers of wild birds are unknown as this subspecies is difficult to identify, even if measurements are taken. Arrivals can be inferred based on neck-collared individuals, as James Bay birds are collared with orange (first arrival was on 9 September survey). Local birds have been collared with green, and birds from Ohio have been collared with white. See Appendix F for details of neck-collared Canada Geese observed on Belle Isle in 2005. Many pairs (approx. 50-150 pairs) successfully fledged young this year as well.

Historical Records: None in the literature, but has been common on Belle Isle for decades.

Mute Swan, Cygnus olor

Status: Uncommon summer resident, common winter resident until freeze-up. (Breeding confirmed in 2005) *Habitat*: Inland lakes (breeding), Detroit River (wintering).

2005 Surveys: Found on all surveys, with numbers building from fall into winter. Casual surveys suggest that over-wintering birds departed the area in late February. Two pairs confirmed nesting, and a third pair was present through summer but nesting could not be confirmed. Over-wintering birds began arriving in mid-October, reaching a maximum of 157 on 17 November, most in the channel between the island and mainland Detroit. Numbers seemed to stabilize at around 120 birds into December, and 106 were on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: None in the literature. This species was introduced into Michigan from Europe, first in Charlevoix County in 1919, and became common in southeastern Michigan by the 1970s. Some evidence suggests this species' aggressive nature is detrimental to other marsh-dwelling bird species.

Trumpeter Swan, Cygnus buccinator

Status: Accidental (Introduced to Michigan beginning in 1986).

Habitat: Detroit River.

2005 Surveys: Two on an informal survey on 18 January was apparently the first known record for Belle Isle.

Historical Records: None in the literature, although a specimen was collected in fall migration in Lake St. Clair in the late 1800s. This species was introduced into Michigan beginning in 1986, and as the population increases, which is centered at Seney NWR in the Upper Peninsula and several areas along Lake Michigan, there may be additional records from Belle Isle in the future. Very similar to Tundra Swan and must be carefully identified.

Tundra Swan, Cygnus columbianus

Status: Rare early spring and uncommon late fall migrant.

Habitat: Detroit River, overhead.

2005 Surveys: The observation on the 17 November survey is likely typical of most observations of this species on the island; a single flock of 157 flying high overhead from the northwest to the southeast. One or two early migrants were detected among the Mute Swans beginning on 7 November, and from 2-19 birds lingering there into mid-December.

Historical Records: None in the literature. Several records from early November through early December (M. Mencotti). Has been observed some years in small numbers in March (A. Chartier). On the 1 January 2001 CBC, 60 were reported (M. Blagdurn, R. Kovalcik, D. Leasure, S. Campbell).

Wood Duck, Aix sponsa

Status: Uncommon summer, rare winter resident. (Breeding confirmed in 2005)

Habitat: Swamp woods, inland lakes and creeks.

2005 Surveys: First arrivals in spring noted on a casual survey on 31 March (2 birds). Four to six pairs observed in swamp woods in spring, and perching in trees presumably near nests. No nests found, but parents with young were noted in August and September (up to 18 birds total), providing confirmation of breeding. The very dry conditions during summer 2005 dried up the floor of the swamp forest, which may have had an effect on the breeding success and dispersal patterns of this species this year. Breeding birds may have been supplemented by migrants, as there was a peak of 33 birds on the 25 October survey. One adult male lingered at the Detroit Yacht Club through the 21 December survey, and was recorded on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Kelley (1963) notes a single bird at Belle Isle in February or March 1953. Has been noted over-wintering in small numbers in many years since the mid-1970s (A. Chartier et al.).

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Gadwall, Anas strepera

Status: Rare spring and uncommon fall migrant.

Habitat: Inland lakes, Detroit River.

2005 Surveys: Noted in spring only during casual surveys, 2 on 29 March, and 10 on 5 April (J. Agius, A. Chartier). First fall migrants (4) were noted on the 6 October survey on Blue Heron Lagoon, with a maximum of 55 on 18 October and the latest on 29 December (3).

Historical Records: Kelley (1978) noted this species in small numbers in winter from Belle Isle from 1970-1974 ("since 1970"). This is consistent with recent patterns. A high count of 100 on 2 November 2001. Six on 3 April 2001, 5 on 4 April 2003.

Eurasian Wigeon, Anas penelope

Status: Accidental (Casual in Michigan).

Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Kelley (1978) notes one record at Belle Isle on 28 November 1970. This is likely the only record for Belle Isle. Most Michigan records of this species are in the spring (March-April). Currently, the status of this species in Michigan is "casual" which requires MBRC acceptance and review prior to publication of records, but in 1970 there was no MBRC, and the species was more frequently reported in the state, thus this record is generally accepted by the MBRC as an accepted historical record.

American Wigeon, Anas americana

Status: Uncommon spring and fall migrant, rare in winter.

Habitat: Inland lakes, Detroit River.

2005 Surveys: First migrants (3) noted on the fall survey on 11 October at Blue Heron Lagoon, with a maximum of 15 on 25 October. One lingered to 31 December at the Detroit Yacht Club (N. Gilbert).

Historical Records: Kelley (1978) notes that this species "winters regularly on Belle Isle (from five to twenty birds reported)." Previously, Kelley (1963) published a winter report from Belle Isle with a maximum of 12 on 27 January 1950. These numbers are somewhat higher than in recent years. Less numerous in spring; 4 on 15 March 2002. A high count of 40 on 2 November 2001.

American Black Duck, Anas rubripes

Status: Uncommon to rare spring and fall migrant and winter resident.

Habitat: Inland lakes, Detroit River.

2005 Surveys: Sixteen birds were noted on the 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Detected on casual surveys through 16 March (6) (A. Chartier, S. Jennex). One straggling bird on 26 May survey. First fall migrants (2) detected on 27 September survey, with peak of 6 on 18 October. Wintering birds arrived on 14 December, with a peak of 16 on 21 December, and 11 through the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: None in the literature. This species has experienced precipitous declines in the Great Lakes since the 1970s. Recent peak counts include 51 recorded on the 1 January 1996 CBC (M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti) and 30 on 19 January 1997.

Mallard, Anas platyrhynchos

Status: Common year-round resident. (Breeding confirmed in 2005)

Habitat: Inland lakes and creeks, Detroit River.

2005 Surveys: Casual surveys recorded 25-250 individuals, with 243 recorded on the 2005 CBC. By early April, numbers were reduced to 15-37 birds through May. About 15-20 breeding pairs through summer, with fledglings detected in July and August confirming breeding. Fall migration began with an increase to 104 birds on the 14 September survey, with a peak of 199 on 18 October. Winter residents arrived in early December with a peak of 298 on 14 December, and 211 through 29 December.

Historical Records: Kelley (1963) describes semi-colonial breeding of, perhaps feral birds, on Belle Isle in mid-July 1957 (10 nests with eggs in a small area, some only 6-feet apart).

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Blue-winged Teal, Anas discors

Status: Rare spring and fall migrant.

Habitat: Inland lakes.

2005 Surveys: Two on 7 April (R. Stocking) and two on the 11 October survey were the only records.

Historical Records: None in the literature. Usually noted in small numbers, for example 1 on 9 May 1998, 2 on 2 May 1999, and 2 on 16 April 2000. Also reported 28 April 1996 (M. Mencotti).

Northern Shoveler, Anas clypeata

Status: Rare migrant.

Habitat: Inland lakes, Detroit River.

2005 Surveys: One on 17 November and two on 1 December surveys were the only records.

Historical Records: Has been recorded in spring in small numbers, for example 2 on 11 May 1996, 2 on 15 March 2002, and 3 on 4 April 2003.

Northern Pintail, Anas acuta

Status: Rare migrant and occasional winter resident.

Habitat: Inland lakes, Detroit River.

2005 Surveys: One on 18 October survey and one on 31 December (N. Gilbert) were the only records. One was also located on the 1 January 2006 CBC (M. Blagdurn et al.).

Historical Records: Kelley (1978) noted that "a few birds have wintered" at Belle Isle. Kelley (1963) previously noted only a single February report during the 1945-1955 period. Has been recorded in spring (A. Chartier).

Green-winged Teal, Anas crecca

Status: Uncommon to rare spring and fall migrant.

Habitat: Inland lakes, Detroit River.

2005 Surveys: One on 4 April (J. Agius) and 3 on 18 October, 8 on 17 November surveys were the only records.

Historical Records: A high count of 10 on 2 November 2001.

Canvasback, Aythya valisineria

Status: Common spring and fall migrant, common winter resident through freeze-up.

Habitat: Blue Heron Lagoon, Detroit River.

2005 Surveys: 2010 on 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure); peak in spring was 520 on 23 February, and last on 14 April, and one straggler on 14 May (R. Hutchinson, R. Kik IV) and 26 May; first fall arrival was 2 on 6 October building in numbers to a peak of 973 on the 7 December survey, and several hundred through the end of December. The 1 January 2006 CBC recorded 125 (M. Blagdurn, A. Chartier).

Historical Records: Kelley (1978) writes that this species "Winters in large numbers in Lake St. Clair and lower Detroit River; somewhat reduced in recent years." Numbers in fall at Belle Isle have exceeded 2000 birds on occasion in recent years, and most recently in winter with 1530 on 20 February 2004.

Redhead, Aythya americana

Status: Uncommon spring and common fall migrant, common winter resident through freeze-up.

Habitat: Blue Heron Lagoon, Detroit River.

2005 Surveys: On the 2005 CBC on 1 January, 54 were reported (M. Blagdurn, J. Agius, D. Leasure), and numbers gradually diminished through late March (20 on 29 March), with stragglers through April, and the latest (2) on the 6 May survey. The earliest fall arrival was 5 on the 11 October survey, peaking at 592 on the 21 December survey. A total of 295 was recorded on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: None in the literature. A high count of 910 on 24 February 2004. One on the 9 May 1998 NAMC, and one on the 13 May 2000 NAMC.

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Ring-necked Duck, *Aythya collaris*

Status: Uncommon spring and common fall migrant, uncommon to rare winter resident through freeze-up. *Habitat*: Blue Heron Lagoon, Detroit River.

2005 Surveys: Just one bird on the 1 January 2005 CBC, and 3 on 4 January (K. Overman, S. Jennex, J. Agius). The next report was not until 29 March when 11 were recorded, and the last for spring were 2 on 5 April (J. Agius, A. Chartier). First fall arrivals were 2 on the 27 September survey, with numbers quickly rising to 195 on the 18 October survey. The peak count was 691 on the 17 November survey, and numbers gradually dwindled through December with 122 on the 21 December survey and 85 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Kelley (1978) writing about SE MI and SW ON notes "scattered winter reports, mainly from Grosse Ile, Belle Isle, and the St. Clair River." A high count of 685 on 25 November 2003. Two on 4 May 2002.

Greater Scaup, Aythya marila

Status: Uncommon to rare spring and fall migrant, uncommon winter resident through freeze-up. *Habitat*: Detroit River.

2005 Surveys: The 164 recorded on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure) was the highest total reported all year, and more than is typical for this time of year. Only two more records through spring, 5 on 27 January and 1 on 4 March. The first fall migrants (2) arrived on 25 November (A. Chartier, C. Carroll, E. Lewandowski, T. Shehan, N. Gilbert). Records through the end of December included 8 on the 7 December survey, 1 on the 14 December survey, and 1 on 31 December (N. Gilbert). Eighteen were found on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Kelley (1978), perhaps writing about both scaup species (it isn't entirely clear), indicated that "Flocks begin to arrive in late September or early October and remain in large numbers throughout the winter in Lake St. Clair, the Detroit River, and western Lake Erie. Most numerous in March and April, decreasing until the end of migration in mid-May." A high count of 100 on 20 January 2004. Care must be taken to distinguish this species from Lesser Scaup, and many distant birds may remain unidentified.

Lesser Scaup, Aythya affinis

Status: Uncommon spring and common fall migrant, rare winter resident through freeze-up. *Habitat*: Detroit River, Blue Heron Lagoon.

2005 Surveys: Only 5 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure) was about typical for this time of year. Peak in winter months was 15 on 18 January, with fewer reported until 16 on 29 March and 79 on 5 April (J. Agius, A. Chartier). A single bird was present at the Detroit Yacht Club from the 8 April survey through the 19 May survey, then two (male and female) were found there on the 26 May survey for the last spring report. First fall arrivals were 65 in a single raft on the 25 October survey. This raft was present through early November with counts ranging from 47-78. Peak fall total was 164 on the 17 November survey, but by 23 November the count was back down to 46 birds. Between 20-85 reported during December. Six were reported on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: A high count of 578 on 20 February 2004. 30 on 7 October 2001.

Surf Scoter, *Melanitta perspicillata*

Status: Rare fall migrant and winter resident through freeze-up.

Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Has been recorded mainly in October and November, with less frequent December and January records, but not every year (A. Chartier et al.). Most recently reported on 3 December 2004 (S. Jennex).

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White-winged Scoter, Melanitta fusca

Status: Rare fall migrant and winter resident through freeze-up.

Habitat: Detroit River.

2005 Surveys: Only record was 1 on 11 January (J. Agius).

Historical Records: Has been recorded mainly in October and November, with occasional December and January records. Not recorded every year. One was recorded on the 1 January 1996 CBC (M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti).

Black Scoter, Melanitta nigra

Status: Rare fall migrant. Habitat: Detroit River.

2005 Surveys: At least two were reported (one male, one female) singly on four dates (two survey dates) between 5-23 November (A. Chartier, S. Jennex, S. Santner).

Historical Records: Recorded mainly in October and November, and the least frequent of the three scoters at Belle Isle. One female on 25 November 2003.

Long-tailed Duck, Clangula hyemalis

Status: Rare fall migrant. Habitat: Detroit River.

2005 Surveys: One, possibly the same individual, on 4 January (K. Overman, S. Jennex, J. Agius) and 18 January. One on 17 November (J. Palland).

Historical Records: Kelley (1963 and 1978) indicates "Most reported from Lake Huron, St. Clair River, and the Detroit River at Belle Isle." But, this species has been quite rare on the Detroit River since Kelley's publication, with perhaps only a handful of individuals in a given decade, with fewer records than any of the scoters. One on the 1 January 1996 CBC (M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti).

Bufflehead, Bucephala albeola

Status: Fairly common spring and fall migrant, uncommon winter resident through freeze-up.

Habitat: Detroit River, inland lakes.

2005 Surveys: The year began with 15 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Lower numbers through January and February with an increase to 16 on 29 March. A few through April with the latest spring birds being 2 on 4 May (R. Stocking). First fall arrivals were 8 on 25 October with numbers slowly building through mid-November and a peak of 55 on the 1 December survey, declining rapidly to the 16 found on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: CBC numbers have varied from 3 in 2001 (M. Blagdurn, R. Kovalcik, S. Campbell) to 177 in 1993 (M. Blagdurn, B. Johnson, E. Johnson, D. Leasure). 46 on 21 March 2003.

Common Goldeneve, Bucephala clangula

Status: Common spring and fall migrant and winter resident until freeze-up.

Habitat: Detroit River.

2005 Surveys: On the 1 January 2005 CBC, 266 were recorded (M. Blagdurn, J. Agius, D. Leasure). Late winter numbers peaked at 1003 on 27 January, with significant declines through mid-March (36 on 10 March), and the last spring individual on 29 March. Oddly, two were recorded out of season on 4 May (R. Stocking). The first fall arrivals were 40 on the 11 November survey, and peaking with 282 on the 14 December survey. The 1 January 2006 CBC recorded 145 (M. Blagdurn, A. Chartier).

Historical Records: CBCs have recorded as few as 49 in 1994 (M. Blagdurn, B. Johnson, E. Johnson, D. Leasure, M. Mencotti) and as many as 470 in 2001 (M. Blagdurn, R. Kovalcik, S. Campbell). 3 on 2 November 2004.

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Hooded Merganser, *Lophodytes cucullatus*

Status: Fairly common spring and fall migrant, uncommon winter resident until freeze-*up*. (Observed during breeding season during 2005)

Habitat: Inland lakes and creeks, Detroit River.

2005 Surveys: The 1 January 2005 CBC recorded 18 (M. Blagdurn, J. Agius, D. Leasure). Numbers declined through February and March, with a sudden increase to 16 on 29 March. Only two April records, with 3 on the 8 April survey and 1 on the 29 April survey. First fall record was 2 apparent juveniles on Lake Takoma on the 23 August survey, which is near the end of the fledging period for this species in Michigan, but rather early for migrants. Thus it is possible that Hooded Merganser bred on the island in 2005, or somewhere nearby. What was likely these same two birds were present at the same locale through the 9 September survey. Five birds on 21 September was the first influx of fall migrants with a peak (possibly a record) of 205 on the 23 November survey (most on Blue Heron Lagoon). Numbers declined through December with 101 on the 1 December survey and 14 on the 29 December survey. The 1 January 2006 CBC tallied 55 (M. Blagdurn, A. Chartier).

Historical Records: Numbers in spring are frequently higher than they were in 2005 (pers. obs.). Typical CBC numbers range from 8 in 2001 (M. Blagdurn, R. Kovalcik, S. Campbell) to 16 in 1995 (M. Blagdurn, B. Johnson, D. Leasure), thus the 2006 CBC total was exceptional. One on 3 May 1998.

Common Merganser, Mergus merganser

Status: Common spring and fall migrant, common (sometimes abundant) winter resident through freeze-up. *Habitat*: Detroit River.

2005 Surveys: The 1 January 2005 CBC recorded 872 (M. Blagdurn, J. Agius, D. Leasure). Generally 300-600+ through early March when numbers began to decline; 690 on 4 March, 125 on 10 March, and 61 on 15 March. Last spring record was 2 on 5 April (J. Agius, A. Chartier). First fall arrivals were 3 on 25 November (A. Chartier, C. Carroll, E. Lewandowski, T. Shehan, N. Gilbert), with numbers rapidly building to 231 on 7 December survey and 634 on the 21 December survey. The 1 January 2006 CBC recorded 90 (M. Blagdurn, A. Chartier).

Historical Records: CBC numbers have ranged from 44 in 1995 (M. Blagdurn, B. Johnson, D. Leasure) to 2155 in 2001 (M. Blagdurn, R. Kovalcik, S. Campbell). Counts as high as 4045 (A. Chartier – 20 January 2004) have been tallied recently.

Red-breasted Merganser, Mergus serrator

Status: Uncommon spring and fall migrant, rare winter resident until freeze-up.

Habitat: Detroit River.

2005 Surveys: Five were on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Two to three were infrequently recorded through February and early March, then 12 observed on 29 March. Only three April records, 1 on 7 April (R. Stocking), 11 on the 14 April survey, and 1 on the 22 April survey. First fall arrival was 1 on 28 November, and one or two present through December and on the 1 January 006 CBC (M. Blagdurn, A. Chartier) with the exception of 25 on 4 December (A. Chartier, S. Jennex).

Historical Records: Some recent years have had daily spring and fall tallied greater than in 2005, but I am unaware of any daily count greater than 100. High counts of 35 on 25 February 2003 and 27 on 4 April 2003 (both A. Chartier). 20 on 3 May 1998.

Ruddy Duck, Oxyura jamaicensis

Status: Uncommon spring and fall migrant.

Habitat: Detroit River, inland lakes.

2005 Surveys: No spring records. First fall record was 1 in the unusual location of the Scott Fountain on 15 October, with a peak in the Detroit River of 70 on the 1 December survey, and the last fall record of 19 on the 7 December survey.

Historical Records: Some years as numerous as in spring (mainly April) as in fall (pers. obs.). 7 on 3 May 1998, 2 on 4 April 2003.

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GALLIFORMES

PHASIANIDAE (Pheasants)

Ring-necked Pheasant, Phasianus colchicus

Status: Introduced, possibly may no longer occur on Belle Isle as there are few recent sightings.

Habitat: Brushy fields.

2005 Surveys: Three on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure) most likely were found on the mainland not on Belle Isle.

Historical Records: This species was maintained in captivity near the Nature Center for many years, and occasional individuals were seen in the vicinity, perhaps escaped. I have no personal observations of this species away from the Nature Zoo area. Records from 1992, 1993, 1994, 1996 (all M. Mencotti) from near Nature Zoo as well.

GAVIIFORMES

GAVIIDAE (Loons)

Red-throated Loon, Gavia stellata

Status: Rare migrant. Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Perhaps only two or three records in the past 10 years; has been recorded in November and February in the Detroit River.

Common Loon, Gavia immer

Status: Uncommon to rare spring and fall migrant.

Habitat: Detroit River, overhead.

2005 Surveys: One was found on the 14 April survey, and three were on the 29 April survey. The only fall record this year was one on 3 December (E. Lewandowski, W. Fissell).

Historical Records: In some past years has been more numerous (4 on 3 May 1998 – A. Chartier), but less frequent in recent years. One was recorded on the 1 January 1993 CBC (M. Blagdurn, B. Johnson, E. Johnson, D. Leasure). One on 23 March 2003, 1 on 11 May 1996 NAMC, 1 on 7 October 2001, 2 on 4 November 2003 (all A. Chartier)

PODICIPEDIFORMES

PODICIPEDIDAE (Grebes)

Pied-billed Grebe, *Podilymbus podiceps*

Status: Uncommon to rare spring and fall migrant, rare winter resident until freeze-up. (Breeding possible in 2005)

Habitat: Inland lakes, Detroit River.

2005 Surveys: Spring records were 1 on 5 April (J. Agius, A. Chartier), 2 on the 8 April survey, and one each on the 22 April and 11 May surveys. First fall record was 3 on the 6 October survey, with 1-2 birds on several dates through 3 December (E. Lewandowski, W. Fissell).

Historical Records: In some past years has been more numerous, particularly in fall migration (11 on 10 October 2001 – A.Chartier). Two were recorded on the 1 January 1995 CBC (M. Blagdurn, B. Johnson, D. Leasure); one on 15 March 2002, 1 on 20 December 2004 (both A. Chartier).

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Horned Grebe, Podiceps auritus

Status: Uncommon to rare spring and fall migrant, rare winter resident until freeze-up.

Habitat: Detroit River.

2005 Surveys: One in winter on 4 January (K. Overman, S. Jennex, J. Agius). Only spring report was 5 on 29 March. First fall record was 1 near the Detroit Yacht Club on the 25 October survey. What was probably this same bird was seen on several days through 28 November. Two were found on the 23 November and 1 December surveys, and three were found on 5 December (J. Agius).

Historical Records: Kelley (1963) lists this species for Belle Isle. One was found on the 1 January 1990 CBC (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit). High count of 14 on 20 March 2003.

Red-necked Grebe, Podiceps grisegena

Status: Rare migrant. Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Recorded perhaps only 3-4 times every four years at Belle Isle. Most recently 4 on 21 March 2003 was perhaps the largest group ever found here (other observers may have seen as many as 5 or 6 at this time).

PELECANIFORMES

PELECANIDAE (Pelicans)

American White Pelican, Pelecanus erythrorhynchos

Status: Accidental (rare migrant in Michigan).

Habitat: Overhead.

2005 Surveys: One flyover on 27 April 2005 (J. Palland, J. Bartell) was well described, and the first known

record for Belle Isle. *Historical Records*: None.

PELECANIFORMES

PHALACROCORACIDAE (Cormorants)

Double-crested Cormorant, *Phalacrocorax auritus*

Status: Uncommon spring and common fall migrant, uncommon summer resident (not breeding), rare in winter. (Observed during breeding season in 2005)

Habitat: Detroit River.

2005 Surveys: First spring record was 1 on the 22 April survey, with peak of 14 on 14 May (R. Hutchinson, R. Kik IV). From 2-9 birds on several days during July-September were not breeding on Belle Isle but were likely from nearby nesting colonies downriver, or on Lake St. Clair. First fall influx was 24 on the 11 October survey, and the peak was 145 on 15 October in a single, high-flying flock. Groups of 6-26 through mid-November, dwindling to single birds until the last bird on 3 December (E. Lewandowski, W. Fissell).

Historical Records: Species had declined significantly in the 1950s to 1970s, but since 1980s has recovered to former abundance.

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CICONIIFORMES

ARDEIDAE (Herons and Egrets)

American Bittern, Botaurus lentiginosus

Status: Accidental.

Habitat: Breeds in extensive cattail marsh.

2005 Surveys: None reported.

Historical Records: One on 15 May 2002 (K. Overman, A. Dettling) flushed from a scrubby clump of trees was clearly a migrant as there is no breeding habitat on Belle Isle for this species.

Great Blue Heron. Ardea herodias

Status: Uncommon summer resident (non-breeding), rare winter resident. (Observed during breeding season in 2005)

Habitat: Inland lakes and creeks.

2005 Surveys: One was recorded on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Two reports of a single bird on two additional dates in January, none in February, one on 31 March, one on 12 April. Only three records in May, with 2 birds on the 11 May survey. Usually arrives at nesting colonies (one located off of Grosse Ile) in March, so the lack of records during this period is puzzling. This species surely only uses Belle Isle as a feeding area. One to five birds on most surveys during July and August, with 9 on 9 September the peak. Records of 5-6 daily as late as late October, dwindling quickly to an infrequently seen single bird by the end of November. Latest report was 2 on the 29 December survey.

Historical Records: Has been reported on the 1993, 1994 (3), and 1995 CBCs.

Great Egret, Ardea alba

Status: Uncommon to rare summer resident (non-breeding).

Habitat: Inland lakes and creeks.

2005 Surveys: Typically arrives at nesting colonies (some off of Grosse Ile) in April, but first records on Belle Isle were likely post-breeding dispersing individuals, with the first (2) on the 10 August survey. One or two seen very infrequently through mid-September. The peak, and latest record, was 6 on 1 November (K. Overman).

Historical Records: Two on 4 May 2002.

Green Heron, Butorides virescens

Status: Uncommon to rare summer resident. (Observed during breeding season in 2005)

Habitat: Inland lakes and creeks.

2005 Surveys: First record was on 9 May (R. Stocking, K. Overman). Occasional records of a single bird through early August. The peak was 4 birds on the 23 August survey, and the latest was 1 on the 21 September survey. Appropriate breeding habitat occurs on Belle Isle, and it is possible that the presence of this species through summer indicates it may breed there, though they can fly considerable distances to feed, and nests are very difficult to find.

Historical Records: Unknown.

Black-crowned Night-Heron, Nycticorax nycticorax

Status: Uncommon summer resident. (Breeding possible in 2005)

Habitat: Inland lakes and creeks.

2005 Surveys: First detected on the July surveys, where recorded in potential nesting habitat, though they can fly considerable distances and nesting does occur in other areas along the Detroit River. Numbers increased after nesting season, particularly the number of immatures. The islands at the east end of Lake Okonoka, across from the Coast Guard Station, have long been a late fall roosting site for this species (pers. obs., K. Overman), and this year up to 9 were seen there (on 25 October survey), and 6 as late as the 2 November survey.

Historical Records: In some years, present through late November (pers. obs.). Ten on 2 November 2004.

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CICONIIFORMES

CATHARTIDAE (New World Vultures)

Turkey Vulture, Cathartes aura

Status: Uncommon spring and fall migrant, rare summer resident (non-breeding).

Habitat: Overhead, open areas, woodlands.

2005 Surveys: First spring record was a single bird on 5 April (J. Agius, A. Chartier), the spring peak was 5 on the 11 May survey, and the latest was 1 on 16 May (R. Stocking, S. Jennex, J. Agius). Breeds on buildings in downtown Detroit (Judy Yerkey, pers. comm.) but none were seen during summer on Belle Isle. First fall record was 2 on the 2 September survey, with a peak of 4 on the 6 October survey, and the latest on 4 November.

Historical Records: Unknown.

FALCONIFORMES

ACCIPITRIDAE (Hawks)

Osprey, Pandion haliaetus

Status: Rare migrant.

Habitat: Shorelines, inland lakes and rivers, and overhead.

2005 Surveys: Two on 2 September survey, one perched in a dead snag along Oakway Drive and one perched along the shore of Lake Okonoka.

Historical Records: One on 5 May 2001.

Bald Eagle, Haliaeetus leucocephalus

Status: Rare permanent resident (non-breeding).

Habitat: Detroit River and shorelines.

2005 Surveys: First report was 1 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Has nested on Peche Island, Ontario, just east of Belle Isle for at least the past 10 years (pers. obs.). These birds occasionally wander over to Belle Isle, most often in fall and winter to hunt waterfowl on the Detroit River. First fall record was on the 17 November survey (one adult), with singles seen on 25 November (A. Chartier, C. Carroll, E. Lewandowski, T. Shehan, N. Gilbert), 3 December (E. Lewandowski, W. Fissell), 4 December (A. Chartier, S. Jennex), and the 7 December survey. Last record was 2 on the 29 December survey and 1 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Three were on the 2001 CBC (M. Blagdurn, R. Kovalcik, S. Campbell).

Northern Harrier, Circus cyaneus

Status: Rare spring and fall migrant.

Habitat: Overhead, open fields and marshes.

2005 Surveys: One on the 14 September survey over the fields near the Scott Fountain.

Historical Records: One on 15 March 1992 (M. Mencotti).

Sharp-shinned Hawk, Accipiter striatus

Status: Uncommon to rare migrant, rare in winter.

Habitat: Woodlands, overhead.

2005 Surveys: The only spring migrant was one on 31 March (J. Agius). First fall migrants were 2 on the 2 September survey. Singles were on the 14 and 27 September surveys, 2 on 1 October (Ed Lewandowski), and 1 on the 11 October survey.

Historical Records: Recorded on 13 May 1996 and 29 November 1997 (both M. Mencotti), and 5 and 12 May 2001.

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Cooper's Hawk, Accipiter cooperii

Status: Uncommon to rare permanent resident. (Breeding probable in 2005)

Habitat: Woodland.

2005 Surveys: First observed on the 14 April survey. Two adults observed in May were agitated apparently near a nest site. Unfortunately, a nest could not be located. From September through December, occasional sightings of one, and less often two birds, including at least one immature, possibly a result of the possible nesting. Last record was 1 on the 21 December survey. One was recorded on the 1 January 2006 CBC (M. Blagdurn, A.Chartier).

Historical Records: Records from 1992, 1993, and 1996 (M. Mencotti).

Northern Goshawk, Accipiter gentilis

Status: Accidental (rare migrant).

Habitat: Overhead.

2005 Surveys: None recorded.

Historical Records: Reported by K. Overman, but no information on date or location yet.

Red-shouldered Hawk, Buteo lineatus

Status: Probably a fall migrant, likely rarely observed at this locale. Rare winter visitor.

Habitat: Overhead.

2005 Surveys: None recorded.

Historical Records: One on the 2001 CBC (M. Blagdurn, R. Kovalcik, S. Campbell) was extremely unusual. Listed on the May 2005 bird checklist (Belle Isle Nature Zoo, 2005) as a migrant, but there is no date or observer information, so status is difficult to confirm.

Broad-winged Hawk, Buteo platypterus

Status: Probably a fall migrant occasionally observed at this locale, and rarely in spring.

Habitat: Overhead.

2005 Surveys: None recorded.

Historical Records: Listed on the May 2005 bird checklist (Belle Isle Nature Zoo, 2005) as a migrant, but there is no date or observer information, so status is difficult to confirm.

Red-tailed Hawk, Buteo jamaicensis

Status: Uncommon permanent resident. (Breeding possible in 2005)

Habitat: Woodland edges and open areas.

2005 Surveys: Three were on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Not recorded again until the 14 May NAMC (R. Hutchinson, R. Kik IV). Late summer records suggested breeding but a nest could not be located. Also nests on buildings in downtown Detroit (Judy Yerkey, pers. comm.) so they could fly over to hunt. Recorded more consistently in fall, with 7 migrating overhead on the 25 October survey. Recorded through December.

Historical Records: Recorded nearly every year on CBCs.

FALCONIFORMES

FALCONIDAE (Falcons)

American Kestrel, Falco sparverius

Status: Uncommon to rare permanent resident. (Breeding possible in 2005)

Habitat: Open parkland and fields.

2005 Surveys: Two birds appeared resident on the island all year, one at the open fields near the Casino, and the other at the open fields near Blue Heron Lagoon and Nature Zoo. One was near the Detroit Yacht Club and one was flying over the ice in the Detroit River in December. No evidence of breeding noted (needs an abandoned woodpecker hole in open woodland).

Historical Records: Recorded nearly every year on CBCs.

Merlin, Falco columbarius

Status: Rare migrant.

Habitat: Open areas and woodland edges.

2005 Surveys: One perched on a light pole on the edge of Lake Muskoday and the Golf Course on the 14

September survey.

Historical Records: Unknown.

Peregrine Falcon, Falco peregrinus

Status: Rare permanent resident.

Habitat: Open areas.

2005 Surveys: Two on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Next sighting was of 2 birds on the 14 December survey sitting on the ice of the Detroit River, probably hunting waterfowl, and 1 on the 29 December survey.

Historical Records: Birds that were introduced to downtown Detroit have occasionally been seen hunting on Belle Isle for several recent years. A color banded bird seen on Belle Isle on 2 November 2004 (A. Chartier) was apparently found dead in December 2004 (Judy Yerkey, pers. comm.).

GRUIFORMES

RALLIDAE (Rails)

Virginia Rail, Rallus limicola

Status: Rare migrant. (Breeding possible in 2005)

Habitat: Wetlands.

2005 Surveys: One calling from *Phragmites* behind the Nature Zoo on the 29 April survey may have been a migrant, or possibly attempting to breed. Apparently the first record for Belle Isle.

Historical Records: None.

Sora, Porzana carolina

Status: Rare migrant. (Breeding possible in 2005

Habitat: Wetlands.

2005 Surveys: One heard calling on the 14 May NAMC (R. Hutchinson, R. Kik IV) may have been a migrant, or possibly attempting to breed. Apparently the first record for Belle Isle.

Historical Records: None.

American Coot. Fulica americana

Status: Rare spring and uncommon fall migrant.

Habitat: Detroit River, inland lakes.

2005 Surveys: First record was a group of 13 on the 6 October survey. Peak number was 83 on the 1 December survey, and the last record was 2 on the 21 December survey.

Historical Records: One on 11 May 1996 NAMC, 2 on 3 May 1998, 2 on 3 April 2001, 6 on 4 April 2003, 40 on 10 November 1999, 20 on 18 November 2001, 25 on 4 November 2003.

CHARADRIIFORMES

CHARADRIIDAE (Plovers)

Black-bellied Plover, *Pluvialis squatarola*

Status: Probably a rare migrant.

Habitat: Beaches, mudflats, open grassy areas, and plowed fields.

2005 Surveys: None recorded.

Historical Records: Listed on the May 2005 bird checklist (Belle Isle Nature Zoo, 2005) as a migrant, but there is no date or observer information, so status is difficult to confirm.

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American Golden-Plover, Pluvialis dominica

Status: Rare migrant.

Habitat: Beaches, mudflats, open grassy areas, and plowed fields.

2005 Surveys: Two flyovers on the 14 September survey were likely the first for Belle Isle.

Historical Records: None.

Semipalmated Plover, Charadrius semipalmatus

Status: Uncommon spring migrant.

Habitat: Beaches and mudflats.

2005 Surveys: Found in the drained Scott Fountain from the 11 May survey through the 26 May survey, with a peak of 10 on the 14 May NAMC (R. Hutchinson, R. Kik IV).

Historical Records: Nine reported at the Scott Fountain after being drawn down on 15 May 2002 (K. Overman, A. Dettling).

Killdeer, Charadrius vociferus

Status: Fairly common summer resident. (Breeding confirmed in 2005).

Habitat: Open grassy areas.

2005 Surveys: First spring arrival was 1 on the 8 April survey, with peak of 18 on the 11 May survey. Perhaps 3-5 pairs during summer. Fledglings in August increased numbers, and migrants in September peaked at 63 on the 14 September survey, and up to 45 through the 6 October survey. Last fall record was 2 on the 11 November survey.

Historical Records: Unknown.

CHARADRIIFORMES

SCOLOPACIDAE (Sandpipers)

Greater Yellowlegs, Tringa melanoleuca

Status: Rare spring and fall migrant.

Habitat: Beaches and mudflats.

2005 Surveys: 8 on the 14 May NAMC (R. Hutchingson, R. Kik IV) was the only record, presumably at the drained Scott Fountain.

Historical Records: Kelley (1978) published a record for 1 December 1964 on Belle Isle. One on 13 May 1996 in the Scott Fountain (M. Mencotti).

Lesser Yellowlegs, Tringa flavipes

Status: Uncommon to rare spring migrant.

Habitat: Beaches and mudflats.

2005 Surveys: Present from 10 May (J. Palland) to 16 May (R. Stocking, J. Palland, J. Agius) with peak of 11 on the 11 May survey at the drained Scott Fountain.

Historical Records: 7 on 15 April 2000 on beach near Water Slide, 3 on 4 May 2002 in the Scott Fountain.

Solitary Sandpiper, *Tringa solitaria*

Status: Uncommon to rare spring migrant.

Habitat: Mudflats and marshy grasslands.

2005 Surveys: Two on the 11 May survey and 1 on 16 May (R. Stocking, J. Palland, J. Agius), both at the drained Scott Fountain.

Historical Records: Reported by K. Overman but with no date or location information.

Spotted Sandpiper, *Actitis macularius*

Status: Uncommon summer resident. (Breeding confirmed in 2005)

Habitat: Rocky shorelines.

2005 Surveys: First arrival in spring was on 11 May (J. Palland, S. Jennex), and 1-2 found into summer until the 12 July survey when 6 were found, including an older fledgling being accompanied by an adult. Last recorded on the 29 August survey.

Historical Records: Unknown.

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Marbled Godwit, Limosa fedoa

Status: Accidental. Habitat: Mudflats.

2005 Surveys: None recorded.

Historical Records: Kelley (1963) notes a record for a single bird on 25 September 1952 observed by R. Cutler).

Ruddy Turnstone, Arenaria interpres

Status: Rare spring migrant.

Habitat: Beaches and rocky shorelines.

2005 Surveys: None recorded.

Historical Records: One on 13 May 1996 on the beach between the Detroit Yacht Club and the MacArthur Bridge (M. Mencotti). One reported at the Scott Fountain after being drawn down on 15 May 2002 (K. Overman, A. Dettling).

Sanderling, Calidris alba

Status: Rare fall migrant.

Habitat: Beaches and rocky shorelines.

2005 Surveys: Two on the 9 September survey on the beach at the Water Slide may have been the first ever for Belle Isle.

Historical Records: Unknown.

Semipalmated Sandpiper, Calidris pusilla

Status: Uncommon to rare spring migrant.

Habitat: Beaches and mudflats.

2005 Surveys: Two first found on the 11 May survey in the drained Scott Fountain, where a peak of 4 was recorded on the 14 May NAMC (R. Hutchinson, R. Kik IV), and one lingering until 16 May (R.

Stocking, J. Palland, J. Agius).

Historical Records: Unknown. Least Sandpiper, Calidris minutilla

Status: Uncommon spring migrant, accidental in winter.

Habitat: Beaches and mudflats.

2005 Surveys: First recorded on the 11 May survey when 13 were found in the drained Scott Fountain. A peak of 28 was found there on the 14 May NAMC (R. Hutchinson, R. Kik IV), and 4 lingered to the 19 May survey and 1 to the 26 May survey.

Historical Records: Kelley (1978) notes one on 5 December 1970. One reported at the Scott Fountain after being drawn down on 15 May 2002 (K. Overman, A. Dettling).

White-rumped Sandpiper, Calidris fuscicollis

Status: Rare spring migrant. Habitat: Beaches and mudflats. 2005 Surveys: None recorded.

Historical Records: Report from 10 May 1995 (fide T. Smart) is only known record. Source of record and details are unknown.

Pectoral Sandpiper, Calidris melanotos

Status: Probably a rare spring migrant.

Habitat: Mudflats.

2005 Surveys: None recorded.

Historical Records: Included on the Belle Isle Checklist (Belle Isle Nature Zoo 2005). Has been recorded in the drained Scott Fountain in previous years (A. Chartier), but specific details are unavailable.

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Dunlin, Calidris alpina

Status: Uncommon spring migrant. *Habitat*: Beaches and mudflats.

2005 Surveys: First reported on 9 May (R. Stocking, K. Overman), peaking on 17 May (R. Stocking, J.

Palland, J. Agius) with 60 in the drained Scott Fountain. Thirteen remained to the 19 May survey, and the last were 3 on the 26 May survey, in the nearly re-filled Scott Fountain.

Historical Records: Ten reported at the Scott Fountain after being drawn down on 15 May 2002 (K.

Overman, A. Dettling).

Short-billed Dowitcher, Limnodromus griseus

Status: Rare spring migrant.

Habitat: Mudflats.

2005 Surveys: One on 10 May (J. Palland) was presumably in the drained Scott Fountain.

Historical Records: Reported on 10 May 1995 (fide T. Smart). Source of record and details are unknown.

Long-billed Dowitcher, Limnodromus scolopaceus.

Status: Accidental. Habitat: Mudflats.

2005 Surveys: None recorded.

Historical Records: One reported by K. Overman but without date or location information. This is

apparently the only known record for Belle Isle.

Wilson's Snipe, Gallinago delicata

Status: Probably a rare migrant.

Habitat: Mudflats, wet grasslands, marshes.

2005 Surveys: None recorded.

Historical Records: Listed on the Belle Isle checklist (Belle Isle Nature Zoo 2005), but no specific date or

location of sightings is known.

American Woodcock, Scolopax minor

Status: Rare fall migrant. (Breeding possible in 2005)

Habitat: Woodlands and edges adjacent to open areas.

2005 Surveys: One flushed behind the Nature Zoo on the 19 July, 28 July, and 10 August surveys may have been the same bird, and was much too early for a migrant so could have been breeding, though no young were ever seen. One flushed along the Nashua Creek trail on the 9 September survey was also a bit early for a migrant. It, or a different bird, was seen in the same location on the 11 October survey, about when migrants would be expected to arrive.

Historical Records: Reported by K. Overman but with no date or location information.

CHARADRIIFORMES

LARIDAE (Jaegers, Gulls, and Terns)

Parasitic Jaeger, Stercorarius parasiticus

Status: Accidental. Habitat: Detroit River. 2005 Surveys: No records.

Historical Records: A dark morph immature seen on 18 December 1998 by Dave Washington and Mike

Oleary (pers. comm.).

Franklin's Gull, Larus pipixcan

Status: Accidental. Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Reports on 28 October 1970 and 19 October 1971 (fide T. Smart) are only known

records. Source of records and details are unknown.

Little Gull, Larus minutus

Status: Accidental. Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Report on 10 December 1972 (*fide* T. Smart) is only known record. Source of record and details are unknown.

Bonaparte's Gull, Larus philadelphia

Status: Rare spring and uncommon fall migrant. Rare in winter.

Habitat: Detroit River.

2005 Surveys: First spring arrivals were 4 on the 14 April survey, with the peak of 18 on the last spring record on the 29 April survey. First fall arrival was an unusually early single bird on the 29 August survey. Another was not seen until 3 on the 25 October survey. Occasional records of 5-11 birds through November, increasing to 34 on the 1 December survey and 39 on the 7 December survey. Last record was 1 on 12 December (P. Hudson).

Historical Records: 20 on 16 April 2000. 8 on the 1993 CBC (M. Blagdurn, B. Johnson, E. Johnson, D. Leasure), 5 on the 1995 CBC (M. Blagdurn, B. Johnson, D. Leasure).

Ring-billed Gull, Larus delawarensis

Status: Common permanent resident. (Observed during breeding season in 2005)

Habitat: Detroit River (generally rare when frozen), open grassy areas.

2005 Surveys: A total of 973 were recorded on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure), and was a good high count for a CBC. The 1675 on 10 March may represent the peak of spring migration. Summer (July) numbers ranged from 479-926, and consisted entirely of adults, probably loafing between feeding bouts in the Detroit River, and before returning to nesting colonies elsewhere on the Detroit River and Lake St. Clair. Many could possibly be non-breeding adults as well. During August, numbers ranging from 459-791 included a fairly large proportion (~25-35%) of juveniles, able to fly and probably hatched nearby. The fall peak was 1175 on 28 November, with numbers reduced to 70 by the 29 December survey, and only 14 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Totals on recent CBCs has ranged from 3 in 1990 (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit) to 560 in 1995 (M. Blagdurn, B. Johnson, D. Leasure).

Herring Gull, Larus argentatus

Status: Rare summer resident (not breeding), common winter resident.

Habitat: Detroit River (generally more common when frozen).

2005 Surveys: A total of 148 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Numbers quickly decreased to no more than about 20 during January-March with the last spring record of 16 on 29 March. Records from May-October (generally less than 10 birds each day) are likely wanderers from breeding colonies nearby in Detroit River and on Lake St. Clair. The first fall influx of migrants or winter residents was 30 on 25 November, increasing to 72 on 28 November and 110 by 21 December. Only 48 recorded on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Totals on recent CBCs has ranged from 46 in 1990 (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit) to 141 in 2001 (M. Blagdurn, R. Kovalcik, S. Campbell).

Thayer's Gull, Larus thayeri

Status: Rare winter visitor.

Habitat: Detroit River.

2005 Surveys: One in 1st winter plumage on 25 November (A. Chartier, Cathy Carroll, E. Lewandowski, T. Shehan, N. Gilbert), and one adult on 4 December (S. Jennex).

Historical Records: One in 2nd winter plumage on 20 March 2003.

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Iceland Gull, Larus glaucoides

Status: Rare winter visitor. Habitat: Detroit River.

2005 Surveys: 1 in 3rd winter plumage offshore of the Water Slide on the 29 December 2005 survey.

Historical Records: Kelley (1963) recorded one on 7 April 1950 (observed by Kelley), and two others on 18 April 1950 at nearby Peche Island, Ontario (observed by M. Reynolds). Presumably, this was not a Thayer's Gull, which was not recognized as a separate species by the A.O.U. until 1975. Thus, the 2005 record is the first actually on Belle Isle.

Lesser Black-backed Gull, Larus fuscus

Status: Rare winter visitor. Habitat: Detroit River.

2005 Surveys: One adult on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure); probably the same bird on 23 February (A. Chartier). One in 2nd winter plumage on 5 December (J. Agius), the 29 December survey (A. Chartier), and 31 December (N. Gilbert). One adult on the 1 January 2006 CBC (M. Blagdurn).

Historical Records: One on 22 November 1996 (M. Mencotti).

Glaucous Gull, Larus hyperboreus

Status: Rare winter visitor.

Habitat: Detroit River (mainly when frozen).

2005 Surveys: Two on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure).

Historical Records: 1 on the 1996 CBC (M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti), and 1 on the 2001 CBC (M. Blagdurn, R. Kovalcik, S. Campbell).

Great Black-backed Gull, Larus marinus

Status: Uncommon winter resident. Rare into spring.

Habitat: Detroit River.

2005 Surveys: Nine on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Two or three seen intermittently through 10 March. One on the 19 May survey. The first fall arrival was 1 on 10 December (E. Lewandowski, N. Gilbert), and 2 on the 29 December survey. Three were on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: One on 3 May 1998, 2 on 3 April 2001. Numbers on CBCs has ranged from 1 in 1990 (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit) and 1996 (M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti) to 26 in 2001 (M. Blagdurn, R. Kovalcik, S. Campbell).

Black-legged Kittiwake, Rissa tridactyla

Status: Accidental. Habitat: Detroit River.

2005 Surveys: One winter plumaged adult on the 1 December survey. (also seen off Grosse Pointe on 4 December by M. Blagdurn).

Historical Records: None.

Caspian Tern, Sterna caspia

Status: Uncommon summer resident. (Observed during breeding season in 2005)

Habitat: Detroit River, beaches.

2005 Surveys: Only spring record was 1 on 28 April (R. Stocking, J. Fowler, D. Washington). One to three birds on surveys between 10 August and 21 September were probably post-breeding wanderers from nearby breeding colonies on Detroit River or Lake St. Clair.

Historical Records: Unknown.

Common Tern, Sterna hirundo

Status: Rare spring and fall migrant.

Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Kelley (1963) indicates young were banded from nests on Belle Isle on 2 August 1958 and 9 August 1959. Probably none nesting since.

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Forster's Tern, Sterna forsteri

Status: Uncommon summer resident. (Observed during breeding season in 2005)

Habitat: Detroit River.

2005 Surveys: First spring record was 4 on the 29 April survey, and peak was 6 on the 6 May survey. Numbers dwindled to 1-3 birds through May and into summer (likely wanderers from nearby breeding colonies in Detroit River and Lake St. Clair). Late fall migrants included 2 on the 11 October survey and

3 on the 2 November survey.

Historical Records: Six on 11 May 1996 NAMC, 10 on 16 April 2000, 5 on 5 October 2004.

Black Tern, Chlidonias niger

Status: Rare migrant. Habitat: Detroit River.

2005 Surveys: None recorded.

Historical Records: Listed on the Birds of Belle Isle checklist (Belle Isle Nature Zoo 2005), but it is unclear what the most recent record was, as this species has declined significantly in southeastern Michigan since the 1970s.

COLUMBIFORMES

COLUMBIDAE (Pigeons and Doves)

Rock Pigeon, Columba livia

Status: Common permanent resident. Introduced. (Breeding probable in 2005)

Habitat: Man-made structures and open grassy areas. Often seen flying over Detroit River.

2005 Surveys: Recorded on surveys throughout the year, with peak numbers in fall as might be expected by fledglings entering the population (287 on the 23 November survey was the peak). Courtship activity was observed during summer months, but nests not found as they are often well hidden within manmade structures, and under bridges.

Historical Records: Has been common in the Detroit area for decades.

Mourning Dove, Zenaida macroura

Status: Uncommon to rare permanent resident. (Breeding probable in 2005)

Habitat: Woodland edges and open areas.

2005 Surveys: A total of 19 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Rarely observed February through April, and only 1-2 birds. In May, numbers increased to 7-12 birds, and declining to 4-7 during the summer months. Courtship activity was observed during May, which is when one would expect a second brood of this species, which typically begins nesting in March, when there were almost no records on Belle Isle in 2005. It seems likely that only 3-5 pairs bred on Belle Isle this year, an unexpectedly low number for this normally fairly common species near human environments. Numbers remained low through October, and 23 were on the 2 November survey, with numbers varying through the end of the year between 7-19 birds, but with a total of 41 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Apparently never numerous on Belle Isle, with high counts of only 7 on 10 May 1997 NAMC, 10 on 16 April 2000, 8 on 13 May 2000 NAMC, 12 on 4 November 2003.

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CUCULIFORMES

CUCULIDAE (New World Cuckoos)

Black-billed Cuckoo, Coccyzus erythropthalmus

Status: Rare spring and fall migrant.

Habitat: Woodlands and woodland edges.

2005 Surveys: One on 9 May (R. Stocking, K. Overman) was unusually early for this species in the state, and one flushed from goldenrod near the Nature Zoo on the 11 October survey was one of the latest ever in Michigan, and in unusual habitat even for a migrant.

Historical Records: Unknown.

Yellow-billed Cuckoo, Coccyzus americanus

Status: Rare migrant.

Habitat: Woodlands and woodland edges.

2005 Surveys: One on the 9 September survey in swamp woods was unusual because it was singing,

something that migrant cuckoos rarely do.

Historical Records: Unknown.

STRIGIFORMES

STRIGIDAE (Typical Owls)

Eastern Screech-Owl, Megascops asio

Status: Uncommon permanent resident. (Breeding probable in 2005)

Habitat: Woodland.

2005 Surveys: One was found, using a tape lure, on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure), and one was reported on 29 January (S. Jennex). A total of 11 was reported on the 14 May NAMC (R. Hutchinson, R. Kik IV). This seems to be an unusually dense breeding population even if some responding to tape were females. The configuration of the roads through the swamp forest could contribute to duplications of counts as individuals could easily move between Oakway Trail and Central Avenue and still be in their territory as these roads are run parallel through the woodland less than 0.25 miles apart. Gehlbach (1995) indicates a "home range" in Connecticut of 6-9 hectares (14.8-22.2 acres) in breeding season and 16 hectares (39.5 acres) in winter. One heard calling in daylight hours on the 11 November survey, one on 5 December (J. Agius), and two were on the 1 January 2006 CBC (M. Blagdurn).

Historical Records: Unknown. Has probably always nested in the swamp woods on Belle Isle. Has been recorded on most recent CBCs, with 1-3 birds typically found, but none in 1996.

Great Horned Owl, Bubo virginianus

Status: Rare permanent resident. (Breeding confirmed in 2005)

Habitat: Woodland.

2005 Surveys: One on the 1 January 2006 CBC (M. Blagdurn, J. Agius, D. Leasure). An adult with two fledglings was observed on the 14 May NAMC (R. Hutchinson, R. Kik IV), providing breeding confirmation. One on 5 November (S. Jennex, S. Santner), and one on the 14 December survey.

Historical Records: Was present on island in late 1970s (A. Chartier pers. obs.). One on 12 May 2001 NAMC. Has been recorded on most recent CBCs, with 1-2 birds typically found, but none in 1994 or 2006.

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Snowy Owl, Bubo scandiacus

Status: Rare and irregular winter visitor.

Habitat: Open areas.

2005 Surveys: None recorded.

Historical Records: One on a lightpost near the Scott Fountain in December 1980 (A. Chartier, later seen by others near the Lighthouse), and one on a buoy in the Detroit River on 5 January 1992 (M. Mencotti), are the only known records.

Northern Saw-whet Owl, Aegolius acadicus

Status: Uncommon to rare migrant and winter resident.

Habitat: Dense tangles in woodland edges and understory.

2005 Survey: All were along the Nashua Creek Trail. One on 30 March (J. Palland - photo); one found on 1 November (A. Chartier, K. Overman). None again until one on the 23 November survey, and thereafter found continuously at day roosts through the end of the year, with a second bird located on 26 November (W. Fissell), and a third bird located on 3 December (E. Lewandowski, W. Fissell), and three were present most days through the 1 January 2006 CBC (A. Chartier). Birds occasionally changed roosts (6 sites identified) or moved to roosts not located.

Historical Records: Reported by K. Overman in March sometime in the 1970s or 1980s (pers. comm.). Difficult to find and likely has been overlooked in other years.

CAPRIMULGIFORMES

CAPRIMULGIDAE (Nightjars and Nighthawks)

Common Nighthawk, Chordeiles minor

Status: Rare migrant.

Habitat: Overhead. Breeds on open rocky areas, often on rooftops.

2005 Surveys: One migrant on the 26 May survey.

Historical Records: Unknown. In general, has declined significantly throughout southeastern Michigan in the past 20-30 years.

APODIFORMES

<u>APODIDAE</u> (Swifts)

Chimney Swift, Chaetura pelagica

Status: Common migrant and summer resident. (Observed during breeding season in 2005)

Habitat: Overhead. Breeds mainly inside man-made structures, particularly chimneys, but also inside old buildings and even inside lighthouses.

2005 Surveys: First spring arrivals were 2 on the 29 April survey, with peak of 49 on the 11 May survey, and 34 as late as the 26 May survey. A total of 8-22 through July, including birds near the MacArthur Bridge, suggesting that they might be nesting underneath, provided it is dark enough. The 48 birds on the 10 August survey may have been adults with young as migration in this species is typically later in September and October. Peak in fall was 321 on the 14 September survey, and the latest were 79 on the 6 October survey and 19 on the 11 October survey.

Historical Records: 30 on 7 October 2001.

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APODIFORMES

TROCHILIDAE (Hummingbirds)

Ruby-throated Hummingbird, Archilochus colubris

Status: Rare spring and uncommon fall migrant. Presence in summer unconfirmed.

Habitat: Woodland edges and openings.

2005 Surveys: Only spring report was 1 on 11 May (J. Palland, S. Jennex). In fall, recorded on three surveys between 9-27 September, with a peak of 5 on 14 September (all visiting flowers on eastern end of island, including three in the gardens near the Nature Zoo).

Historical Records: Unknown. Presence of hummingbird feeders, not present in 2005, would increase detectability of this species, and may be the only reasonable opportunity to confirm the species presence during the breeding season.

CORACIIFORMES

<u>ALCEDINIDAE</u> (Kingfishers)

Belted Kingfisher, Ceryle alcyon

Status: Uncommon summer resident, rare in winter. (Breeding probable in 2005)

Habitat: Inland lakes and creeks, Detroit River shoreline.

2005 Surveys: One on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Not reported again until 3 on the 8 April survey. Intermittent reports of a single bird through April and May. Reports during July of 1-2 birds, and during August of 3-4 birds (including a pair) suggest probable breeding. Last report of 3 birds was on the 27 September survey, with mainly single birds reported thereafter through 18 October. No additional reports until 1 on the 23 November survey. In December 2 were on the 7 December survey and 1 on the 21 December survey.

Historical Records: Single birds have been reported on the 1993 CBC (M. Blagdurn, B. Johnson, E. Johnson, D. Leasure) and the 2001 CBC (M. Blagdurn, R. Kovalcik, S. Campbell).

PICIFORMES

PICIDAE (Woodpeckers)

Red-headed Woodpecker, Melanerpes erythrocephalus

Status: Rare migrant. Habitat: Open woodland.

2005 Surveys: One immature on the 2 November survey in the swamp woods was the only record, and was likely a late migrant.

Historical Records: Formerly bred on Belle Isle (pers. obs.), but not seen during summer in several years. Probably intense competition with abundant European Starlings has forced the species out. Reported on 23 February and 15 March 1992 (M. Mencotti), 1 on 11 May 1996 NAMC, 2 on 10 May 1997 NAMC, 1 on 9 May 1998 NAMC, 2 on 8 May 1999 NAMC. Four on the 1990 CBC (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit) and 2 on the 1995 CBC (M. Blagdurn, B. Johnson, D. Leasure).

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Red-bellied Woodpecker, Melanerpes carolinus

Status: Uncommon permanent resident. (Breeding probable in 2005)

Habitat: Woodlands.

2005 Surveys: One on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Next reported at the end of March, mainly because informal surveys did not cover woodlands. Reported on 22 of 30 surveys through the year, including a pair seen at least once during the breeding season indicating probable breeding. Peak count was 6 on the 11 November survey. Two on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Single birds recorded on most CBCs since 1990. Was rare in southern Michigan before 1970, but has colonized the entire Lower Peninsula since then, and is beginning to occur in parts of the Upper Peninsula with some regularity.

Yellow-bellied Sapsucker, Sphyrapicus varius

Status: Uncommon spring and fall migrant, rare in winter.

Habitat: Woodlands.

2005 Surveys: First spring arrival was on 7 April (R. Stocking), with a peak of 3 on 12 April (R. Stocking), and last on 14 April (R. Stocking, J. Agius). First fall arrival was 4 on the 27 September survey, with a peak of 7 on the 6 October survey. Two remained at the east end of the zoo through the 21 December survey, and 1 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) was the first in recent years on a CBC.

Historical Records: Unknown.

Downy Woodpecker, Picoides pubescens

Status: Common permanent resident. (Breeding probable in 2005)

Habitat: Woodland, including open parkland in summer.

2005 Surveys: First recorded on the 1 January 2005 CBC (M. Blagdurn, J. Agius. Recorded on all 30 surveys, with numbers ranging from 3-32 (peak was on 14 December). Thirteen on the 1 January 2006 CBC (M. Blagdurn, A. Chartier). A number of pairs were seen in the swamp woodlands, including territorial chasing. Fewer were present in the open parklands on the west end of the island from April through October, when they seemed to perhaps move into the swamp woods for the winter.

Historical Records: Recorded annually on CBCs, with counts ranging from 6-11 individuals.

Hairy Woodpecker, Picoides villosus

Status: Uncommon permanent resident. (Breeding probable in 2005)

Habitat: Woodland.

2005 Surveys: One on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Recorded on 16 of 30 surveys, from 29 April to 29 December. Mostly 1-2 birds, but 3 on the 11 November survey and 4 on the 14 December survey. One on the 1 January 2006 CBC (M. Blagdurn, A. Chartier). Presence of calling and drumming birds through summer indicated probable breeding.

Historical Records: Recorded on most recent CBCs, with 1-2 on each count.

Northern Flicker, Colaptes auratus

Status: Uncommon summer resident, rare in winter. (Breeding probable in 2005)

Habitat: Woodland and open parkland.

2005 Surveys: First spring arrival was 1 on 31 March (J. Agius), with peak of 7 on 14 and 29 April surveys. Through summer, two to four seen, including one seen defending a nest cavity from several European Starlings, providing evidence of probable breeding. Increase during August, before fall migration, to 6-8 birds probably included locally hatched young but this could not be confirmed. Peak of fall migration was 19 on the 27 September survey and 13 on the 6 October survey, dwindling to a single bird by 25 October, which was last recorded on the 11 November survey. It is unclear what was the source of the bird on the 29 December survey and on the 1 January 2006 CBC (M. Blagdurn, A. Chartier). Perhaps an overlooked individual from the late fall season.

Historical Records: Two on 30 March 2004. Reported on 1990 (3), 1993 (1), 1995 (1), and 1996 (1) CBCs.

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PASSERIFORMES

TYRANNIDAE (Tyrant Flycatchers)

Olive-sided Flycatcher, Contopus cooperi

Status: Rare migrant. *Habitat*: Woodlands.

2005 Surveys: One on the 9 September survey, somewhat late for this species, was perhaps the first record

for Belle Isle.

Historical Records: None.

Eastern Wood-Pewee, Contopus virens

Status: Uncommon summer resident. (Breeding confirmed in 2005)

Habitat: Woodlands.

2005 Surveys: First spring record was 4 on the 19 May survey, which were probably locally breeding birds.

During August, 5-10 birds recorded per survey, including adults feeding young, which confirmed breeding. Up to 4 birds lingered to the 14 September survey, and the latest individual was on the 6 October survey.

Historical Records: One on 7 October 2001, 3 on 13 May 2000 NAMC, 2 on 12 May 2001 NAMC.

Yellow-bellied Flycatcher, Empidonax flaviventris

Status: Rare migrant.

Habitat: Woodland edges and shrubby areas. 2005 Surveys: One on the 29 August survey.

Historical Records: Unknown.

Acadian Flycatcher, Empidonax virescens

Status: Rare spring migrant. Habitat: Swamp woods. 2005 Surveys: None recorded.

Historical Records: One on 13 May 2000 NAMC.

Willow Flycatcher, Empidonax traillii

Status: Uncommon and local summer resident. (Breeding probable in 2005)

Habitat: Shrubby areas.

2005 Surveys: Found only in the prairie restoration area at the east end of Blue Heron Lagoon. First spring arrivals were 2 on the 19 May survey. A single singing bird was present through the summer months, providing evidence of probable breeding. Last record was on the 28 July survey.

Historical Records: Unknown.

Least Flycatcher, Empidonax minimus

Status: Uncommon migrant.

Habitat: Woodlands, woodland edges, and shrubby areas.

2005 Surveys: First spring arrivals were 2 on the 6 May survey, with a peak and last spring date with 5 on the 19 May survey. First fall arrivals were 4 on the 29 August survey and the latest were 2 on the 2 September survey.

Historical Records: Four on 11 May 1996 NAMC, 6 on 13 May 2000 NAMC.

Eastern Phoebe, Sayornis phoebe

Status: Uncommon spring and fall migrant, rare in summer. (Breeding possible in 2005)

Habitat: Woodland edges and shrubby areas near water.

2005 Surveys: First spring arrival was 1 on the 8 April survey. Only two other spring records, 1 on 12 April (R. Stocking), and 1 on the 14 May NAMC (R. Hutchinson, R. Kik IV). One near the bridge over the outlet at the east end of Blue Heron Lagoon on the 23 August survey was in appropriate breeding habitat and too early to be a migrant, thus providing evidence of possible breeding. Also present there on the 9 and 14 September surveys. Two birds on the 27 September survey may have been the first fall arrivals, with a peak of 6 on the 6 October survey. The last fall departure was 1 on 25 October.

Historical Records: Unknown.

Great Crested Flycatcher, Myiarchus crinitus

Status: Uncommon summer resident. (Breeding probable in 2005)

Habitat: Woodlands.

2005 Surveys: First spring arrival was 1 on the 11 May survey. Peak was 4 on the 26 May survey. One singing into early July provided evidence of probable breeding. Latest fall departure was 2 on the 14 September survey.

Historical Records: Unknown. **Eastern Kingbird**, Tyrannus tyrannus

Status: Fairly common summer resident. (Breeding confirmed in 2005)

Habitat: Open parkland and shrubby areas.

2005 Surveys: First spring arrival was 2 on 9 May (R. Stocking, K. Overman), with a peak of 13 on the 26 May survey. Present through July, with frequent territorial chases observed, and adults feeding young providing breeding confirmation. On the 10 August survey, a peak of 20 birds was probably adults and young staging for migration, with 18 recorded on the 28 August survey. Two birds lingered unusually late to the 14 September survey.

Historical Records: Four on 8 May 1999 NAMC.

PASSERIFORMES

<u>LANIIDAE</u> (Shrikes)

Northern Shrike, Lanius excubitor

Status: Rare and irregular winter visitor.

Habitat: Open shrubby areas. 2005 Surveys: None recorded.

Historical Records: One on 1 January 1996 CBC (M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti).

One on 1 January 2001 CBC (M. Blagdurn, R. Kovalcik, S. Campbell).

PASSERIFORMES

VIREONIDAE (Vireos)

White-eyed Vireo, Vireo griseus

Status: Rare spring migrant.

Habitat: Tangled woodland edges and shrubby areas.

2005 Surveys: None recorded.

Historical Records: Included on the Belle Isle checklist (Belle Isle Nature Zoo 2005), but no date, location,

or observer is known.

Yellow-throated Vireo, Vireo flavifrons

Status: Rare spring migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrival was 1 on the 11 May survey. Peak of 3 on the 14 May NAMC (R.

Hutchinson, R. Kik IV). Last spring record was 1 on the 19 May survey.

Historical Records: Unknown.

Blue-headed Vireo, Vireo solitarius

Status: Uncommon spring and fall migrant.

Habitat: Woodlands and shrubby areas.

2005 Surveys: First spring arrival was 1 on 26 April (L. Modesitt, P. Berrigan, J. Olesen), with single birds on the 29 April 6 May, and 11 May surveys, and on the 14 May NAMC (R. Hutchinson, R. Kik IV).

First fall arrival was 1 on the 21 September survey, with single birds on the 6 October and 2 November surveys, the latter date somewhat late for the species.

Historical Records: Unknown.

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Warbling Vireo, Vireo gilvus

Status: Common summer resident. (Breeding confirmed in 2005)

Habitat: Woodlands, including second growth and shrubby areas.

2005 Surveys: First spring arrival was 1 on the 6 May survey. Peaks were 11 on the 11 May survey and 23 on the 26 May survey. Between 8 and 18 was recorded during July, and the larger numbers on the latter dates were adults feeding young, providing confirmation of breeding. Numbers in August peaked at 19 on the 23 August survey. Numbers dwindled through September from a high of 8 on the 9 September survey, and the latest 1 on the 27 September survey.

Historical Records: One on 4 May 2002.

Philadelphia Vireo, Vireo philadelphicus

Status: Rare spring and fall migrant.

Habitat: Woodland and shrubby areas.

2005 Surveys: Three spring records; 1 on the 19 May survey, 1 on 25 May (S. Jennex), and 1 on the 26 May survey.

Historical Records: Unknown.

Red-eved Vireo, Vireo olivaceus

Status: Uncommon summer resident. (Breeding probable in 2005)

Habitat: Woodlands.

2005 Surveys: First spring arrival was 6 on the 11 May survey, with peak of 20 on the 26 May survey.

During summer, territorial chases provided evidence of probable breeding, with 3-6 birds on each survey in July. Fall migration peak may have been 10 on the 29 August survey, with the latest a single bird on the 11 October survey.

Historical Records: Two on 5 May 2001.

PASSERIFORMES

CORVIDAE (Crows and Jays)

Blue Jay ,Cyanocitta cristata

Status: Common permanent resident. (Breeding confirmed in 2005)

Habitat: Woodlands, open parkland.

2005 Surveys: First spring record was 1 on the 8 April survey, but was undoubtedly present Jan-Mar, though not recorded on the 1 January 2005 CBC. Peak in spring was 38 on the 11 May survey. Adults feeding young in August provided confirmation of breeding, with a peak of 36 on the 29 August survey. The typical peak fall migration period for this species in southeastern Michigan and southwestern Ontario is 25 September – 15 October. By 14 September, the daily count was up to 84, and on the 27 September survey the count was 142, dropping to 116 on the 6 October survey, and dwindling to 33 on the 29 December survey and on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: 125 on 4 May 2002. Numbers on recent CBCs have ranged from 29-84, with 2005 the only recent year with none.

American Crow, Corvus brachyrhynchos

Status: Uncommon permanent resident. (Observed during breeding season in 2005)

Habitat: Woodland, open areas.

2005 Surveys: Only 2 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). None again until April, when 1-5 birds per day were seen on surveys. The 11 on 11 May was the highest daily total in the spring, with only a couple single birds on other survey dates in May. None during July, but 9 on the 29 August survey. Only two single birds reported in September, with an increase in October with 11 on the 6 October survey and 25 on 15 October. Widely scattered reports of single birds through November and December, with 2 on the 21 December survey.

Historical Records: Has declined significantly since summer 2002 due to West Nile Virus. 86 on 7 December 1999, 100 on 28 January 2002. CBC numbers seem to validate this decline: 523 in 1990, 32 in 1993, 65 in 1994, 34 in 1995, 18 in 1996, 58 in 2001, 2 in 2005, and 0 in 2006.

PASSERIFORMES

<u>ALAUDIDAE</u> (Larks)

Horned Lark, Eremophila alpestris

Status: Rare spring and fall migrant.

Habitat: Open grassy areas, flying overhead.

2005 Surveys: All records were of birds flying overhead. First fall record was 4 on the 2 November survey; followed by 1 on the 7 November survey, and 5 on the 29 December survey. One on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) was apparently the first recent CBC record.

Historical Records: Two on 15 March 2002.

PASSERIFORMES

HIRUNDINIDAE (Swallows)

Purple Martin, Progne subis

Status: Rare spring and fall migrant.

Habitat: Open areas.

2005 Surveys: Only records were 2 on the 10 August survey and 1 on the 29 August survey. Probably bred nearby (Grosse Pointe), but not on the island.

Historical Records: Reported on 28 April 1998 (M. Mencotti).

Tree Swallow, Tachycineta bicolor

Status: Fairly common migrant, uncommon summer resident. (Breeding confirmed in 2005)

Habitat: Wetlands with standing dead trees.

2005 Surveys: First spring arrival was 12 on 5 April (A. Chartier, J. Agius). Increased to 17 on the 11 May survey, and peaked with 57 on the 14 May NAMC (R. Hutchinson, R. Kik IV). Perhaps 4-6 pairs nested behind the Nature Zoo, and seen feeding young during July, providing confirmation of breeding. Numbers declined significantly in August, with only 2 seen on the 29 August survey, and similar numbers through September. Latest record was 4 on the 6 October survey.

Historical Records: 77 on 11 May 1996 NAMC, 50 on 7 October 2001, 50 on 4 May 2002.

Northern Rough-winged Swallow, Stelgidopteryx serripennis

Status: Uncommon migrant and summer resident. (Breeding confirmed in 2005)

Habitat: Open areas, nesting in natural and man-made cavities.

2005 Surveys: First spring arrival was 3 on the 6 May survey, with a peak of 40 on the 14 May NAMC (R. Hutchinson, R. Kik IV), declining to 9 on the 29 May survey. It is unknown how many pairs nested on the island, but many of the 15-32 birds seen during July were juveniles being fed by adults. Numbers declined quickly with 8 on the 28 July survey, 16 on the 10 August survey, and the latest 3 on the 27 September survey.

Historical Records: 42 on 11 May 1996 NAMC, 14 on 5 October 2004.

Bank Swallow, Riparia riparia

Status: Uncommon spring migrant.

Habitat: Open areas, nesting in vertical banks of sand or soil.

2005 Surveys: First spring record was 2 on the 6 May survey, and singles were on 16 May (R. Stocking, S. Jennex, J. Agius) and 17 May (R. Stocking, J. Palland, J. Agius). Typically migrates earlier than other swallows in fall, so may have been missed by observers in previous years, but lack of fall records during weekly surveys in 2005 is puzzling.

Historical Records: 30 on 11 May 1996 NAMC.

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Cliff Swallow, Petrochelidon pyrrhonota

Status: Common migrant and summer resident. (Breeding confirmed in 2005)

Habitat: Open areas, breeds on cliff faces, under bridges, and on buildings.

2005 Surveys: First spring arrival was 4 on the 22 April survey, with a peak of 115 on the 11 May survey, which were undoubtedly all adults on this date. During early July, 52-95 birds each day consisted of numerous juveniles being fed by adults, providing confirmation of breeding. On the 28 July survey only 12 were located, and were also the last of the year. Nests were either seen or presumed present based on bird activity, under the MacArthur Bridge, on a round lighthouse off the east end of the island, and under the South Fishing Pier. Nests were suspected under the bridge over the Loop Canal near the Casino, and under the North Fishing Pier. Further investigations to census nests is warranted.

Historical Records: Has been increasing in recent years as a breeding bird on Belle Isle. 5 on 11 May 1996 NAMC, 1 on 9 May 1998 NAMC, 31 on 8 May 1999 NAMC, 40 on 13 May 2000 NAMC, 10 on 12 May 2001 NAMC.

Barn Swallow, Hirundo rustica

Status: Common migrant and summer resident. (Breeding confirmed in 2005)

Habitat: Open areas, breeds under bridges and on buildings.

2005 Surveys: First spring arrival was 1 on the 14 April survey, with a peak of 169 on the 14 May NAMC (R. Hutchinson, R. Kik IV). Numbers declined to 51 by the 29 May survey. During July, 77-126 birds each day consisted of numerous juveniles being fed by adults, providing confirmation of breeding. Nests were either seen or presumed present based on bird activity under the MacArthur Bridge, under the South Fishing Pier, and under the bridge over the Loop Canal near the Casino. Further investigations to census nests is warranted. During fall, numbers peaked at 187 on the 23 August survey, which was likely post-breeding gathering of migrants. The latest was 12 on the 2 September survey.

Historical Records: 338 on 11 May 1996 NAMC.

PASSERIFORMES

PARIDAE (Chickadees and Titmice)

Black-capped Chickadee, *Poecile atricapillus*

Status: Rare permanent resident. (Breeding possible in 2005)

Habitat: Woodlands.

2005 Surveys: First record was 2 on the 14 April survey, with only 1-2 birds occasionally seen on surveys through the end of May. Evidence of breeding was based only on the presence of 1-2 singing birds through the summer months, thus only allowing breeding status to be considered possible, with evidence of at most 2 pairs on the entire island. Only 2 birds present as late as the 11 October survey, but evidence of an irruption began with 11 on 1 November (A. Chartier, K. Overman) and 23 on the 2 November survey, and peaking with 41 on the 7 November survey, declining to 16 on the 23 November survey. At migration stations, these irruptions usually begin rather suddenly around the third week of October, and taper off significantly by mid-November, with numbers returning to pre-irruption levels by the end of November (Chartier 2002). This year at Belle Isle, numbers remained higher throughout December, perhaps due to a lack of resident territorial chickadees to force them to move on. This is evidenced by 24 on the 7 December survey, 34 on the 14 December survey, and 27 on the 21 and 29 December surveys. Nineteen reported on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Undergoes periodic irregular migrations (irruptions), about every 3-4 years. Has declined significantly since summer 2002 due to West Nile Virus. 10 on 11 May 1996 NAMC, 4 on 10 May 1997 NAMC, 6 on 8 May 1999 NAMC, 4 on 12 May 2001 NAMC. Generally lower numbers in winter, with 1-6 reported on CBCs from 1990-2001.

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Boreal Chickadee, Poecile hudsonica

Status: Accidental (Restricted to the Upper Peninsula and generally non-migratory).

Habitat: Spruce bogs in boreal forest; during rare irruptions found in woodland and shrubby areas.

2005 Surveys: None reported.

Historical Records: Kelley (1978) describes the Black-capped Chickadee irruption of the winter of 1972-1973 as including the largest numbers of Boreal Chickadees ever reported in the region (45 birds from 8 locales in SE Michigan). Thus, a 1972 record for Belle Isle, likely in late October or November (*fide* K. Overman, but not seen by him, and not specified by Kelley), seems quite plausible.

Tufted Titmouse, Baeolophus bicolor

Status: Uncommon to rare permanent resident. (Breeding confirmed in 2005)

Habitat: Woodlands.

2005 Surveys: First reported with 5 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Next report was 4 on 31 March (J. Agius), when birds were probably already beginning to nest. Perhaps two pairs bred on Belle Isle, and during late July adults were seen feeding young, providing confirmation of breeding. Subsequent increases in numbers undoubtedly involved adults and independent young; 6 on the 28 July survey, 7 on the 23 August survey, and 5 on the 2 September survey. One to six birds recorded on surveys through December, and 1 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Has declined significantly since summer 2002 due to West Nile Virus. Four on 11 May 1996 NAMC, 6 on 10 May 1997 NAMC, 14 on 9 May 1998 NAMC, 10 on 2 May 1999, 10 on 5 May 2001, 10 on 4 May 2002. Declines even more evident from CBC data: 11 in 1990, 15 in 1993, 28 in 1994, 17 in 1995, 21 in 1996, 21 in 2001, 5 on 2005, and 1 in 2006.

PASSERIFORMES

SITTIDAE (Nuthatches)

Red-breasted Nuthatch, Sitta canadensis

Status: Irregular spring and fall migrant.

Habitat: Woodlands.

2005 Surveys: Only spring record was 2 on the 19 May survey. First fall record was 3 on the 9 September survey. Single birds were noted from the 14 September survey through the 18 October survey, with two on the 11 October survey. Most were in the vicinity of the zoo, but a couple were detected in open parkland just south of the Water Slide.

Historical Records: One on 11 May 1996 NAMC, one on 5 October 2004.

White-breasted Nuthatch, Sitta carolinensis

Status: Fairly common permanent resident. (Breeding probable in 2005)

Habitat: Woodlands.

2005 Surveys: First 4 recorded on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Not recorded again until 31 March (J. Agius), primarily due to a lack of surveys in woodlands until early April. Thereafter recorded on 28 out of 30 surveys. Singing birds recorded throughout July provided evidence of probable breeding, and increased numbers into fall undoubtedly were the result of young fledging, but unfortunately none were seen being fed. Perhaps 3-5 pairs were breeding in the swamp woods. The peak was 19 on the 14 December survey. Six were reported on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Recorded annually on CBCs, with totals ranging from 1-10 individuals.

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PASSERIFORMES

<u>CERTHIIDAE</u> (Creepers)

Brown Creeper, Certhia americana

Status: Uncommon spring and fall migrant, rare in winter.

Habitat: Woodlands.

2005 Surveys: First spring report was 3 on 31 March (J. Agius); singles on 7 April (R. Stocking) and 14 April (R. Stocking, J. Agius). First fall arrival was 2 on the 27 September survey, with peak of 11 on the 11 September survey. Numbers dwindled to 3 on the 2 November survey and on the 11 November survey. Single birds reported occasionally through the remainder of November and December, with 1 on the 29 December survey and 2 on the 1 January 2006 CBC (M. Blagdurn, J. Agius).

Historical Records: One on 10 May 1997 NAMC, 1 on 2 May 1999.

PASSERIFORMES

TROGLODYTIDAE (Wrens)

Carolina Wren, Thryothorus ludovicianus

Status: Rare permanent resident. (Breeding possible in 2005)

Habitat: Woodland edges and shrubby areas.

2005 Surveys: A singing bird was located at the east end of Blue Heron Lagoon on the 29 August survey, suggesting possible breeding, with at most a single pair on the island. Two birds, one singing, one calling, were south of the Nature Zoo along Central Avenue about 1/8 – 1/4 mile west of Lakeside Drive on the 14 September survey. Mainly single birds (2 on the 11 October survey) were found in this same general area irregularly through late December (1 on the 29 December survey), with no records from mid-November to late December. This species' tendency to wander widely and have fairly large territories may account for the irregular detection on surveys, in addition to the fact that surveys around Blue Heron Lagoon were not initiated until August, where it is possible they were breeding this year.

Historical Records: Unknown.

House Wren, Troglodytes aedon

Status: Common summer resident. (Breeding confirmed in 2005)

Habitat: Woodlands, woodland edges, and shrubby areas.

2005 Surveys: First spring arrivals were 2 on the 22 April survey, with a peak of 18 on the 11 May survey. From late May through July, 10-14 singing birds were detected each day, suggesting perhaps as many breeding pairs on the island. During August, adults were seen feeding fledglings, providing confirmation of breeding. Good numbers remained into September, with 16 on the 14 September survey, and the latest fall record was 9 on the 11 October survey.

Historical Records: Unknown.

Winter Wren, Troglodytes troglodytes

Status: Uncommon spring and fairly common fall migrant. Rare winter resident.

Habitat: Dense undergrowth in woodlands and woodland edges.

2005 Surveys: First spring arrival was 2 on 31 March (J. Agius), with singles from the 8 April survey through the 29 April survey (2 on 14 April – R. Stocking, J. Agius). First fall arrival was 2 on the 21 September survey, with a peak of 38 on the 11 October survey. Nine still present on the 29 October survey, with numbers dwindling to 3 on the 2 November survey and 1 on the 7 November survey. The fall peak total this year may have been the largest ever recorded anywhere in Michigan, and may have been a reflection of a better than normal season for this species region-wide.

Historical Records: One on 11 May 1996 NAMC, 1 on 3 May 1998, 1 on 8 May 1999 NAMC.

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Marsh Wren, Cistothorus palustris

Status: Rare migrant.

Habitat: Breeds in extensive cattail marsh, occasionally in non-native invasive Phragmites in migration.

2005 Surveys: One on 2 September in *Phragmites* across from the Golf Course on Oakway Trail was perhaps only the second record for Belle Isle.

Historical Records: Reported by K. Overman but with no date or location information.

PASSERIFORMES

REGULIDAE (Kinglets)

Golden-crowned Kinglet, Regulus satrapa

Status: Uncommon spring and common fall migrant, rare in winter.

Habitat: Woodlands, shrubby areas, weedy fields.

2005 Surveys: First record was 1 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Due to a lack of surveys in woodlands, not recorded again until 42 were found on 29 March (J. Agius), which was also the spring peak. During April, 9 recorded on the 8 April survey, 17 on the 14 April survey, 6 on 24 April, and 2 on the 29 April survey were the last in spring. First fall arrival was 41 on the 27 September survey, with a peak of 316 on the 11 October survey, with 117 lingering to the 25 October survey. In early November, 51 were on the 2 November survey, dwindling to 15 on the 11 November survey, 6 on the 17 November survey. A single bird on the 1 December survey was the last of the season.

Historical Records: 8 on the 1 January 1993 CBC (M. Blagdurn, B. Johnson, E. Johnson, D. Leasure), 1 on the 1 January 1994 CBC (M. Blagdurn, B. Johnson, E. Johnson, D. Leasure, M. Mencotti), 2 on the 1 January 1995 CBC (M. Blagdurn, B. Johnson, D. Leasure).

Ruby-crowned Kinglet, Regulus calendula

Status: Fairly common spring and common fall migrant.

Habitat: Woodlands, shrubby areas, weedy fields.

2005 Surveys: First spring arrival was 1 on 12 April (R. Stocking), and 13 on the 14 April survey, with 7 on the 29 April survey. Numbers in May seemed lower than expected, with mainly singles (2 on the 11 May survey) through the lates on the 19 May survey. First fall arrival was 1 on the 21 September survey, with a peak of 177 on the 11 October survey, with 12 lingering to the 18 October survey and the latest 1 on the 2 November survey.

Historical Records: Unknown.

PASSERIFORMES

SYLVIIDAE (Gnatcatchers)

Blue-gray Gnatcatcher, Polioptila caerulea

Status: Uncommon spring migrant.

Habitat: Woodlands and woodland edges.

2005 Surveys: First spring arrival was 1 on the 14 April survey, and singles were on the 22 April survey and on 24 April. Two were on the 29 April survey and 3 were on the 11 May survey.

Historical Records: 3 on 9 May 1998 NAMC, 3 on 8 May 1999 NAMC.

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PASSERIFORMES

<u>TURDIDAE</u> (Thrushes)

Eastern Bluebird. Sialia sialis

Status: Rare fall migrant.

Habitat: Open areas, overhead.

2005 Surveys: Only records were 3 overhead on the 7 November survey and 1 overhead on the 17

November survey.

Historical Records: Unknown.

Veery, Catharus fuscescens

Status: Uncommon spring and fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrival was 1 on 10 May (J. Palland), with a peak of 7 on the 14 May NAMC (R. Hutchinson, R. Kik IV), and 9 on the 19 May survey, which were also the latest spring migrants. First fall arrival were 3 on the 2 September survey, and the latest, and only other fall record, 1 on the 9 September survey.

Historical Records: Four in the swamp woods on 15 May 2002 (K. Overman, A. Dettling), 3 on 8 May 1999 NAMC.

Gray-cheeked Thrush, Catharus minimus

Status: Rare spring and uncommon fall migrant.

Habitat: Woodlands and shrubby undergrowth.

2005 Surveys: First spring arrival was 1 on the 11 May survey, with singles on 16 May (R. Stocking, S. Jennex, J. Agius), and on the 19 May survey, the last spring migrant. First fall arrival was 5 on the 19 September survey, with a peak of 16 on the 27 September survey, and the latest 2 on the 11 October survey. Region-wide this year, this species was more numerous in fall migration than is typical.

Historical Records: Unknown.

Swainson's Thrush, Catharus ustulatus

Status: Common spring and fall migrant.

Habitat: Woodlands and shrubby undergrowth.

2005 Surveys: First spring arrival was 1 on 9 May (R. Stocking, K. Overman), with a peak of 20 on the 19 May survey, and the latest 8 on the 26 May survey. First fall migrant was 1 on the 23 August survey, with a peak of 76 on the 9 September survey, and the latest 1 on the 18 October survey.

Historical Records: 1 on 4 May 2002.

Hermit Thrush, Catharus guttatus

Status: Uncommon spring and common fall migrant. Rare in winter.

Habitat: Woodlands and shrubby undergrowth.

2005 Surveys: First spring record was 4 on 31 March (J. Agius). The peak was 8 on the 8 April survey and 7 on 7 on 28 April (R. Stocking, J. Fowler, D. Washington). Mainly singles reported in May, but with 2 on 14 May NAMC (R. Hutchinson, R. Kik IV) the latest spring migrants. First fall arrival was 11 on the 27 September survey, with a peak of 47 on the 11 October survey. Numbers dwindled to 15 on the 18 October survey and 6 on the 2 November survey. A single was reported irregularly from the 23 November survey through the 29 December survey.

Historical Records: 1 on the 1 January 1990 CBC (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit).

Wood Thrush, *Hylocichla mustelina*

Status: Uncommon migrant and summer resident. (Breeding probable in 2005)

Habitat: Woodlands.

2005 Surveys: First spring arrival was 1 on 9 May (R. Stocking, K. Overman), with peak of 14 on 11 May survey and 9 on the 19 and 26 May surveys. 1-2 singing birds in July provided evidence of probable breeding. Surprisingly, no reports during August or September, but a single, unusually late migrant was found on the 11 October survey.

Historical Records: 14 on 8 May 1999 NAMC.

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American Robin, Turdus migratorius

Status: Common migrant and summer resident, uncommon in winter. (Breeding confirmed in 2005) *Habitat*: Woodlands, open parklands, open grassy areas.

2005 Surveys: First report was 35 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure).

Recorded on 29 of 30 surveys (not on 14 December). Peak spring count was 78 on the 29 April survey. Birds were observed building nests in April, providing confirmation of breeding. During July surveys, 20-52 birds recorded, but given that this included recently fledged young it is difficult to estimate the number of breeding pairs on the island. Fall migration probably began in early or mid-September, with 86 on the 9 September survey and 152 on the 14 September survey. The peak fall count was 362 on the 6 October survey, and 287 on the 11 October survey. Numbers remained fairly high through early November, with 143 on the 2 November survey, but decreasing through the month to 26 on the 23 November survey. In December, 7 were on the 1 December survey, 5 on the 7 December survey, and two each on the 21 and 29 December surveys. One was found on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Reported consistently on recent CBCs, ranging from 2 (1993) to 44 (1994).

PASSERIFORMES

MIMIDAE (Mockingbirds and Thrashers)

Gray Catbird, Dumetella carolinensis

Status: Uncommon migrant and summer resident. (Breeding confirmed in 2005)

Habitat: Dense undergrowth on woodland edges, and shrubby areas.

2005 Surveys: First spring arrival was 5 on the 11 May survey, with a peak of 12 on the 14 May NAMC (R. Hutchinson, R. Kik IV). Two to four birds were detected on surveys in early July, suggesting a similar number of breeding pairs, with increased numbers in late July (7-8) consisting of fledglings being fed by adults, providing confirmation of breeding. In August, the peak count of 12 on the 29 August survey was likely local adults and independent young. During September, the peak count of 10 on the 14 September survey undoubtedly consisted of migrants, and perhaps most surprising was the large number (13) on the somewhat late date of 6 October. The last fall records were 4 on the 11 October survey, and a very late single bird on the 7 November survey.

Historical Records: 4 on 5 May 2001, 2 on 4 May 2002.

Brown Thrasher, Toxostoma rufum

Status: Uncommon migrant, rare summer resident. (Breeding probable in 2005)

Habitat: Dense undergrowth of woodland edges, and hedgerows in open areas.

2005 Surveys: First spring arrival was 1 on the 22 April survey, with a peak of 4 on the 6 May survey. A bird singing into late May (26 May survey) provided evidence of probable breeding. The only fall record was 1 on the 14 September survey.

Historical Records: One in the swamp woods on 15 May 2002 (K. Overman, A. Dettling) was presumed to be a migrant. 6 on 3 May 1998.

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PASSERIFORMES

STURNIDAE (Starlings)

European Starling, Sturnus vulgaris

Status: Common permanent resident. Introduced. (Breeding confirmed in 2005)

Habitat: Most common in open parklands, but also quite numerous in swamp woodlands, open grassy areas. 2005 Surveys: First record was 455 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure).

Numerous nesting holes were occupied in swamp woods, at the expense of breeding woodpeckers, providing confirmation of breeding. Recorded on all 30 survey dates, with the lowest count of 20 on the 21 December survey, and the highest count of 1350 on the 11 October survey. 210 recorded on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Totals on recent CBCs have ranged from 80 (2001) to 300 (1994). Winter roosts on the Ambassador Bridge typically numbers in the thousands, often tens of thousands or more.

PASSERIFORMES

MOTACILLIDAE (Pipits)

American Pipit, Anthus rubescens

Status: Rare spring and uncommon fall migrant.

Habitat: Open grassy areas, overhead.

2005 Surveys: The only spring records were 1 on the 6 May survey and 2 on the 11 May survey. The first fall arrival was 2 on the 27 September survey. No October records. In November, recorded on all surveys, with 5 on 2 November, 6 on 7 November, 14 on 11 November, 2 on 17 November, and 2 on 23 November, all of which were flyovers. Three on the 1 December survey were in the grassy area near Blue Heron Lagoon, and the last for the year was 1 on 3 December (E. Lewandowski, W. Fissell).

Historical Records: 2 on 4 November 2003.

PASSERIFORMES

BOMBYCILLIDAE (Waxwings)

Cedar Waxwing, Bombycilla cedrorum

Status: Common migrant, uncommon summer resident, rare in winter. (Breeding confirmed in 2005) *Habitat*: Woodland edges and shrubby areas.

2005 Surveys: First spring record was 6 on the 11 May survey, with a peak of 19 on the 19 May survey, and decreasing to 5 on the 26 May survey. During July, 4-12 birds were recorded on surveys, and during August adults observed feeding young provided confirmation of breeding. Fall migration appeared to begin in mid-September, with 26 on the 14 September survey and 29 on the 21 September survey. Peak numbers were mainly found on November surveys, with 38 on 2 November, 61 on 7 November, 74 on 11 November, 77 on 23 November. The 80 on the 1 December was the last high count, as only 8 were on the 7 December survey and 3 on the 29 December survey.

Historical Records: 47 on the 1 January 1990 CBC (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit).

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PASSERIFORMES

PARULIDAE (Wood-Warblers)

Blue-winged Warbler, Vermivora pinus

Status: Rare spring migrant.

Habitat: Woodland and shrubby areas.

2005 Surveys: The only record was 1 on 16 May (S. Jennex).

Historical Records: 1 on 8 May 1999 NAMC. Golden-winged Warbler, Vermivora chrysoptera

Status: Rare spring migrant.

Habitat: Woodland and shrubby areas.

2005 Surveys: The only record was 1 on 17 May (R. Stocking, J. Palland, J. Agius).

Historical Records: One on 13 May 1996 (M. Mencotti).

Tennessee Warbler, Vermivora peregrina

Status: Uncommon spring and common fall migrant.

Habitat: Woodlands and shrubby areas.

2005 Surveys: First spring arrivals were 6 on the 11 May survey, with a peak of 7 on the 19 May survey, and the last 3 on the 26 May survey. First fall arrival was 1 on the 29 August survey with peaks of 13 on the 2 September survey and 21 on the 21 September survey, and the last 1 on the 6 October survey.

Historical Records: 16 on 8 May 1999 NAMC, 2 on 5 May 2001.

Orange-crowned Warbler, Vermivora celata

Status: Uncommon spring and fall migrant.

Habitat: Woodland edges and shrubby areas.

2005 Surveys: The only spring records were 5 on the 19 May survey and 1 on 23 May (S. Jennex). The first fall arrivals were 3 on the 27 September survey, with a peak of 5 on the 6 October survey, and the last 2 on the 18 October survey.

Historical Records: Unknown.

Nashville Warbler, Vermivora ruficapilla

Status: Fairly common spring and fall migrant.

Habitat: Woodland edges and shrubby areas.

2005 Surveys: First spring arrivals were 2 on the 6 May survey, with peaks of 11 on the 11 May survey and 7 on the 19 May survey, which were also the last for spring. First fall arrival was 1 on the 23 August survey, with peaks of 15 on the 21 September survey and 18 on the 6 October survey, and the last 7 on the 11 October survey.

Historical Records: 1 on 3 May 1998, 17 on 9 May 1999 NAMC.

Northern Parula, Parula americana

Status: Uncommon spring and rare fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrivals were 3 on the 11 May survey, with 1 on 16 May (R. Stocking, S. Jennex,

J. Agius), and 2 on the 19 May survey the only other records. The only fall record was 1 on the 9 September survey.

Historical Records: 3 on 11 May 1996, 2 on 5 May 2001.

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Yellow Warbler, Dendroica petechia

Status: Fairly common summer resident. (Breeding confirmed in 2005)

Habitat: Shrubby areas, often with willows and usually near water.

2005 Surveys: First spring arrivals were 4 on the 6 May survey, with a peak of 25 on the 14 May NAMC (R. Hutchinson, R. Kik IV). Birds on territory in the wetlands near the Nature Zoo, and on the shorelines of Blue Heron Lagoon, with a peak of 14-16 singing males. Adults seen feeding young in July provided confirmation of breeding, with the peak count of 36 on the 28 July survey undoubtedly consisting of adults and fledged young, as well as possibly some migrants. During August, 21 were found on the 10 August survey, and the last of the season was 1 on the 29 August survey.

Historical Records: 10 on 11 May 1996 NAMC, 5 on 10 May 1997 NAMC, 7 on 9 May 1998 NAMC, 11 on 8 May 1999 NAMC, and 8 on 12 May 2001 NAMC.

Chestnut-sided Warbler, Dendroica pensylvanica

Status: Uncommon spring and fall migrant.

Habitat: Woodlands, woodland edges, and shrubby areas.

2005 Surveys: First spring arrivals were 5 on the 11 May survey, with a peak of 9 on the 19 May survey, and the last 1 on the 26 May survey. First fall arrivals were 6 on the 23 August survey, with a peak of 8 on the 29 August survey, and the last 1 on the 6 October survey.

Historical Records: 10 on 11 May 1996, 1 on 5 May 2001.

Magnolia Warbler, Dendroica magnolia

Status: Uncommon spring and fairly common fall migrant.

Habitat: Woodlands, woodland edges, and shrubby areas.

2005 Surveys: First spring arrivals were 13 on the 11 May survey, with a peak of 19 on the 19 May survey, and the last 2 on the 26 May survey. First fall arrivals were 6 on the 29 August survey, with a peak of 18 on the 14 September survey, and the last 2 on the 6 October survey.

Historical Records: 12 on 13 May 2000 NAMC, 3 on 5 May 2001.

Cape May Warbler, Dendroica tigrina

Status: Uncommon to rare spring and fall migrant.

Habitat: Woodland.

2005 Surveys: First spring arrival was 1 on the 11 May survey, with 1 on 16 May (R. Stocking, S. Jennex, J. Agius), 1 on the 19 May survey, and 1 on the 26 May survey. First fall arrival was 1 on the 2 September survey, with 1 on the 9 September survey, 3 on the 21 September survey, and the last 1 on 1 October (E. Lewandowski).

Historical Records: 2 on 5 May 2001.

Black-throated Blue Warbler, Dendroica caerulescens

Status: Uncommon spring and fall migrant.

Habitat: Shrubby undergrowth in woodlands.

2005 Surveys: First spring arrivals were 6 on the 6 May survey, with 1 on the 14 May NAMC (R.

Hutchinson, R. Kik IV), 1 on 16 May (R. Stocking, S. Jennex, J. Agius), and the last 1 on the 19 May survey. First fall arrival was 1 on the 23 August survey, with a peak of 6 on the 14 September survey, and the last 1 on the 11 October survey.

Historical Records: 2 on 5 May 2001.

Yellow-rumped Warbler, Dendroica coronata

Status: Common spring and fall migrant.

Habitat: Woodland and shrubby areas.

2005 Surveys: First spring arrivals were 3 on the 8 April survey, with peaks of 20 on the 29 April survey, 34 on the 6 May survey, 89 on the 11 May survey, and the last 14 on the 19 May survey. First fall arrivals were unusually early with 3 on the 2 September survey, with peaks of 62 on the 21 September survey, 383 on the 27 September survey, 301 on the 6 October survey, and 336 on the 11 October survey, and the last 2 on the 2 November survey.

Historical Records: 105 on 11 May 1996 NAMC, 130 on 10 May 1997 NAMC, 80 on 9 May 1998 NAMC, 24 on 8 May 1999 NAMC, 17 on 13 May 2000 NAMC, 40 on 5 May 2001.

Black-throated Green Warbler, Dendroica virens

Status: Common spring and fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrivals later than expected, 4 on the 6 May survey, with a peak of 20 on the 11 May survey, and the last 2 on the 26 May survey. First fall arrivals were 7 on the 2 September survey, with peaks of 12 on the 14 September survey, 11 on the 21 September survey, 11 on the 6 October survey, and the last 1 on the 18 October survey.

Historical Records: 16 on 11 May 1996 NAMC, 20 on 12 May 2001 NAMC.

Blackburnian Warbler, Dendroica fusca

Status: Uncommon spring and fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrivals, and the peak, 13 on the 11 May survey, with 2 on the 14 May NAMC (R. Hutchinson, R. Kik IV), 1 on 16 May (R. Stocking, S. Jennex, J. Agius), and the last 3 on the 19 May survey. First fall arrivals were 5 on the 23 August survey, with 5 on the 29 August survey, 1 on the 14 September survey, and unusually late 2 on the 27 September survey.

Historical Records: 4 on 8 May 1999 NAMC.

Pine Warbler, Dendroica pinus

Status: Rare spring and fall migrant.

Habitat: Woodlands.

2005 Surveys: Only record was 1 on the 2 September survey.

Historical Records: 3 on 11 May 1996 NAMC, 1 on 10 May 1997 NAMC.

Palm Warbler, Dendroica palmarum

Status: Fairly common spring and uncommon fall migrant.

Habitat: Woodland edges, shrubby areas, and open areas.

2005 Surveys: First spring arrivals were 2 on the 6 May survey, with peak of 14 on the 14 May NAMC (R. Hutchinson, R. Kik IV), and the last 1 on 16 May (R. Stocking, S. Jennex, J. Agius).

Historical Records: Ten reported at the eastern end of the island (near Blue Heron Lagoon?) on 15 May 2002 (K. Overman, A. Dettling). 15 on 11 May 1996 NAMC, 18 on 10 May 1997 NAMC, 5 on 3 May 1998.

Bay-breasted Warbler, Dendroica castanea

Status: Uncommon spring and fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrivals were 5 on the 11 May survey, with the peak and latest 9 on the 19 May survey. First fall arrival was 1 on the 23 August survey, with peaks of 4 on the 2 September survey, 3 on the 9 and 14 September surveys, and last 1 on the 6 October survey.

Historical Records: 1 on 8 May 1999 NAMC, 6 on 13 May 2000 NAMC.

Blackpoll Warbler, Dendroica striata

Status: Uncommon spring and common fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrivals were 8 on the 19 May survey, with the only other record, and the last 4 on the 26 May survey. First fall arrivals were 3 on the 23 August survey, with peaks of 15 on the 2 September survey, 24 on the 9 September survey, 19 on the 14 September survey, 29 on the 27 September survey, and the last 1 on the 18 October survey.

Historical Records: 5 on 13 May 2000 NAMC.

Cerulean Warbler, Dendroica cerulea

Status: Rare migrant. *Habitat*: Woodlands.

2005 Surveys: None recorded.

Historical Records: Listed on the Belle Isle Bird checklist (Belle Isle Nature Zoo 2005), but no specific records are known.

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Black-and-white Warbler, Mniotilta varia

Status: Uncommon spring and fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrival was later than expected, 1 on 9 May (R. Stocking, K. Overman), with a peak of 7 on the 14 May NAMC (R. Hutchinson, R. Kik IV), and the last 1 on 16 May (R. Stocking, S. Jennex, J. Agius). First fall arrivals were 8 on the 29 August survey, which was also the peak, and only two additional fall records; 3 on the 2 September survey and the last 1 on the 14 September survey.

Historical Records: 12 on 11 May 1996 NAMC, 1 on 2 May 1999.

American Redstart, Setophaga ruticilla

Status: Common spring and fall migrant.

Habitat: Woodlands, woodland edges, and shrubby areas.

2005 Surveys: First spring arrival was 1 on 9 May (R. Stocking, K. Overman), with peaks of 11 on the 11 May survey, 16 on the 19 May survey, and the last 14 on the 26 May survey. First fall arrival was 1 on the 29 August survey, with a peak of 10 on the 14 September survey, and last 2 on the 27 September survey. Less numerous than expected in fall.

Historical Records: 3 on 5 May 2001.

Prothonotary Warbler, Protonotaria citrea

Status: Rare spring migrant.

Habitat: Swamp woods.

2005 Surveys: One on 10 May (J. Palland) was actually in shrubbery on the edge of the Scott Fountain, well out of expected habitat.

Historical Records: 1 on 11 May 1996 NAMC in swamp woods.

Worm-eating Warbler, Helmitheros vermivorum

Status: Accidental.

Habitat: Undergrowth in woodlands.

2005 Surveys: One found on 22 April (J. Sniderman) lingered through 28 April (R. Stocking, J. Fowler, D. Washington) despite significant and unseaonal snowfall on 24 April, and was seen by dozens of local birders. This is likely the first record for Belle Isle.

Historical Records: None. **Ovenbird**, Seiurus aurocapilla

Status: Uncommon spring and fall migrant, rare summer resident. (Breeding possible in 2005)

Habitat: Woodlands.

2005 Surveys: First spring arrivals were 6 on the 11 May survey, which was also the peak, and last 2 on 26 May. Two heard singing in breeding habitat (swamp woods) at the end of may, indicating possible breeding. First fall arrival was 1 on the 2 September survey, with 1 on the 14 September survey, and the peak and last 4 on the 27 September survey.

Historical Records: 3 on 8 May 1999 NAMC.

Northern Waterthrush, Seiurus noveboracensis

Status: Uncommon spring and rare fall migrant.

Habitat: Wet woodlands, creeksides.

2005 Surveys: First spring arrival was 1 on 28 April (R. Stocking, J. Fowler, D. Washington) and the 29 April survey, with a peak of 7 on the 11 May survey, and the last 1 on 16 May (R. Stocking, S. Jennex, J. Agius). Only fall record was 1 on the 14 September survey, fewer than expected.

Historical Records: 2 on the 11 May NAMC, 3 on the 10 May 1997 NAMC, 1 on the 9 May 1998 NAMC, 1 on the 8 May 1999 NAMC, 4 on the 13 May NAMC, 3 on the 12 May 2001 NAMC.

Louisiana Waterthrush, Seiurus motacilla

Status: Rare spring migrant.

Habitat: Wet woodlands, creeksides.

2005 Surveys: One on 16 May (S. Jennex) was likely the first record for Belle Isle.

Historical Records: None. Perhaps has been overlooked during its peak migration period during mid-April.

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Kentucky Warbler, Oporornis formosus

Status: Accidental. Habitat: Woodlands.

2005 Surveys: None recorded.

Historical Records: 1 on 10 May 1997 NAMC along Central Avenue.

Connecticut Warbler, Oporornis agilis

Status: Rare spring and fall migrant.

Habitat: Dense undergrowth in woodlands, shrubby areas.

2005 Surveys: One on 11 May (J. Palland, S. Jennex) along Nashua Creek, 1 on the 9 September survey along Nashua Creek, and 2 on the 27 September survey with one along Nashua Creek and one at east end of Blue Heron Lagoon.

Historical Records: Unknown.

Mourning Warbler, Oporornis philadelphia

Status: Rare spring and fall migrant.

Habitat: Dense undergrowth in woodlands and woodland edges.

2005 Surveys: One on 25 May (S. Jennex) and one on the 29 August survey.

Historical Records: Unknown.

Common Yellowthroat, Geothlypis trichas

Status: Uncommon spring and fall migrant, rare in summer. (Breeding probable in 2005)

Habitat: Wetlands, including cattail marshes, wet weedy fields.

2005 Surveys: First spring arrivals were 2 on the 11 May survey. Singles noted on 16 May (R. Stocking, S. Jennex, J. Agius) and 17 May (R. Stocking, J. Palland, J. Agius), and 4 on the 26 May survey. A pair, male and female, in *Phragmites* along Central Avenue south of the Nature Zoo on 26 May provided evidence of probable breeding. A female was seen at this same locale on the 28 July survey. First fall arrivals were 2 on the 14 September survey, with the last 2 on the 11 October survey.

Historical Records: 1 on 8 May 1999 NAMC.

Hooded Warbler, Wilsonia citrina

Status: Rare spring migrant.

Habitat: Woodlands.

2005 Surveys: One on 16 May (R. Stocking, S. Jennex, J. Agius) and 17 May (R. Stocking, J. Palland, J.

Agius) along Nashua Creek.

Historical Records: 1 on 12 May 2001 NAMC along Central Avenue.

Wilson's Warbler, Wilsonia pusilla

Status: Uncommon spring and fall migrant.

Habitat: Undergrowth in woodlands and woodland edges, shrubby areas.

2005 Surveys: First spring arrival was 1 on 16 May (R. Stocking, S. Jennex, J. Agius) and one on 17 May (R. Stocking, J. Palland, J. Agius); last 3 were on the 26 May survey. First fall arrivals were 2 on the 29 August survey, with the peak and last 4 on the 9 September survey.

Historical Records: 1 on 8 May 1999 NAMC, 1 on 13 May 2000 NAMC.

Canada Warbler, Wilsonia canadensis

Status: Uncommon spring and fall migrant.

Habitat: Undergrowth in woodlands and woodland edges.

2005 Surveys: First spring arrival was 1 on 16 May (R. Stocking, S. Jennex, J. Agius) and 1 on 17 May (R. Stocking, J. Palland, J. Agius); also 1 on the 19 May survey, and the last 3 were on the 26 May survey. Only fall record was 2 on the 23 August survey.

Historical Records: 2 on 13 May 2000 NAMC.

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PASSERIFORMES

THRAUPIDAE (Tanagers)

Scarlet Tanager, Piranga olivacea

Status: Uncommon spring and fall migrant, rare in summer. (Breeding probable in 2005)

Habitat: Woodlands.

2005 Surveys: First spring arrivals later than expected, 4 on the 11 May survey; 1 on the 14 May NAMC (R. Hutchinson, R. Kik IV), and latest 1 on 26 May survey. A singing male detected on surveys from 7 July to 19 July provided evidence of probable breeding. First fall arrivals were 2 on the 14 September survey, with latest 1 on the 27 September survey.

Historical Records: 1 on 11 May 1996 NAMC, 1 on 8 May 1999 NAMC, 3 on 13 May 2000 NAMC, 1 on 12 May 2001 NAMC.

Summer Tanager, Piranga rubra

Status: Accidental. Habitat: Woodlands.

2005 Surveys: None recorded.

Historical Records: Kelley (1978) notes a record for Belle Isle but provides no details.

PASSERIFORMES

EMBERIZIDAE (Sparrows and Buntings)

Eastern Towhee, Pipilo erythrophthalmus

Status: Uncommon spring and fall migrant.

Habitat: Brushy areas in woodlands.

2005 Surveys: First spring record was 1 on 31 March (J. Agius). Only other spring records were 3 on the 29 April survey and 1 on 16 May (R. Stocking, S. Jennex, J. Agius). First fall arrivals, and peak, were 10 on the 11 October survey, which is a very high total for any single locale in Michigan. Other fall records were 4 on the 18 October survey, and singles on the 25 October, 2 November, and 7 November surveys, 2 on the 11 November survey, and 1 on 28 November. A single bird lingered through December at the west end of the Nashua Creek trail, but was not detected on every survey, with the last on 31 December (N. Gilbert). One on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) was probably the first since 1990.

Historical Records: 1 on the 12 May 2001 NAMC.

American Tree Sparrow, Spizella arborea

Status: Fairly common winter resident.

Habitat: Woodlands and shrubby areas.

2005 Surveys: First record was 17 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). No further records until 4 on 31 March (J. Agius) undoubtedly due to no woodland surveys before that date. First fall arrivals were 2 on the 25 October survey, with peaks of 31 on the 11 November survey, 52 on the 17 November survey, and 31 on the 21 December survey. Total of 34 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) was probably the highest since 1990.

Historical Records: 4 on 19 January 1997, 1 on 20 March 2003. Recorded on all recent CBCs, with totals ranging from 6 (1995) to 18 (1996).

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Chipping Sparrow, Spizella passerina

Status: Common migrant, uncommon summer resident. (Breeding confirmed in 2005)

Habitat: Woodland edges, prefers conifers.

2005 Surveys: First spring arrival was 1 on 5 April (A. Chartier, J. Agius), with peak of 4 on the 29 April survey, and last 1 on the 26 May survey. An adult feeding young on the 10 August survey at the intersection of Central Avenue and Tanglewood Road provided confirmation of breeding. Likely only 1-2 pairs breeding on Belle Isle. First fall migrants were 4 on the 9 September survey, with an astounding peak of 94 (most in a single flock) on the 11 October survey at the east end of Blue Heron Lagoon. Last were 2 on the 18 October survey.

Historical Records: 9 on the 11 May 1996 NAMC, 2 on the 8 May 1999 NAMC, 1 on the 13 May 2000 NAMC.

Field Sparrow, Spizella pusilla

Status: Rare spring and fall migrant.

Habitat: Open weedy fields to woodland edges.

2005 Surveys: One on the 14 May NAMC (R. Hutchinson, R. Kik IV) and one on the 11 October survey.

Historical Records: Unknown.

Savannah Sparrow, Passerculus sandwichensis

Status: Rare and local summer resident. (Breeding confirmed in 2005)

Habitat: Open grassy areas, including weedy fields and grassy areas.

2005 Surveys: First spring arrival was 1 on the 6 May survey. Two adults feeding 4-5 young in the fields south of Blue Heron Lagoon on the 7 and 12 July surveys provided confirmation of breeding. Singing males attempting to establish territories at the Athletic Fields and the field east of the Scott Fountain both were apparently driven out due to aggressive mowing schedules there. Last fall record was 1 on the 14 September survey.

Historical Records: unknown.

Fox Sparrow, Passerella iliaca

Status: Uncommon spring and fall migrant. Rare in winter.

Habitat: Brushy undergrowth in woodlands, and shrubby areas.

2005 Surveys: First spring record was 19 on 31 March (J. Agius), but no woodland surveys were conducted prior to this date. The only other spring record was 1 on the 14 April survey. First fall arrival was 1 on the 27 September survey, with peaks of 10 on the 11 October survey, 24 on the 2 November survey, 34 on the 7 November survey, 22 on the 17 November survey, decreasing to 6 on the 1 December survey, and 4 remaining on 31 December (N. Gilbert). The 5 recorded on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) were probably the first CBC records since 1990. Region-wide, it was a better than average fall migration for this species.

Historical Records: 1 on 20 March 2003, 1 on 11 May 1996 NAMC was rather late.

Song Sparrow, Melospiza melodia

Status: Common spring and fall migrant, fairly common in summer, uncommon in winter. (Breeding confirmed in 2005)

Habitat: Shrubby areas and woodland edges.

2005 Surveys: First spring record was 1 on 4 March, though no woodland surveys were conducted before this date. Peak spring counts of 13 on the 29 April survey, 13 on the 11 May survey. During July, counts ranged from 14-30, which included numbers of fledged young being fed by adults, providing confirmation of breeding. Perhaps 20 pairs or more probably breed on Belle Isle. Peak fall counts of 27 on the 14 September survey, 25 on the 11 October survey, declining to 10 on the 17 November survey and 6 on the 1 December survey. The high count in December was 15 on the 14 December survey, and 4 were on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: 7 on the 11 May 1996 NAMC, 4 on the 10 May 1997 NAMC, 5 on the 9 May 1998 NAMC, 8 on the 8 May 1999 NAMC, 8 on the 13 May 2000 NAMC, and 5 on the 12 May 2001 NAMC. Totals on recent CBCs range from 0 (2001, 2005) to 8 (1990).

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Lincoln's Sparrow, Melospiza lincolnii

Status: Uncommon to rare spring and fall migrant.

Habitat: Dense shrubby tangles in woodlands and on woodland edges, shrubby areas.

2005 Surveys: First spring arrival was 1 on the 11 May survey, and the only other record was 2 on the 26 May survey. First fall arrival was 1 on the 2 September survey, with 2 on the 9 September survey, 1 on the 14 September survey, and the last 1 on the 6 October survey.

Historical Records: Unknown.

Swamp Sparrow, Melospiza georgiana

Status: Uncommon migrant, rare summer resident, rare in winter. (Breeding possible in 2005)

Habitat: Cattail marshes, edges of swamp woodlands, occasionally in *Phragmites*.

2005 Surveys: First spring arrivals were 2 on the 22 April survey. Also, 2 on the 29 April survey and 1 singing in *Phragmites* on the 11 May survey provided evidence of possible breeding. First fall arrival was 1 on the 14 September survey, with a peak of 5 on the 18 October survey, and singles lingering to the 1 December survey. One was on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: 3 on the 11 May 1996 NAMC, 1 on the 10 May 1997 NAMC, 3 on the 9 May 1998 NAMC, 1 on the 13 May 2000 NAMC. 1 on 19 January 1997. Recorded on several recent CBCs, including 1 in 1990, 1 in 1993, 2 in 1994, 2 in 1995, 2 in 1996.

White-throated Sparrow, Zonotrichia albicollis

Status: Common spring and fall migrant, uncommon to rare in winter.

Habitat: Undergrowth in woodlands, woodland edges, shrubby areas.

2005 Surveys: First spring record was 1 on the 8 April survey. It is unclear whether this is the first arrival as woodland surveys were not done prior to this date, but the absence of this species on the Christmas Bird Count suggests none over-wintered this year. Peak spring counts were 41 on the 29 April survey, 55 on the 11 May survey, and 40 on the 14 May NAMC (R. Hutchinson, R. Kik IV), and latest was 1 on the 19 May survey. First fall arrivals were early, with 2 on the 9 September survey. Peak fall counts were 91 on the 21 September survey, 179 on the 27 September survey, 250 on the 6 October survey, 395 on the 11 October survey, 153 on the 25 October survey, 259 on the 2 November survey, and 232 on the 7 November survey. Declined through November and December, with 44 on the 21 December survey, and 8 on the 29 December survey. The 20 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) may be the highest CBC total for Belle Isle.

Historical Records: 66 on the 11 May 1996 NAMC, 10 on the 10 May 1997 NAMC, 40 on the 9 May 1998 NAMC, 8 on the 8 May 1999 NAMC, 11 on the 13 May 2000 NAMC, and 10 on the 12 May 2001 NAMC. Generally low numbers on CBCs, ranging from 0 (1995, 2005) to 7 (1993).

White-crowned Sparrow, Zonotrichia leucophrys

Status: Fairly common spring and uncommon fall migrant.

Habitat: Shrubby areas, woodland edges, open areas.

2005 Surveys: First spring arrival was 1 on 4 May (R. Stocking), with peaks of 26 on the 11 May survey and 37 on the 14 May NAMC (R. Hutchinson, R. Kik IV), and latest 2 on the 19 May survey. First fall arrivals were 2 on the 27 September survey, with a peak of 12 on the 11 October survey and latest 1 on the 2 November survey.

Historical Records: 20 on 11 May 1996 NAMC, 4 on 5 May 2001.

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Dark-eyed Junco, *Junco hyemalis*

Status: Fairly common fall migrant and winter resident. *Habitat*: Woodlands, woodland edges, shrubby areas.

2005 Surveys: First recorded with a high count of 42 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Next report was 37 on 31 March (J. Agius), which may represent the continuing presence of wintering birds. In April, only 2-4 early in the month, with 4 on the 29 April survey also the last for the spring. First fall arrivals were 12 on the 27 September survey, with a clear peak of 208 on the 11 October survey where birds were in open grassy areas on the west end of the island as well as in woodlands on the east end. Numbers declined to 43 on the 2 November survey to 60 on the 11 November survey, which may represent another influx of migrants. Numbers were down to 19 on the 1 December survey and back up to 43 on the 21 December survey. Only 11 were on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Totals on recent CBCs have ranged from 0 (1994) to 9 (1996).

Lapland Longspur, Calcarius lapponicus

Status: Rare fall migrant.

Habitat: Overhead, open grassy areas, rocky shorelines.

2005 Surveys: First fall arrival was 2 on the 2 November survey, with 3 on the 7 November survey and 1 on the 11 November survey, all overhead in flight.

 ${\it Historical\ Records} : Unknown.$

Snow Bunting, Plectrophenax nivalis

Status: Uncommon to rare fall migrant and winter visitor.

Habitat: Overhead, open grassy areas, rocky shorelines.

2005 Surveys: First fall arrival was 1 on the 7 December survey, with 2 on the 14 December survey.

Historical Records: One reported on 1 January 1996 CBC ((M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti), and 265 reported on 1 January 1990 CBC (M. Blagdurn, R. Healy, D. Leasure, L. Beitz, D. Benoit). Also reported on 22 November 2003 (S. Jennex). 60 on 13 January 2004 on beach near Water Slide.

PASSERIFORMES

CARDINALIDAE (Grosbeaks)

Northern Cardinal, Cardinalis cardinalis

Status: Fairly common permanent resident. (Breeding confirmed in 2005)

Habitat: Woodlands, woodland edges, shrubby areas.

2005 Surveys: First record was 12 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure).

Recorded on all 30 surveys. The peak spring count was 25 on the 11 May survey. Several pairs through summer, and in August adults observed feeding fledglings provided confirmation of breeding. The peak fall counts were 30 on the 27 September survey, and 33 on the 14 December survey. Only 5 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: 11 on the 11 May 1996 NAMC, 11 on the 10 May 1997 NAMC, 6 on the 9 May 1998 NAMC, 6 on the 8 May 1999 NAMC, 7 on the 13 May 2000 NAMC, 10 on the 12 May 2001 NAMC. Recorded on all recent CBCs, with totals ranging from 18 (2001) to 39 (1996).

Rose-breasted Grosbeak, Pheucticus ludovicianus

Status: Fairly common spring and uncommon fall migrant.

Habitat: Woodlands.

2005 Surveys: First spring arrival was 1 on the 6 May survey, with a peak of 9 on the 11 May survey, and last 3 on the 19 May survey. First fall arrivals and peak count were 8 on the 9 September survey, with last 1 on the 6 October survey.

Historical Records: 15 on 11 May 1996 NAMC, 3 on 10 May 1997 NAMC, 10 on 9 May 1998 NAMC, 3 on 8 May 1999 NAMC, 4 on 13 May 2000 NAMC, 2 on 12 May 2001 NAMC.

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Indigo Bunting, Passerina cyanea

Status: Fairly common summer resident. (Breeding confirmed in 2005)

Habitat: Woodland edges, shrubby areas.

2005 Surveys: First spring arrivals were 3 on the 11 May survey, with a peak of 9 on the 26 May survey. Several pairs observed in early July, and adults feeding young in late July and early August provided confirmation of breeding. Peak in fall was 10 on the 14 September survey, and the last was 1 on 15 October.

Historical Records: 1 on the 11 May 1996 NAMC, 6 on the 13 May 2000 NAMC, 3 on the 12 May 2001 NAMC.

PASSERIFORMES

ICTERIDAE (Blackbirds)

Bobolink, Dolichonyx oryzivorus

Status: Uncommon to rare spring and fall migrant.

Habitat: Overhead, open weedy fields.

2005 Surveys: Only spring record was 3 on the 19 May survey. Fall records were 1 on the 2 September survey, and 13 unusually late on the 14 September survey. All were of birds flying overhead.

Historical Records: One male flushed on the east end of the island (near Blue Heron Lagoon?) on 15 May 2002 (K. Overman, A. Dettling) was clearly a migrant.

Red-winged Blackbird, Agelaius phoeniceus

Status: Common spring and fall migrant, fairly common summer resident, rare in winter. (Breeding confirmed in 2005)

Habitat: Wetlands, shrubby fields, woodland edges.

2005 Surveys: First spring record was 1 on 23 February, with an influx of 7 on 15 March and 18 on 29 March. Recorded on 28 of 30 surveys. Peak spring count was 234 on the 14 May NAMC (R. Hutchinson, R. Kik IV). Perhaps 20-40 pairs, or more, during July and early August surveys, with adults observed feeding young providing confirmation of breeding. Numbers mysteriously declined precipitously during late August and September, where most birds may have departed the island after breeding, as the maximum count that month was only 8 on the 27 September survey. A modest influx of birds in October may have been migrants, with a peak of 51 on the 6 October survey, declining to 16 on the 2 November survey and 3 on the 7 November survey. Only 2-6 on December surveys, with 4 recorded on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: 3 on 13 February 2002, 17 on 5 March 2004, 2 on the 1 January 1993 CBC.

Eastern Meadowlark, Sturnella magna

Status: Rare spring and fall migrant.

Habitat: Open grassy areas. 2005 Surveys: None recorded.

Historical Records: 2 on 15 March 2002, 1 on 2 November 2004.

Yellow-headed Blackbird, Xanthocephalus xanthocephalus

Status: Accidental.

Habitat: Breeds in extensive cattail marshes.

2005 Surveys: One male found at the feeders at the Nature Zoo on 19 April (found by J. Palland, also seen by R. Stocking, K. Overman, S. Jennex, B. Paxton). This is the first record for Belle Isle.

Historical Records: None.

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Rusty Blackbird, Euphagus carolinus

Status: Uncommon spring and fall migrant.

Habitat: Swamp woods and open, but wet areas.

2005 Surveys: First spring arrivals were 7 on the 8 April survey, with a peak of 27 on the 22 April survey, and last 5 were on the 19 May survey, unusually late. First fall arrival was 1 on the 11 October survey, with only 6 on the 18 October survey, then a significant peak of 175 on the 17 November survey, and the last 3 on the 1 December survey.

Historical Records: 6 on the 8 May 1999 NAMC.

Common Grackle, Quiscalus quiscula

Status: Common spring and fall migrant, uncommon summer resident, rare in winter. (Breeding confirmed in 2005)

Habitat: Woodland, woodland edges.

2005 Surveys: First spring record was 4 on 15 March, though could have been present earlier as woodland surveys were not conducted prior to this date. Peak spring count was 152 on the 14 May NAMC (R. Hutchinson, R. Kik IV). Perhaps between 15-25 pairs present through July, and adults observed feeding fledglings in late July and early August, providing confirmation of breeding. Fall migration seemed to commence in early October, with the sudden appearance of large flocks in the grassy areas among the open parkland at the west end of the island, including 932 on the 6 October survey, 4376 on the 11 October survey, 700 on 15 October, and 376 on the 18 October survey. Numbers declined sharply to 54 on the 25 October survey and 4 on the 2 November survey. Only 3 remained by the 29 December survey, and the 1 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) was the first CBC record for Belle Isle in recent years.

Historical Records: 4 on 5 March 2004.

Brown-headed Cowbird, Molothrus ater

Status: Fairly common migrant, uncommon summer resident, rare in winter. (Breeding confirmed in 2005) *Habitat*: Woodland edges, shrubby areas, open areas.

2005 Surveys: First spring arrivals were 5 on the 8 April survey, with a peak of 14 on the 11 May survey. Several pairs observed on July surveys, and two fledglings being fed by Northern Cardinals in early August provided confirmation of breeding. Most seemed to depart the island from mid-August through mid-November as only singles were occasionally detected on surveys. Five on the 17 November survey and 5 on the 29 December survey were the only other records for the year. The 5 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier) were the first on a CBC for Belle Isle in recent years.

Historical Records: 1 on 20 March 2003, 20 on the 11 May 1996 NAMC, 20 on the 10 May 1997 NAMC, 4 on the 9 May 1998 NAMC, 10 on the 8 May 1999 NAMC, 12 on the 13 May 2000 NAMC, 3 on the 12 May 2001 NAMC.

Orchard Oriole, *Icterus spurius*

Status: Rare spring migrant.

Habitat: Open woodland.

2005 Surveys: One male on the 11 May survey in the swamp woods.

Historical Records: Unknown.

Baltimore Oriole, Icterus galbula

Status: Common spring and fall migrant, uncommon summer resident. (Breeding confirmed in 2005) *Habitat*: Open woodland.

2005 Surveys: First spring arrivals were 4 on the 6 May survey, with peaks of 29 on the 11 May survey, 19 on the 14 May NAMC (R. Hutchinson, R. Kik IV), 33 on the 19 May survey. Perhaps 3-5 breeding pairs in the swamp woods, with adults feeding young in July providing confirmation of breeding. Fall migration commenced in mid-August, with 34 on the 23 August survey, 19 on the 29 August survey, 5 on the 2 September survey, and the last 1 on the 9 September survey.

Historical Records: 2 on 2 May 1999, 6 on the 11 May 1996 NAMC, 3 on the 10 May 1997 NAMC, 12 on the 9 May 1998 NAMC, 21 on 8 May 1999 NAMC, 15 on the 13 May 2000 NAMC, 8 on the 12 May 2001 NAMC.

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PASSERIFORMES

FRINGILLIDAE (Finches)

Purple Finch, Carpodacus purpureus

Status: Rare and irregular spring and fall migrant and winter visitor.

Habitat: Woodlands.

2005 Surveys: One on the 14 April survey, and one on the 29 April survey, were the only spring records. In fall, 2 on the 25 October survey and 1 on the 2 November survey were the only records.

Historical Records: Reported on 8 November and 25 December 1996 (both M. Mencotti). 5 on the 1 January 1995 CBC (M. Blagdurn, R. Kovalcik, D. Leasure, M. Mencotti).

House Finch, Carpodacus mexicanus

Status: Uncommon to rare permanent resident. (Breeding probable in 2005)

Habitat: Open areas and shrubby areas, often in residential areas.

2005 Surveys: First record was 3 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Only recorded on 21 of 30 surveys, and significantly more numerous in fall. Peak in spring was only 5 on the 26 May survey. A single singing bird in July provided evidence of probable breeding. In fall, an influx began with 8 on the 2 November survey, 16 on the 7 November survey, 19 on the 11 November survey, and 16 on 15 November (J. Agius). Interestingly, most of these birds were accompanying migrant flocks of Cedar Waxwings feeding on berries. Reduced numbers into December with 12 on the 1 December survey and 3 on the 29 December survey. Four were on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Apparently has become scarce more dramatically than surrounding areas. 4 on the 11 May 1996 NAMC, 3 on the 10 May 1997 NAMC, 1 on the 8 May 1999 NAMC, 6 on the 13 May 2000 NAMC, 3 on the 12 May 2001 NAMC. Declining numbers on CBCs; 19 in 1990, 9 in 1993, 11 in 1994, 4 in 1995, 10 in 1996, 7 in 2001.

Pine Siskin, Carduelis pinus

Status: Rare and irregular fall migrant and winter visitor.

Habitat: Open woodland.

2005 Surveys: One on the 11 May survey was the only spring record. In fall, 3 were on the 2 November survey, 1 on the 23 November survey, and 1 on the 1 December survey.

Historical Records: 2 on the 11 May 1996 NAMC, 1 on 28 November 1997. Surprisingly, not recorded on recent CBCs.

American Goldfinch, Carduelis tristis

Status: Fairly common migrant, uncommon summer and winter resident. (Breeding probable in 2005) *Habitat*: Open weedy fields, woldland edges.

2005 Surveys: First record was 11 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Peak spring counts were 18 on the 8 April survey, 20 on the 14 May NAMC (R. Hutchinson, R. Kik IV). July and August surveys recorded 10-29 birds, including observations of territorial chases that provided evidence of probable breeding. Oddly, fairly steady numbers through the peak migration period of September and October, with 10-20 birds per survey. A sudden influx of birds with 102 on the 2 November survey, 56 on the 7 November survey, and 51 on the 23 November survey. In December, numbers declined to 15 on the 29 December survey, and 14 were recorded on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: 2 on the 11 May 1996 NAMC, 10 on the 10 May 1997 NAMC, 2 on the 9 May 1998 NAMC, 2 on the 8 May 1999 NAMC, 4 on the 13 May 2000 NAMC, 8 on the 12 May 2001 NAMC. Recorded on all recent CBCs with counts ranging from 2 (2001) to 23 (1995).

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PASSERIFORMES

PASSERIDAE (Old World Sparrows)

House Sparrow, *Passer domesticus* (Introduced)

Status: Common permanent resident. Introduced. (Breeding confirmed in 2005)

Habitat: Open areas, man-made structures, woodland edges.

2005 Surveys: First record was 68 on the 1 January 2005 CBC (M. Blagdurn, J. Agius, D. Leasure). Recorded on all 30 surveys. Peak spring count was 122 on the 11 May survey. Occupied nests were found during May and July, providing confirmation of breeding. Perhaps 50-100+ nesting pairs on Belle Isle. Peak fall count was 274 on the 23 November survey. Became relatively scarce during December surveys, with counts ranging from 20-86, and 65 on the 1 January 2006 CBC (M. Blagdurn, A. Chartier).

Historical Records: Recorded on all recent CBCs, with counts ranging from 48 (2001) to 192 (1996).

HYPOTHETICAL and REJECTED SPECIES

Tufted Duck, Aythya fuligula

Status: Rejected. No records for Belle Isle (accidental in Michigan).

Historical Records: A bird present near the Detroit Yacht Club from 10 January – 12 February 1989 was thought to be a hybrid based on photos (A. Chartier – ph., MBRC). The bird may have been a Tufted Duck X Greater Scaup hybrid, or possibly even a Ring-necked Duck X Lesser Scaup hybrid; there is no way to know with certainty.

Harlequin Duck, Histrionicus histrionicus

Status: Hypothetical (rare fall migrant and winter resident in Michigan).

Historical Records: Kelley (1978) reports an individual "on the Detroit River at Windsor (Kidd)" on 16 March 1969, which may (in my opinion) have been in the vicinity of Belle Isle. Agius (pers. comm.) noted he was aware of a record of this species, possibly on an older CBC, but I have thus far been unable to locate any published reference to such a record.

Least Bittern, Ixobrychus exilis

Status: Hypothetical.

2005 Surveys: None recorded.

Historical Records: Included on Belle Isle Checklist (Belle Isle Nature Center 2005), but no sighting information or source can be found. Also, this species is a rare breeding species in Michigan (extensive cattail marsh), and is seen in migration even more rarely, so without any specific information it is best to leave this species off the main list.

Little Blue Heron, Egretta caerulea

Status: Hypothetical.

2005 Surveys: What would be the first record for Belle Isle, and the only spring record in the entire state, was reported on the 14 May NAMC. Unfortunately, the written documentation for this rarity was too ambiguous to eliminate other species. The compiler of the count did accept this record based on additional verbal information, but such information is impossible to archive for future generations to evaluate independently, which is the ultimate test that such documentation should pass. This species should be considered hypothetical based on this.

Historical Records: None.

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Short-eared Owl, *Asio flammeus*

Status: Hypothetical.

Habitat: Open grassland (not lawns) and marshes.

2005 Survey: None recorded.

Historical Records: Reported by K. Overman but with no date or location information. One reported on the 1 January 2001 CBC was identified based on habitat, and was actually seen over Peche Island, Canada, not on Belle Isle. If Overman's report is not the same as this CBC report, and can be confirmed as occurring on Belle Isle, the status of this species should be changed to accidental, and added to the list.

Scissor-tailed Flycatcher, Tyrannus forficatus

Status: Hypothetical. *Habitat*: Open areas.

2005 Surveys: None recorded.

Historical Records: One was reported on 9 May 1982 (Powell 1982). No information can be found on the specific location on the island, and no written description or photos are available [observers were Robert and Rose Ann Comstock]. Through 1974, there was only a single published record for this species in the region (Kelley 1978), and that was from Pt. Pelee, Ontario (3 June 1961). Given that this species is casual in Michigan, and there is no evidence supporting this record other than the confidence of Powell (1982), it would be best to consider it hypothetical for the time being.

Loggerhead Shrike, Lanius ludovicianus

Status: Hypothetical.

Habitat: Open shrubby areas with plenty of thorny vegetation, such as hawthorn.

2005 Surveys: None recorded.

Historical Records: None in literature. Included on the Belle Isle checklist (Belle Isle Nature Zoo 2005). This species is listed as endangered in Michigan, and none have nested anywhere in the state for the past three years, and several years before that only 1-2 pairs, all on the western side of the state. There are probably fewer than 5 confirmed records of the species in Wayne County in the past 25 year, thus a good description, or a good photograph, should be required to consider this species as having occurred on Belle Isle due to its similarity to the more frequent Northern Shrike.

Brewer's Blackbird, Euphagus cyanocephalus

Status: Hypothetical.

Habitat: Most often in bare farm fields and sod farms.

2005 Surveys: Four were reported on the 14 May NAMC, but the lack of adequate description eliminating the very similar Rusty Blackbird, general lack of appropriate habitat on Belle Isle, and presence of 5 Rusty Blackbirds both before and after this date (and no Rusty's reported on this date), suggests a possible misidentification. Thus this species should not be included on the main list until it is better documented.

Historical Records: None. Generally quite rare in migration in southeastern Michigan, especially in spring.

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APPENDIX B. Spring Survey Results

li		10/	0.11	+ , ,
Location	East Transect	West	Other	Total
Charian		Transect	Areas	Observed
Species	107	68	112	128
Individuals	3034	3117	5596	11747
On the Court	100	007	045	4004
Canada Goose	162	287	915	1364
Mute Swan	9	2	43	54
Wood Duck	48		4	52
American Black Duck	100		1	1
Mallard	100	14	107	221
Canvasback			13	13
Redhead	7		12	19
Lesser Scaup			6	6
Bufflehead			20	20
Hooded Merganser	2		2	4
Red-breasted Merganser			12	12
Common Loon	3		1	4
Pied-billed Grebe	1		3	4
Double-crested Cormorant	7		2	9
Great Blue Heron		2	1	3
Turkey Vulture	2	6		8
Cooper's Hawk	1	1	1	3
American Kestrel		1		1
Virginia Rail	1			1
Semipalmated Plover			7	7
Killdeer	15	22	22	59
Lesser Yellowlegs			11	11
Solitary Sandpiper	1		1	2
Spotted Sandpiper	1		2	3
Semipalmated Sandpiper			6	6
Least Sandpiper			18	18
Dunlin			16	16
Bonaparte's Gull	19	1	3	23
Ring-billed Gull	241	513	1685	2439
Herring Gull		3		3
Great Black-backed Gull		_	1	1
Forster's Tern	2	6	7	15
Rock Pigeon	80	268	113	461
Mourning Dove	15	20	3	38
Common Nighthawk		1		1
Chimney Swift	30	54	43	127
Belted Kingfisher	1	0.	2	3
Red-bellied Woodpecker	14		3	17
Downy Woodpecker	38	16	7	61
Hairy Woodpecker	1	10	2	3
Northern Flicker	20	7	7	34
Eastern Wood-Pewee	7	1	1	9
Willow Flycatcher	2	1		2
Least Flycatcher	6	1	4	11
Eastern Phoebe	1	1	4	1
Great Crested Flycatcher	3	1	3	7
			<u>3</u> 12	
Eastern Kingbird	4	9	12	25

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APPENDIX B. Spring Survey Results, continued.

Location	East	West	Other	Total
	Transect	Transect	Areas	Observed
Yellow-throated Vireo	2			2
Blue-headed Vireo	1	1	1	3
Warbling Vireo	16	13	21	50
Philadelphia Vireo	1		1	2
Red-eyed Vireo	23	7	8	38
Blue Jay	50	46	18	114
American Crow	20	1	3	24
Tree Swallow	34	19	26	79
Northern Rough-winged Swallow	7	4	23	34
Bank Swallow		1	1	2
Cliff Swallow	5	76	151	232
Barn Swallow	25	71	129	225
Black-capped Chickadee	3		1	4
Tufted Titmouse	16		4	20
Red-breasted Nuthatch			2	2
White-breasted Nuthatch	8		1	9
House Wren	34		23	57
Winter Wren	2		1	3
Golden-crowned Kinglet	26		2	28
Ruby-crowned Kinglet	23		4	27
Blue-gray Gnatcatcher	7		•	7
Veery	4		10	14
Gray-cheeked Thrush	2		10	2
Swainson's Thrush	24		11	35
Hermit Thrush	14		4	18
Wood Thrush	20		12	32
American Robin	181	145	140	466
Gray Catbird	9	2	10	21
Brown Thrasher	4	2	3	9
European Starling	547	910	946	2403
American Pipit	547	1	2	3
Cedar Waxwing	1	3	26	30
Tennessee Warbler	10	2	4	16
Orange-crowned Warbler	10	2	3	5
Nashville Warbler	8	4	8	20
Northern Parula	3	1	1	5
Yellow Warbler	27	13	11	51
Chestnut-sided Warbler	10	13	4	
Magnolia Warbler	24	4	6	15 34
	1	1	1	
Cape May Warbler Black-throated Blue Warbler		I		3
1	4	40	3	7
Yellow-rumped Warbler	106	18	47	171
Black-throated Green Warbler	21	2	8	31
Blackburnian Warbler	12		4	16
Palm Warbler	5	2	2	9
Bay-breasted Warbler	13	_	1	14
Blackpoll Warbler	5	3	4	12
Black-and-white Warbler	4	.=	1	5
American Redstart	25	2	14	41
Ovenbird	9		3	12

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APPENDIX B. Spring Survey Results, continued.

Location	East	West	Other	Total
	Transect	Transect	Areas	Observed
Northern Waterthrush	3		6	9
Common Yellowthroat	5		1	6
Wilson's Warbler	2		1	3
Canada Warbler	2		2	4
Scarlet Tanager	3	1	1	5
Eastern Towhee	1		2	3
Chipping Sparrow	3	4	2	9
Savannah Sparrow		2	2	4
Fox Sparrow	1			1
Song Sparrow	29	18	27	74
Lincoln's Sparrow	3			3
Swamp Sparrow	5			5
White-throated Sparrow	78	1	37	116
White-crowned Sparrow	23	3	6	32
Dark-eyed Junco	9		1	10
Northern Cardinal	71	10	45	126
Rose-breasted Grosbeak	8	1	4	13
Indigo Bunting	10	1	6	17
Bobolink	3			3
Red-winged Blackbird	125	70	157	352
Rusty Blackbird	72		14	86
Common Grackle	66	81	149	296
Brown-headed Cowbird	43	14	9	66
Orchard Oriole	1			1
Baltimore Oriole	45	12	25	82
Purple Finch	2			2
House Finch	3	2	4	9
Pine Siskin			1	1
American Goldfinch	64	11	25	100
House Sparrow	114	293	238	645

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Location	East	West	Nashua	Blue Heron	Other	Total
	Transect	Transect	Creek	Lagoon	Areas	Observed
Species	112	75	96	96	81	160
Individuals	11124		4970	9535		
Greater White-fronted Goose		1				1
Snow Goose		1				1
Canada Goose	785	8963	594	643	12044	23029
Cackling Goose		0000		0.0	1	1
Mute Swan			1	68	850	919
Tundra Swan				154	7	161
Wood Duck	40		54	23	41	158
Gadwall				170		170
American Wigeon				51	1	52
American Black Duck		2		18	2	22
Mallard	198	635	52	162	699	1746
Blue-winged Teal				2		2
Northern Shoveler				1		1
Northern Pintail				1		1
Green-winged Teal					11	11
Canvasback				968	378	
Redhead				577	335	
Ring-necked Duck				3327	1	3328
Greater Scaup				1	•	1
Lesser Scaup				105	363	468
Black Scoter				100	2	2
Bufflehead					91	91
Common Goldeneye				1	282	283
Hooded Merganser	1	23		235	109	
Ruddy Duck	<u> </u>			13	81	94
Pied-billed Grebe				11	0.	11
Horned Grebe					5	5
Double-crested Cormorant	2	6		122	27	157
Great Blue Heron	10		6	15	25	61
Great Egret					5	5
Green Heron			2	7	1	10
Black-crowned Night-Heron		2	2	1	36	
Turkey Vulture		7	1	2		10
Osprey	1	-	<u> </u>	1		2
Bald Eagle	-				1	1
Northern Harrier		1			•	1
Sharp-shinned Hawk	1	-	3	1		5
Cooper's Hawk	5	4		1	1	11
Red-tailed Hawk	8		2		3	
American Kestrel	3			7	9	
Merlin	1	•				1
American Coot				1	338	339
American Golden-Plover		1		1		2
Killdeer	11	193	1	38	33	
Spotted Sandpiper	1		•	5	- 50	5
Sanderling					2	
American Woodcock	1		2		_	3
				l	1	

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APPENDIX C. Fall Survey Results, continued.

Location	East	West	Nashua	Blue Heron	Other	Total
December 1919 O. II	Transect	Transect	Creek	Lagoon	Areas	Observed
Bonaparte's Gull	3	04.4		1	16	20
Ring-billed Gull	61	814		925	6904	8704
Herring Gull	4			15	9	24
Caspian Tern	1			6	5	12
Forster's Tern				2	5	7
Rock Pigeon	867	1076	13	420	744	3120
Mourning Dove	50	14		5	17	86
Black-billed Cuckoo	1					1
Yellow-billed Cuckoo			1			1
Eastern Screech-Owl	1					1
Northern Saw-whet Owl			1			1
Chimney Swift	179	111	94	40	184	608
Ruby-throated Hummingbird	5	1		1		7
Belted Kingfisher	3	3	3	7	3	19
Red-headed Woodpecker	1					1
Red-bellied Woodpecker	22		9		2	33
Yellow-bellied Sapsucker	10	3	4		1	18
Downy Woodpecker	147	30	55	8	5	245
Hairy Woodpecker	15		1			16
Northern Flicker	46	14	20	10	4	94
Olive-sided Flycatcher	1			10		1
Eastern Wood-Pewee	22		12			34
Yellow-bellied Flycatcher	22		12			1
Least Flycatcher	2		1	3		6
Eastern Phoebe	10		3	4		17
		4		4		
Great Crested Flycatcher	3	1	2	40	0.5	6
Eastern Kingbird	10	2	4	13	25	54
Blue-headed Vireo	2		1	07		3
Warbling Vireo	12	6	2	37	1	58
Red-eyed Vireo	25		6			31
Blue Jay	495	217	220	28	119	1079
American Crow	29		5		5	40
Horned Lark		4		1		5
Purple Martin		2	1			3
Tree Swallow		2		3	4	9
Northern Rough-winged Swallow		2		18	2	22
Barn Swallow	16	100	8	78	79	281
Black-capped Chickadee	74	1	46	6	2	129
Tufted Titmouse	35		14		1	50
Red-breasted Nuthatch	1	4	2		2	9
White-breasted Nuthatch	58	3	35			96
Brown Creeper	19	5	9			33
Carolina Wren	7			4		11
House Wren	69	1	14	14	1	99
Winter Wren	49	2	31	9		91
Marsh Wren	1	_				1
Golden-crowned Kinglet	376	110	101	61	60	708
Ruby-crowned Kinglet	210	5	31	52		298
Eastern Bluebird	4	J		32		4
Veery	2		2			4
v oor y						4

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APPENDIX C. Fall Survey Results, continued.

Location	East Transect	West Transect	Nashua Creek	Blue Heron	Other Areas	Total Observed
Cray shooked Thrush	21	Hansect	8	Lagoon	Aleas	30
Gray-cheeked Thrush Swainson's Thrush				1	1	
	84	4	116	3	1	204
Hermit Thrush	20	1	79	2		102
Wood Thrush	040	50	1 704	40		1040
American Robin	810	59	704	13	57	1643
Gray Catbird	42		8	13	1	64
Brown Thrasher	4074	0777	1	7.4	4.407	1
European Starling	1374	3777	78	74	4497	9800
American Pipit	6	15	3	4	3	31
Cedar Waxwing	258	17	55	27	8	365
Tennessee Warbler	38	1	7			46
Orange-crowned Warbler	9		3			12
Nashville Warbler	29	4	14	2	2	51
Northern Parula			1			1
Yellow Warbler	2		1	19	1	23
Chestnut-sided Warbler	23		4			27
Magnolia Warbler	31	1	13	2	2	49
Cape May Warbler	2	3				5
Black-throated Blue Warbler	10		13			23
Yellow-rumped Warbler	745	49	182	114	49	1139
Black-throated Green Warbler	32	3	18	1		54
Blackburnian Warbler	12		1			13
Pine Warbler	1					1
Palm Warbler	5	2		4		11
Bay-breasted Warbler	11		4			15
Blackpoll Warbler	75	8	23	1	2	109
Black-and-white Warbler	11		1			12
American Redstart	14		8			22
Ovenbird	2		4			6
Northern Waterthrush			1			1
Connecticut Warbler			2	1		3
Mourning Warbler	1					1
Common Yellowthroat	3		2	1		6
Wilson's Warbler	7		1			8
Canada Warbler	2		<u> </u>			2
Scarlet Tanager	2		1			3
Eastern Towhee	7		9	3		19
American Tree Sparrow	45	11	13		7	147
Chipping Sparrow	5	17	3		<u>'</u>	111
Field Sparrow	1			00		1
Savannah Sparrow	+ '	2		2		4
Fox Sparrow	32	1	80			113
Song Sparrow	82	5	12	160	11	270
Lincoln's Sparrow	4	1	۱۷	100	11	270
Swamp Sparrow	5	1		8		13
		24	640		20	
White-throated Sparrow	1098	21	613		26	
White-crowned Sparrow	8	2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	4	21
Dark-eyed Junco	231	103	117	45	7	503
Lapland Longspur	1 1	2		3		6
Northern Cardinal	150	10	99	31	30	320

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APPENDIX C. Fall Survey Results, continued.

Location	East	West	Nashua	Blue Heron	Other	Total
	Transect	Transect	Creek	Lagoon	Areas	Observed
Rose-breasted Grosbeak	11		1			12
Indigo Bunting	32	1	1	5	1	40
Bobolink	14					14
Red-winged Blackbird	105	24	3	10	24	166
Rusty Blackbird	3		4	8	171	186
Common Grackle	734	119	1132		3867	5852
Brown-headed Cowbird	6	5		12		23
Baltimore Oriole	35	8	7	11	2	63
Purple Finch	2		1			3
House Finch	49	5	9	2	1	66
Pine Siskin	2		2			4
American Goldfinch	236	20	25	133	20	434
House Sparrow	533	818	9	8	485	1853

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East Transect

<u>Waypoint</u>	<u>Latitude</u>	Longitude	<u>Description</u>
1	42°20'49.7"N	82°57'52.1"W	START: Nature Center
2	42°20'49.9"N	82°57'56.5"W	-
3	42°20'44.9"N	82°57'58.9"W	Beginning of cross trail
4	42°20'40.5"N	82°57'59.9"W	Middle of cross trail
5	42°20'35.6"N	82°57'59.2"W	End of cross trail
6	42°20'33.4"N	82°58'01.2"W	-
7	42°20'33.6"N	82°58'05.9"W	Beginning of Tanglewood Dr.
8	42°20'29.9"N	82°58'10.5"W	Middle of Tanglewood Dr.
9	42°20'29.3"N	82°58'23.7"W	Middle of Tanglewood Dr.
10	42°20'30.7"N	82°58'32.7"W	End of Tanglewood Dr.
11	42°20'34.5"N	82°58'34.0"W	Loop Point #1
12	42°20'34.9"N	82°58'30.1"W	Loop Point #2
13	42°20'37.8"N	82°58'26.8"W	Loop Point #3
14	42°20'37.1"N	82°58'30.7"W	Loop Point #4
		>	Back to Loop Point #1 (Waypoint 11)
15	42°20'34.5"N	82°58'35.5"W	Across bridge
16	42°20'39.3"N	82°58'37.7"W	Beginning of Oakway Trail
17	42°20'42.5"N	82°58'31.7"W	Middle of Oakway Trail
18	42°20'45.7"N	82°58'22.2"W	Middle of Oakway Trail
19	42°20'43.2"N	82°58'12.5"W	Middle of Oakway Trail
20	42°20'43.1"N	82°58'03.7"W	Middle of Oakway Trail
		>	Back to Beginning of cross trail (Waypoint 3)
		>	Back to Waypoint 2
		>	END: Back to Nature Center (Waypoint 1)

Total Distance 2.2 miles

West Transect

Waypoint	<u>Latitude</u>	Longitude	<u>Description</u>
1	42°20'29.5"N	82°58'50.4"W	START: Central Ave. at Vista Ave.
2	42°20'22.1"N	82°59'11.2"W	Central Ave. at Inselruhe Ave.
3	42°20'13.9"N	82°59'33.0"W	Central Ave. at Picnic Way
4	42°20'11.0"N	82°59'42.8"W	Central Ave. at Casino Way
5	42°20'06.5"N	82°59'55.6"W	Scott Memorial Fountain
6	42°20'05.8"N	82°59'47.1"W	Fountain Dr. at west end of Casino
7	42°20'04.7"N	82°59'39.8"W	Bridge at east end of Casino
8	42°20'06.3"N	82°59'35.9"W	Loiter Way at Muse Rd.
9	42°20'09.5"N	82°59'21.8"W	Loiter Way at Picnic Way west
10	42°20'10.1"N	82°59'17.0"W	Loiter Way at Picnic Way east
11	42°20'17.4"N	82°59'08.8"W	Loiter Way at Inselruhe Ave.
12	42°20'23.5"N	82°58'56.5"W	Loiter Way at Kids Row
13	42°20'25.9"N	82°58'58.0"W	END: Kids Row at Central Ave.

Total Distance 2.7 miles

Nashua Creek Trail

Waypoint	<u>Latitude</u>	<u>Longitude</u>	<u>Description</u>
1	42°20'24.8"N	82°58'46.7"W	START: Trailhead
2	42°20'26.0"N	82°58'41.3"W	Old Red Bridge
3	42°20'26.8"N	82°58'30.0"W	Cement Bridge
4	42°20'27.4"N	82°58'25.8"W	
5	42°20'25.3"N	82°58'18.6"W	
6	42°20'27.2"N	82°58'08.4"W	New Red Bridge
7	42°20'26.9"N	82°58'10.1"W	
8	42°20'28.8"N	82°58'12.7"W	
9	42°20'27.8"N	82°58'16.7"W	Green Fence
10	42°20'28.2"N	82°58'20.3"W	Fallen Tree/Vine Tangles (NSWO)
11	42°20'29.5"N	82°58'32.6"W	SE corner of Zoo Fence
12	42°20'28.2"N	82°58'38.3"W	Center of Zoo Fence
13	42°20'29.3"N	82°58'39.1"W	West end of Zoo Fence
		>	Back to Old Red Bridge (Waypoint 2)
		>	END: Back to Trailhead Waypoint 1

Total Distance 1.2 miles

Blue Heron Lagoon Trail

<u>Waypoint</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Description</u>
1	42°20'30.1"N	82°57'36.4"W	START: Trailhead
2	42°20'32.7"N	82°57'30.8"W	
3	42°20'33.8"N	82°57'26.0"W	
4	42°20'40.4"N	82°57'22.1"W	Elev. 561'
5	42°20'45.6"N	82°57'14.9"W	
6	42°20'50.3"N	82°57'11.8"W	
7	42°20'54.3"N	82°57'12.6"W	Gate
8	42°20'57.0"N	82°57'17.0"W	Bridge
9	42°20'53.9"N	82°57'35.0"W	End of trail
		>	Backtrack to #8
		>	Backtrack to #7
10	42°20'49.6"N	82°57'16.8"W	Lighthouse
11	42°20'49.2"N	82°57'21.0"W	Scope viewpoint
12	42°20'42.9"N	82°57'24.7"W	
13	42°20'40.0"N	82°57'28.3"W	
14	42°20'40.1"N	82°57'33.0"W	Scope viewpoint
15	42°20'36.7"N	82°57'36.3"W	Road/Belle Isle Grille
		>	Return to START

Total Distance 2.0 miles

APPENDIX E. GPS coordinates and habitat of Point Counts conducted on Belle Isle on 7 July 2005.

<u>Point</u>	<u>Latitude</u>	Longitude	Main Habitat Type	Secondary Habitat Type
A	42°20'01.0"N	83°00'13.1"W	SHOb	OWAb
В	42°20'01.0"N	82°59'39.3"W	SHOb	OWAb
C	42°20'06.8"N	82°59'21.4"W	RESa	OWAb
D	42°20'28.7"N	82°58'51.1"W	RESa	WDFa
E	42°20'17.5"N	82°59'27.9"W	RESa	-
F	42°20'16.4"N	82°58'34.5"W	SHOb	WDFa
G	42°20'27.8"N	82°57'59.0"W	OWAb	WDFa
Н	42°20'28.3"N	82°58'22.0"W	WDFa	-
I	42°20'49.4"N	82°57'51.7"W	WDFa	OWEc (RESa)
J	42°20'43.0"N	82°58'07.2"W	WDFa	-
K	42°20'35.4"N	82°58'28.0"W	WDFa	-
L	42°20'31.9"N	82°58'02.7"W	WDFa	-
M	42°20'59.9"N	82°58'03.9"W	SHOb	OWAb & c
N	42°20'52.5"N	82°58'30.1"W	SHOa	OWAb
O	42°20'21.8"N	82°58'13.8"W	SHOb	WDFa
P	42°20'39.3"N	82°57'22.2"W	OLDa	SHOb
Q	42°20'10.3"N	82°59'41.2"W	RESa	OWAa

Habitat Abbreviations Key:

OLD = Old Field. Herbaceous vegetation is dominant; woody plants, if present, generally widely spaced shrubtree (coverage projected on ground is less than 80%, usually much below). Abandoned croplands and gravel pits may fit here.

- a. Grass-herb coverage sparse; few shrubs taller than 0.6 m
- b. Grass-herb coverage dense; few shrubs taller than 0.6 m
- c. Shrubs up to 1.8 m
- d. Small trees (up to 6 m; if taller, goes into forest category)

OWA = Open Water. Permanent bodies of water including lakes, rivers, and floodings. Nonpersistent (such as water lilies) or submergent (such as bladderwort) vegetation may be present.

- a. Stream less than 1.8 m wide
- b. River (greater than or equal to 1.8 m wide)
- c. Lake (less than 12 ha)
- d. Lake (greater than or equal to 12 ha)
- e. Pond or shallow water with vegetation present (areas with emergent plants, like cat-tails, are placed in open wetlands)

OWE = Open Wetland. Herbaceous vegetation dominant on lowland sites water table near surface). Areas may be seasonally, semi-permanently, or permanently flooded. Less than 50% shrubs or trees. Wetlands are characterisically mosaic.

- a. Sedge and grass dominated
- b. Open bog (may include shrubs such as blueberry and leatherleaf)
- c. Cat-tail
- o. Other

SHO = Shoreland. Barren or sparsely vegetated areas next to permanent bodies of water. Examples are beaches and mudflats.

- a. Sand beach
- b. Rock beach
- c. Other

RES = Residential, Roadside, and Hedgerow. Areas which are highly disturbed by human activities and are very mosaic. Vegetation occupies more than 10% of the area.

- a. Large trees (greater than or equal to 15.2 m) present
- b. Large trees absent

WDF = Wet Deciduous Forest. Forests growing on lowland sites (water table near the surface). Needle-leaved trees, if present, are less than 25% of the canopy.

- a. Swamp forest (lowland sites with American Elm, Green Ash, Red Maple, or Swamp White Oak)
- b. Floodplain forest (riparian sites with Sycamore, Silver Maple, or Hackberry)
- c. Bog forest (forest rooted in peat; Black Ash, Red Maple, Birch)
- o. Other

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APPENDIX F. Neck-collared Canada Geese on Belle Isle in 2005.

Collar/Text	Code	Age/Sex	Banded	Banding Location	Belle Isle Sighting Dates	Comments
Orange/White	1XX2	AHY-M	20-Jul-98	Ft. Albany, NWT	09-Sep-05 06-Oct-05 25-Oct-05 04-Nov-05	8+ years old in 2005!
Orange/White	Y2E1	AHY-M	31-Jul-02	Ft. Albany, NWT	06-Oct-05 02-Nov-05 04-Nov-05 17-Nov-05	
Orange/White	76PE	AHY-F	30-Jul-93	Ft. Albany, NWT	05-Oct-04 11-Oct-05	13+ years old in 2005!
Orange/White	T2P3	AHY-F	22-Jul-99	Ft. Albany, NWT	11-Oct-05 18-Oct-05	
Orange/White	T4H8				11-Oct-05	
Orange/White Orange/White	T6H0 T0H9				11-Oct-05 11-Oct-05	
Orange/White	Y2F1	AHY-F	01-Aug- 02	Ft. Albany, NWT	15-Oct-05 18-Oct-05 07-Nov-05	
Orange/White	1XM5	AHY-F	04-Jul-98	East Point,ON	02-Feb-04 25-Oct-05 04-Nov-05 17-Nov-05 28-Nov-05	8+ years old in 2005!
Orange/White	Y3E0	AHY-F	31-Jul-02	Ft. Albany, NWT	02-Nov-05	
Orange/White	Y6E4	AHY-M	31-Jul-02	Ft. Albany, NWT	04-Nov-05	
Orange/White Orange/White	T5C9 P3K3	AHY-M	24-Jul-00	Ft. Albany, NWT	11-Nov-05 23-Nov-05	
Orange/White	P3F6				27-Jan-06	
White/Black	5Z2C				09-Sep-05 14-Sep-05 07-Nov-05	
					06-Jan-06	
White/Black	9F4F	HY-M	29-Jun-04	LaCarne, OH	14-Sep-05 18-Oct-05 25-Oct-05	
					04-Nov-05	
					11-Nov-05 23-Nov-05	
\\/\bita/D ==	OLIOV				25-Nov-05	
White/Black	0H3X				15-Oct-05 18-Oct-05	
					25-Oct-05	
					02-Nov-05 07-Nov-05	
					23-Nov-05	
					25-Nov-05 14-Dec-05	

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Collar/Text	Code	Age/Sex	Banded	Banding Location	Belle Isle Sighting Dates	Comments
White/Black	6J7Z	HY-F	27-Jun-03	New Petersburg, OH	18-Oct-05 11-Nov-05	
White/Black	1R9R	HY-M	11-Jun-03	New Bremen, OH	18-Oct-05 17-Nov-05 23-Nov-05	
Green/White	4KR3	AHY-M	22-Jun-02	Near Detroit, MI	19-May-05 25-Oct-05 07-Nov-05 11-Nov-05 17-Nov-05	
Green/White	8MY0				25-Oct-05 02-Nov-05 04-Nov-05 07-Nov-05	
Green/White	1KR2	HY-M	22-Jun-02	Near Detroit, MI	05-Mar-05 25-Oct-05 02-Nov-05 20-Jan-06	
Green/White	9MY0				25-Oct-05 23-Nov-05 21-Dec-05	
Green/White	8PM8				06-Oct-05 18-Oct-05	
Green/White	3KP7				04-Nov-05	
Green/White	7MY9				25-Nov-05	
Green/White	3KR9				25-Nov-05 29-Dec-05 20-Jan-06	
Green/White	0MY9				21-Dec-05 06-Jan-06 27-Jan-06	
Green/White	7MY4				21-Dec-05 29-Dec-05	

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APPENDIX G. Additional observations (non-bird).

Wildflowers

The spring wildflower display at Belle Isle was not as extensive or as diverse as many woodlands in southeastern Michigan, but this is likely due to the presence of non-native Fallow Deer for many years. Fortunately, the deer were taken into captivity in 2004 and the native flora may now begin to recover. Without doubt, the most spectacular floral event of the spring was the blooming of perhaps 100,000 or more White Trout Lilies (Erythronium albidum). This species is quite scarce in Michigan, and is rather uncommon throughout its range. The population of White Trout Lily on Belle Isle may represent the largest in the entire state. Oddly, there were no representatives seen of the usually more numerous Yellow Trout Lily (*Erythronium americanum*) on the island. Other plants noted, not all in spring, included: Northern Blue Violet (Viola septentrionalis), Jackin-the-pulpit (Arisaema atrorubens), Great Lobelia (Lobelia siphilitica), Motherwort (Leonurus cardiaca) – not native, Ground Ivy (Glechoma hederacea) – not native, Spring Cress (Cardamine bulbosa), Cut-leaved Toothwort (Dentaria laciniata), Tall Ironweed (Veronia altissima), Spotted Knapweed (Centaurea maculosa) – not native, Wild Geranium (Geranium maculatum), Poison Ivy (Rhus radicans), Sharp-lobed Hepatica (Hepatica acutiloba), Common Burdock (Arctium minus) – not native, Wood Nettle (Laportea canadensis), White Baneberry (Actaea pachypoda), Spotted Joe-Pye Weed (Eupatorium maculatum), Stinging Nettle (Urtica dioica) - not native, Fox Grape (Vitis labrusca), Virginia Creeper (Parthenocissus quinquefolia), Gray Goldenrod (Solidago nemoralis), and New England Aster (Aster novae-angliae). A complete survey of Belle Isle's flora is highly recommended.

Butterflies

During bird surveys, casual observations of butterflies were made. Species noted included: Black Swallowtail (*Papilio polyxenes*), Tiger Swallowtail (*Papilio glaucus*), Cabbage Butterfly (*Pieris rapae*), Clouded Sulphur (*Colias philodice*), Banded Hairstreak (*Satyrium calanus*), Spring Azure (*Celastrina ladon*), Summer Azure (*Celastrina neglecta*), Pearl Crescent (*Phyciodes tharos*), Question Mark (*Polygonia interrogationis*), Comma (*Polygonia comma*), Mourning Cloak (*Nymphalis antiopa*), Painted Lady (*Vanessa cardui*), Red Admiral (*Vanessa atalanta*), Viceroy (*Limenitis archippus*), Monarch (*Danaus plexippus*), Silver-spotted Skipper (*Epargyreus clarus*), Least Skipper (*Ancyloxypha numitor*), and Mulberry Wing (*Poanes massasoit*). A complete survey of Belle Isle's butterflies is highly recommended.

Dragonflies

During bird surveys, casual observations of dragonflies were made. A number of damselflies were observed, but were not collected and were unable to be identified. Probably the most interesting, and significant observation was a dragonfly that was observed, and photographed, in August that was most likely an Elusive Clubtail (*Stylurus notatus*). This species is rarely seen perched, and is rather uncommon in Michigan, though it has been recorded in Wayne County before. Other species noted included: Common Green Darner (*Anax junius*), Common Whitetail (*Libellula lydia*), Yellow-legged Meadowhawk (*Sympetrum vacinum*), Blue Dasher (*Pachydiplax, longipennis*), Eastern Pondhawk (*Erythemis simplicicollis*), and Black Saddlebags (*Tramea lacerata*). A complete survey of Belle Isle's dragonflies is highly recommended.

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Amphibians and Reptiles

During bird surveys, casual observations of amphibians and reptiles were made. More detailed surveys have been conducted previously by others. All observations were documented and submitted to the ongoing Michigan Herp Atlas project.

American Toad (Bufo americanus)

20 April 2005, 5 calling individuals, T2S, R12E, Section 1 (Swamp Woods)

Painted Turtle (*Chrysemys picta*)

6 May 2005, one 4" individual, T2S, R12E, Section 12 (Nashua Creek)

23 August 2005, one 4" individual, T2S, R13E, Section 6 (Blue Heron Lagoon)

Northern Brown Snake (Storeria dekayi)

25 October 2005, one 10" individual dead on road, T2S, R12E, Section 1 (Swamp Woods)

Eastern Garter Snake (*Thamnophis sirtalis*)

23 August 2005, one 18" individual, T2S, R13E, Section 6 (Blue Heron Lagoon)

Butler's Garter Snake (*Thamnophis butleri*)

10 October 2005, one 10" hatchling, T2S, R13E, Section 6 (Blue Heron Lagoon)

Mammals

During bird surveys, casual observations of mammals were made. Species observed included:

Northern Short-tailed Shrew (*Blarina brevicauda*)

Observed in leaf litter in swamp woods in spring.

Eastern Chipmunk (Tamias striatus)

Observed commonly in woodlands from April through December.

Eastern Gray Squirrel (Sciurus carolinensis)

Observed commonly in all areas of the island from January through December. Probably 60-70% were melanistic individuals.

Woodland Vole (*Microtus pinetorum*)

Not personally observed, but an individual probably of this species was photographed (J. Palland) in the talons of one of the over-wintering Northern Saw-whet Owls.

Muskrat (*Ondatra zibethicus*)

Observed mainly in fall and winter, mainly on Blue Heron Lagoon, Lake Muskoday, and near the Detroit Yacht Club.

Common Raccoon (*Procyon lotor*)

Seen in swamp woods in spring on occasion in early mornings. A couple of road kills seen in fall.

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