

MISCELLANEOUS PUBLICATIONS
MUSEUM OF ZOOLOGY, UNIVERSITY OF MICHIGAN NO. 164

A Distributional Checklist of the Birds of Michigan

by

Robert B. Payne
Museum of Zoology
and Division of Biological Sciences
The University of Michigan
Ann Arbor, Michigan 48109

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March 28, 1983

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WILLIAM D. HAMILTON, EDITOR

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Map of Michigan indicating the counties.

INTRODUCTION

This checklist is a summary of the occurrence, breeding status, migration, and distribution of birds in Michigan. Used with one of the popular field guides to North American birds, the checklist should be helpful in identifying birds in the field most likely to be seen in Michigan.

All species known to occur in the state and documented with specimens, photographs, or tape recordings are included in the checklist. I have accepted only the birds known in the past or at the present time from these permanent reference sources. Museum specimens are the primary sources of information about bird species, and they are the original reference material used in distributional works and field guides. In recent years the biology and distribution of birds have increasingly been determined with field observations, and museum collecting is done only under special circumstances. Most recent information on birds in Michigan is from field observations.

NAMES

The common names follow the American Ornithologists' Union Committee on Classification and Nomenclature (AOU, 1982). For scientific names and sequence I follow the AOU (1982) except for the herons where I follow the names and sequence in Payne (1979). Sub-species names are included only where they differ from those in Zimmerman and Van Tyne (1959) (referred to here as ZVT) or where recent changes in the recognized species call for further comment.

DEFINITIONS OF TERMS

The list includes the migratory and breeding status of Michigan birds and the seasons of occurrence and their regularity and abundance. Introduced birds and exotics are included only if they have established breeding populations in the wild in Michigan. An asterisk (*) indicates a known breeding record in Michigan. Those birds not represented by specimens, recognizable photographs, tape recordings, or verified banding recoveries are included in brackets and are regarded as hypothetical.

The categories used to describe status are: (1) vagrant, one to four records for the state; (2) occasional, 5–40 records; (3) uncommon, sparse population but usually seen in every year; (4) common, regularly occurring in the state in numbers in every year in suitable habitat. Estimates of population numbers of breeding birds are included where available, as are the migration routes and wintering areas determined from recoveries of banded birds. "Transient" indicates that the species occurs in migration, but unless noted otherwise it does not nest in the state. "Summer resident" indicates that the species occurs in Michigan during the breeding season and that most or all individuals migrate out of the state during the colder time of year. "Regular" birds are seen every year or nearly every year. "Irregular" birds are seen in some years but not in others. "Irruptive" birds occur in large numbers in some years and usually few or none in other years; these are mainly wintering visitors from the northern coniferous forests.

"Hypotheticals" are those species reported only as sight records but not documented with specimens or photographs. Several of these are reasonable identifications and are supported by detailed written field descriptions. Further field work likely will confirm their occurrence with good photographs or museum specimens. I have not included in the checklist the species

whose occurrence was doubted by Barrows (1912), Swales (1913), Wood (1951), or ZVT— whoever reviewed the species most recently—unless more recent observations were available. Other lists also were consulted (Gibbs, 1879; Tordoff, 1966, 1973; Janson and Ryel, 1977). At the end of the list are a few “rejected” species whose occurrence is doubtful.

“Northern Michigan” refers to the country north of a line from the Grand Valley to Saginaw Bay and includes both the Upper Peninsula and the northern Lower Peninsula. “Southern Michigan” includes the area to the south. This division marks the northern or southern ranges of breeding populations of several birds, and it corresponds approximately to the southern limit of extensive tracts of coniferous forests in the original natural vegetation of Michigan (Küchler, 1964).

SOURCES OF INFORMATION

Information on the occurrence and status of Michigan birds was gathered from museum collections, photographs, and both published and unpublished field observations. The documentation for species is given mainly where few records are known or where recent observations show a change in the range or status.

Unless noted otherwise at least 5 specimens of each species are known from Michigan. Most are in the collections of the University of Michigan Museum of Zoology (UMMZ). Included are the museum specimen numbers, localities, and dates for those species with only 1–5 specimens. Details are given for species known from photographs, tape recordings, or only 1–2 specimens in addition to the photographs or tape recordings. Photographs and tape recordings are generally suitable as permanent records of the occurrence of a species. But the quality of photos and tapes varies, and usually we cannot use them to determine the bird’s subspecific identity or otherwise examine them in detail.

In preparing the checklist I have used Barrow’s “Michigan Bird Life” (1912), Wood’s “Birds of Michigan” (1951), and Zimmerman and Van Tyne’s “Check-list of the birds of Michigan” (1959) as a guide to specimens, though except where noted I examined all specimens myself. Birds in private collections and in high school collections years ago in some cases have disappeared. The local collection of Miller Empey is now in the Freeland Community Schools. Remnants of the historically important Clarence R. Barron collection in Niles remain in the Fort St. Joseph Museum and in Niles Senior High School, but most of these early specimens have been discarded. Bird collections of the Sault Ste. Marie Public Schools and of Olivet College, described in part by Barrows (1912) and Wood (1951), have since been discarded (J. F. Ingold, in litt., L. C. Holcomb, in litt., UMMZ). Rare or noteworthy specimens and documents should be placed in a permanent university museum collection.

The list also includes information from bird specimens in Andrews University at Berrien Springs (AU), Central Michigan University (CMU), Field Museum of Natural History, Chicago (FMNH), the Empey collection (Freeland Community Schools), Grand Rapids Public Museum (including Kent Scientific Museum) (GRPM), Hope College Museum of Zoology (HCMZ), Kalamazoo Nature Center (KNC) (Pettingill collection, Kalamazoo College (KCS) collection, and the Michigan Audubon Society (MAS) collection), Michigan State University (MSU), Fort St. Joseph Museum (Niles), Niles Public Schools, Royal Ontario Museum (ROM), the University of Michigan Biological Station (UMBS), and the University of Michigan Exhibit Museum (UMEM), all of which I examined, and from other museums as cited. Other museums were checked for Michigan specimens by their curators (Michigan Technological University at Houghton (MTech), Norman F. Sloan; Royal Ontario Museum (ROM), Jon C. Barlow; Wayne State University (WSU), William L. Thompson; Northern Illinois University, William E. Southern; Delaware Museum of Natural History (DEL), David M. Niles; Carnegie Museum (CM), Kenneth C. Parkes; Yale Peabody Museum of Natural History (PMNH), Eleanor H. Stickney) or by visiting investigators (National Museum of Natural History, formerly United States National Museum (USNM), Steven M. Goodman and Robert W. Storer).

Distributional and nesting records were compiled from Kelley *et al.* (1963) and Kelley (1978) in southeastern Michigan, McWhirter and Beaver (1977) in the Lansing area, Walkin-

shaw (1978) on Calhoun County, Cuthbert (1963) on Isabella County, Pettingill (1974) on the Douglas Lake region, Scharf (1979) on colonial waterbird nesting, and published notes in the *Jack-Pine Warbler* (JPW) from 1956–1982, *Audubon Field Notes* (AFN)/*American Birds* (AB), *Whitefish Point Bird Observatory Annual Reports* (WPBO), *Michigan Audubon Newsletter* (MAN)/*Michigan Audubon* (MA), *Goldeneye*, and *Oronoko Bird Club Field Notes* (OBC). Unpublished observations in the files of UMMZ, KNC, MAS, the Michigan Department of Natural Resources (DNR), the Michigan Natural Features Inventory (MNFI), and Detroit Audubon Society (DAS) have also been included. Many records have been published or deposited in more than one place (notably AB and JPW), and I have usually cited the source with the most information. I have omitted without comment most records of questionable identification, published or not, if the species is otherwise known as a vagrant or occasional visitor. References for all but the most general published articles and books listed at the end of the checklist, and for the sources of the unpublished records, are abbreviated in the text.

A SUMMARY OF THE BIRDS

A total of 370 species of birds are known in Michigan. Of these, 232 have bred at least once under natural conditions. One (the Passenger Pigeon) is now extinct, and several others have not been seen recently. Yet other birds have been added to the list in recent years. Several birds not seen earlier on the islands of Lake Michigan (Hatt *et al.*, 1948) have now been found as nesting or at least as summer residents. Some species such as the Northern Cardinal and House Finch have expanded their ranges, others such as Bewick's Wren and Carolina Wren have retreated from Michigan's recent cold winters, and birds such as Piping Plover have decreased in numbers as nesting birds due to human disturbance of their habitat. Certain species such as Double-crested Cormorants and Caspian Terns now have large breeding populations in the state. The list includes the observations available through early 1982. There are also 26 "hypotheticals" and 11 "rejected" species.

ACKNOWLEDGMENTS

Many field ornithologists and birders have contributed to our knowledge about Michigan birds. Lawrence H. Walkinshaw has contributed much information on distribution breeding biology (*e.g.* Walkinshaw, 1978, 1980). H. B. Tordoff, Norman L. Ford, C. Dean Fisher, Frank B. Gill, Steven M. Goodman, Joseph R. Jehl, B. G. Murray, and Joseph G. Strauch, Jr. were active in adding to the UMMZ collections in recent years, and H. B. Tordoff and R. W. Storer helped to maintain the UMMZ Michigan bird records file. Walter R. Booth and C. Roy Smith in Berrien County, Nicholas Ilnicki in Marquette County, Norman F. Sloan in Houghton and Baraga counties, William J. Robinson at Marquette, Raymond J. Adams in Kalamazoo County, William C. Scharf in the northern Great Lakes region, W. Powell Cottrille and Betty Darling Cottrille and David E. Baker in the bogs of northern Michigan, Lawrence L. Master in marshlands, and Sergej Postupalsky in raptor biology have been among the most active field ornithologists in the state in recent years and contributed nesting and other bird records.

Victor S. Janson and Lawrence A. Ryel made available the bird records of the DNR, Lawrence L. Master the MNFI, David N. Ewert the Whitefish Point Bird Observatory (WPBO), Raymond J. Adams the KNC and MAS, Glenn Y. Belyea the Rose Lake Experimental Station, and Alice H. Kelley and Joseph P. Kleiman the DAS. Joe Johnson provided copies of field notes by Miles Pirnie on waterfowl from the records of the W. C. Kellogg Bird Sanctuary. For photographs and details of certain birds I thank Raymond J. Adams, George A. Ammann, Walter L. Anderson, David E. Baker, Walter R. Booth, Michael Brown, William A. Buttemer, Ellie T. Cox, John F. Douglass, Steven M. Goodman, Margaret Halbeisen, Mike Jorae, Walter Koelz, Lawrence L. Master, Thomas E. Moore, Charles Nelson, Roger T. Peterson, Rolf O. Peterson, Sergej Postupalsky, Dennis Rupert, Chris M. Schumacker, Norman F. Sloan, William E. Southern, Laura F. Sweany, Thomas Van't Hof, Lawrence H. Walkinshaw, and Paul A. Young. The other members of the Michigan Ornithological Records Committee

(Raymond J. Adams, Thomas V. Heatley, Victor S. Janson, Joseph P. Kleiman, David J. Powell, and C. Roy Smith) were encouraging in the preparation of the checklist. Burt L. Monroe made available before publication a copy of the AOU (1982) list of names. The Bird Banding Laboratory (BBL) of the U.S. Fish and Wildlife Service provided recovery data for certain birds.

For access to specimens in collections I thank Raymond J. Adams (KNC), Dave VandenBos (GRPM), Rollin H. Baker and James E. Zablony (MSU), Michael J. Hamas (CMU), Eldon J. Greij (HCMZ), Asa C. Thoresen (AU), John W. Fitzpatrick and David Willard (FMNH), David M. Niles (DEL), Eleanor H. Stickney (PMNH), Robert S. Butsch (UMEM), D. Wayne Stiles (Fort St. Joseph Museum, Niles), Jack Mell (Niles Senior High School), and Harold Hoelzle (Freeland Community Schools). The Michigan State University library gave access to their archival records and the remaining original bird records of W. B. Barrows, though most of his unpublished records were discarded in the 1940's. For checking certain specimens I thank Steven M. Goodman, Larry C. Holcomb, Johann F. Ingold, Kenneth C. Parkes, Robert W. Storer, William L. Thompson, Dave VandenBos, and Bob Vande Kopple.

I am grateful to the ornithologists who have read and commented on the checklist manuscript: Raymond J. Adams, David E. Baker, Jon C. Barlow, Donald L. Beaver, Glenn Y. Belyea, Walter R. Booth, Godfrey R. Bourne, Arthur Carpenter, W. Powell and Betty Darling Cottrille, Francesca J. Cuthbert, David N. Ewert, James A. Fowler, Jr., Steven M. Goodman, Michael J. Hamas, Thomas V. Heatley, Janet Hinshaw, Nicholas Ilnick, Victor S. Janson, Alice H. Kelley, Eugene E. Kenaga, Joseph P. Kleiman, Lawrence L. Master, Douglas W. McWhirter, Harold F. Mayfield, Sergej Postupalsky, William L. Robinson, Lawrence A. Ryel, Alan J. Ryff, William C. Scharf, Norman F. Sloan, C. Roy Smith, Thomas J. Van't Hof, Lawrence H. Walkinshaw, LaRue Wells, Thomas C. Will, Richard A. Wolinski, Paul A. Young, and James E. Zablony. Most of these people kindly made available their own field observations.

CHECKLIST

Red-throated Loon, *Gavia stellata*. Uncommon transient. Most specimens in UMMZ were taken on the Great Lakes in spring or autumn. A few recorded into summer (JPW 44:51, 1966). Occasional in winter.

***Common Loon**, *Gavia immer*. Common transient, uncommon summer nesting resident in northern Michigan, sometimes nesting on small islands in ponds several miles from their feeding areas on larger lakes. Occasional in summer in southeastern Michigan, nesting once in Oakland County (Kelley, 1978), also several recent nesting records in Barry County in southwestern Michigan (KNC; UMMZ). Occasional in winter.

***Pied-billed Grebe**, *Podilymbus podiceps*. Common transient and summer resident, local in northern part of state. Population is mainly migratory but a few birds are observed in winter where open water is available.

Horned Grebe, *Podiceps auritus*. Common transient. Summer observations in the Upper Peninsula. Early winter records on Little Traverse Bay, in Berrien County, in Kalamazoo County (into January), near Lansing (Ingham County) (McWhirter and Beaver 1977), and on the Detroit River.

***Red-necked Grebe**, *Podiceps grisegena*. Uncommon transient, most often observed on Great Lakes. Occasional summer resident in the Upper Peninsula. Uncommon in winter. Late summer records (Cheboygan County, Isle Royale) (Wood, 1951; Nelson, 1956) may refer to early autumn migrants. One nesting record, successful, at Cedarville, Mackinac County, in 1975 (Wilson Bull. 89:33-46, 1977).

Eared Grebe, *Podiceps nigricollis*. Occasional transient. One specimen, UMMZ 208557, taken 3 miles S of Marlette, Lapeer County, on 20 January 1965. Photograph (UMMZ) of bird in breeding plumage at St. Joseph, Berrien County, on 25 May 1981. Observations number about 20, mainly from St. Joseph, Berrien County (Goldeneye 20(4):5, 1981) and the Muskegon sewage ponds (AB 35:941, 1981; DNR).

Western Grebe, *Aechmophorus occidentalis*. Occasional transient. One specimen, dark phase, GRPM 100009, at Fox Station, Cascade Township, Kent County, on 17 February 1917. Observed in Berrien County at St. Joseph (OBC 9:1, 1970; 14:1, 1975), Muskegon sewage ponds (through summer) (JPW 59:142, 1981), Kalamazoo County (JPW 56:153, 1978; KNC), Hillsdale County (JPW 32:124, 1954), Clinton County (McWhirter and Beaver, 1977), Midland County (DNR), Jackson-Lenawee county line (Auk 62:312, 1945), and Port Huron, St. Clair County (UMMZ). Also observed in the Upper Peninsula in Delta and Baraga counties (JPW 52:35, 1974).

Northern Gannet, *Sula bassanus*. Vagrant from the North Atlantic. UMMZ 42189, immature, was taken at Walker Lake, Livingston County, on 19 October 1911. Another immature was collected Thunder Bay, Alpena County, on 10 November 1925 (Empey collection; locality verified in correspondence in UMMZ). Photographs of immatures from Lake St. Clair, St. Clair County, on 1 December 1929, and Birmingham, Oakland County, on 29 November 1942 (ZVT; UMMZ). One observed near Port Huron on St. Clair River on 13 October 1978 (DAS).

American White Pelican, *Pelecanus erythrorhynchos*. Occasional to uncommon transient, mainly on the Great Lakes. Observed on Lake Michigan, Lake Erie, Lake Superior (Keweenaw Point, Houghton, and Marquette) (Barrows, 1912; Jordan and Shelton, 1982; MTEch; UMMZ), Lake Gogebic (Gogebic County) (AB 35:825, 1981), and, less often, inland at Seney, Schoolcraft County (JPW 22:102, 1944), Houghton Lake (Roscommon County) (Wood, 1951), Rose Lake, Ingham County (McWhirter and Beaver, 1977), Shiawassee National Wildlife Refuge, Saginaw County (DNR), and in Kalamazoo County (KNC).

Brown Pelican, *Pelecanus occidentalis*. Occasional transient. Photograph of adult at Macatawa Bay, Holland, Ottawa County, on 17 June 1978 (AB 32:1162, 1978; HCMZ; UMMZ). Sight observations from Berrien and Ottawa counties (JPW 29:145, 1951; 43:166, 1965; 58:121, 1980; OBC). Early records in Barrows (1912) from Berrien County include an adult shot at St. Joseph.

***Double-crested Cormorant**, *Phalacrocorax auritus*. Uncommon transient, occasional in winter. In 1982 there were about 300 nests at 8 sites in Michigan, up from 68 nests at one site in 1978 and no nesting birds in 1975 (MNFI). Nesting localities (1982) are known inland in the Upper Peninsula at Gene's Pond (Dickinson County), on Lake Superior on Tahquamenon Island (Chippewa County), on Lake Michigan on Gull Island and Pismire Island (Charlevoix County), Ile aux Galets (Emmet County), Gravelly Island and Little Gull Island (Delta County), and Naubinway Island (Mackinac County), in St. Mary's River on Pipe Islands and Munuscong

Bay (Chippewa County), and on Lake Huron on Little St. Martin Island (Mackinac County) and Gull and Scarecrow Islands (Alpena County) (JPW 59:142, 1981; AB 35:910, 1981; MNFI).

[**Anhinga**, *Anhinga anhinga*. Hypothetical. UMMZ 91960 from St. Mary's River, Sault Ste. Marie (?Ontario) in 1881, was probably a curio shop import (Barrows, 1912). This record must be rejected, but another record is likely a local Anhinga: one was shot on Lake St. Clair, Macomb County, in the early 1930's; no specimen was prepared (UMMZ files).]

***Great Blue Heron**, *Ardea herodias*. Common transient and summer resident. Breeds in woods, feeds in marshes, lakes, and rivers. About 180 breeding colonies are known in Michigan (MNFI). A few birds occur in winter where open water remains.

***Great Egret**, *Ardea alba*. Common visitor in spring, late summer, and autumn, increasing in numbers throughout the season. As many as 200 are seen in Erie Marshes, Monroe County, in late summer. Has nested in recent years in southeastern Michigan in Oakland, St. Clair (Dickinson Island), Saginaw, and Bay counties (Scharf, 1979; MNFI). Uncommon and irregular elsewhere in Michigan.

Louisiana Heron, *Egretta tricolor*. Occasional summer visitor. Observed at Erie Gun Club, Monroe County, in May 1965 (Tordoff, 1966; photo in UMMZ). Sighted in Allegan, Monroe, and Macomb counties in May and June (AB 35:826, 1981; JPW 53:145, 1975), Bay County in July (AB 32:1163, 1978), and at Fish Point, Tuscola County, in August (JPW 54:9, 1976). One seen in the Upper Peninsula in the area from Whitefish Point to Tahquamenon and Paradise in Chippewa County in April and May 1979 (DNR). Several late summer and autumn records at Pte. Mouillee, Erie Gun Club, and Erie Marsh, Monroe County (Kelley, 1978; UMMZ).

Cattle Egret, *Egretta ibis*. Uncommon visitor from spring to autumn. UMMZ specimen 217606 from Mueller Township, Schoolcraft County, on 10 November, 1970 is the earliest known record for the Upper Peninsula. Seen at several localities in the Upper Peninsula including Houghton, Alger, Dickinson, and Chippewa counties (JPW 54:178-179, 1976; WPBO). Observed widely with most sightings in southern part of the state. First recorded in Michigan in the Erie Marsh, Monroe County, in spring 1961 (JPW 41:61, 1963). Photographed in Michigan near Cheboygan in October 1964 (Pettingill, 1974; photo in UMMZ), in Kalamazoo and Washtenaw counties in 1966 (UMMZ), in Calhoun County in 1968 (UMMZ), and in Berrien County in 1969 (UMMZ). Has nested on islands in western Lake Erie (Kelley, 1978) and in Oconto Marsh and on Willow Island, Wisconsin, in Lake Michigan (Scharf, 1979), but is not yet known to nest in Michigan.

Snowy Egret, *Egretta thula*. Uncommon visitor from spring to autumn. UMMZ specimens: 44334 on 10 May 1889 from Ann Arbor, Washtenaw County; 85917 (10 August 1935) and 91448 (29 August 1937) both from Erie Marsh, Monroe County. Observed at Erie Marsh from spring through autumn (Kelley, 1978; UMMZ). Occasional in northern Lower Peninsula (Benzie, Iosco, and Alpena counties). Has nested in Oconto Marsh,

Wisconsin (Scharf, 1979). Most records in Michigan are in late summer from southern part of state.

Little Blue Heron, *Egretta caerulea*. Uncommon visitor from spring to autumn. All UMMZ specimens are in immature plumage, but adults also have been seen.

***Green Heron**, *Ardeola striata*. Common summer resident. Occasional birds are seen into December.

***Black-crowned Night Heron**, *Nycticorax nycticorax*. Uncommon transient and summer resident. Breeding population in 1982 was 310 pairs at active nests at 8 sites located from Saginaw Bay (70% of the population) to Big Bay de Noc in Delta County (MNFI). Many nonbreeding individuals occur in summer particularly in southeastern Michigan (Lake St. Clair and Lake Erie), where they formerly nested (Wood, 1951; Kelley, 1978: UMMZ). Occasional in winter.

***Yellow-crowned Night Heron**, *Nyctanassa violacea*. Occasional summer resident. No specimens. Photographed at Bloomfield Hills, Oakland County, on 20 May 1970 (JPW 48:86, 1970), at nest near Erie Marsh, Monroe County, on 17 July 1971 (JPW 50:29, 1972), and at nest in Westland, Wayne County, where it has nested every year since 1978 (JPW 59:143, 1981; UMMZ). Also nested near the Rouge River, Wayne County, in 1971 (Kelley, 1978). Photographed at Benton Harbor, Berrien County, in July 1979 (UMMZ). More than 20 observations in Michigan (Schoolcraft, Berrien, Van Buren, Allegan, Ottawa, Kalamazoo, Calhoun, Clinton, Ingham, Midland, Washtenaw, Monroe, St. Clair, Oakland, Macomb, and Wayne counties).

***Least Bittern**, *Ixobrychus exilis*. Uncommon transient and summer resident. More numerous in the Lower Peninsula; nesting is known in 27 counties throughout the state. The dark-phase "Cory's Bittern" ("*neoxena*") is represented by only one Michigan specimen in UMMZ (91065, taken at Watkins Lake, Jackson County, on 24 August 1894).

***American Bittern**, *Botaurus lentiginosus*. Uncommon transient and summer resident, occasional in winter in Erie Marsh, Monroe County, and in Berrien County. Numbers appear reduced in southern Michigan in recent years.

White Ibis, *Eudocimus albus*. Vagrant. An adult was observed near Vicksburg at Oswald's Marsh, Kalamazoo County, on 1 August 1948 (KNC), and an immature bird was seen on Harsen's Island, St. Clair County, Lake St. Clair, on 19–26 September 1970 (JPW 49:3, 1971; photo in UMMZ).

Glossy Ibis, *Plegadis falcinellus*. Occasional transient and summer visitor. Adult female specimen from Yoncom Bayou (= 4 miles N of Linwood) on Saginaw Bay, Bay County, on 14 June 1939, in Empey collection. Specimen in GRPM examined by Barrows (1912) lacked precise data and data are now unavailable. Observed in Shiawassee National Wildlife Refuge, Saginaw County; Mount Pleasant, Isabella County; Maple River Game Area, Gratiot County; Tobico Lagoon, Bay County; Fish Point, Tuscola County; Haehnle Sanctuary, Jackson County; Harsen's Island, St.

Clair County; and Erie Marsh, Monroe County (JPW 41:27, 1963; 49:94, 1971; Kelley, 1978; AB 35:943, 1981; UMMZ).

White-faced Ibis, *Plegadis chihi*. Vagrant. UMMZ 55261, immature, near Jackson, Jackson County, taken on 15 October 1916. Photograph of adult, Dowagiac Creek at Lake LaGrange, Cass County, on 4 May 1969 (JPW 48:33, 1970). A few other sight records may refer to this species or the previous species.

Wood Stork, *Mycteria americana*. Vagrant. An immature was collected near Monroe, Monroe County, on 19 June 1910, and photographed (Auk, 26:83, 1911). Photographed near Mason, Ingham County, on 31 July 1963 (JPW 42:229, 1964) and two birds on South Manitou Island, Leelanau County, Lake Michigan, on 29 May 1975 (JPW 53:158, 1975; UMMZ). One earlier record: bird observed at Port Huron, St. Clair County, in autumn, year unknown (Barrows, 1912).

[**Greater Flamingo**, *Phoenicopterus ruber*. Hypothetical, perhaps a vagrant. Observations of this species in Burlington Township, Calhoun County, from 16 August to late September 1959 (Wilson Bull. 73:383, 1961, photos in UMMZ), near Alpena, Alpena County, and Wakefield, Gogebic County, in autumn 1971 (JPW 50:3, 1972), and in Spring Lake Township, Ottawa County, on 13 August 1974 (JPW 52:191, 1974) may be escaped captive birds, but wild flamingos do appear in northern North America as vagrants, both this and other species of flamingos are highly dispersive (Cramp and Simmons, 1977), and the records available match the season of dispersal in the southern herons and egrets.]

Fulvous Whistling-Duck, *Dendrocygna bicolor*. Occasional visitor. Two UMMZ specimens (157798, 157799) were taken from flock of 10, North Cape, Monroe County, on 14 October 1962. A third specimen (UMMZ 204767) was shot on Drummond Island, Chippewa County, on 29 September 1979. Photographs of two from Bloomfield Township, Oakland County, on 12 June 1974; seen for next two weeks (UMMZ).

Black-bellied Whistling-Duck, *Dendrocygna autumnalis*. Vagrant. Observed at Kalamazoo, Kalamazoo County, on 25 July 1981 (AB 35:941, 1981), photo in UMMZ. The bird may have been an escaped captive but appeared quite wild (KNC). Increased numbers of breeding wild and feral populations are known in Louisiana and Texas in recent years (G. H. Lowery, Louisiana Birds, 3rd Ed., 1974; Todd, 1979), and scattered sightings in the eastern United States in recent years may be derived from these birds.

Tundra Swan, *Cygnus columbianus*. Common transient. Up to 2000 seen locally in migration in early spring (JPW 59:106, 1981). Summer records near Midland, Midland County, and Lake Linden, Houghton County (JPW 43:84, 144, 1965), in Oakland County (JPW 49:122, 1971), in Monroe County (Kelley, 1978), and in Mackinac County in 1981 (MNFI). A few winter locally on Grand Traverse Bay and in southern Michigan in Ottawa and Kalamazoo counties. Observations of marked birds show that birds flying over Michigan winter mainly in the Mid-Atlantic states and

breed in northwest from Manitoba to Northwest Territories (Wildfowl 24:8-14, 1973).

Trumpeter Swan, *Cygnus buccinator*. Vagrant. One record, USNM 70317: St. Clair Flats, Michigan, on 20 November 1875 (specimen checked by R. W. Storer). No recent observations. Nested in the Midwest west of the Great Lakes in the 1800's, but there are no nesting records in Michigan (Wilson Bull. 76:331-338, 1964; 80:228-229, 1968).

***Mute Swan**, *Cygnus olor*. Introduced, now a common breeding bird locally in the Lower Peninsula especially in Traverse Bay and Houghton Lake areas. Also observed in the Upper Peninsula mainly around Marquette and L'Anse on Lake Superior. Apparently most birds remain in Michigan throughout the year, but there are local migrations. Traverse City population began with a breeding pair in 1920; after 1933 the birds spread in the northwestern Lower Peninsula. Estimated total number of 1440 birds in Michigan in 1981 (DNR). Breeding distribution of main population of 1100 birds includes 11 counties in northern lower Michigan, with these birds wintering in Grand Traverse Bay from 1948 (MAN 18(5):3, 7, 1970). Other wintering areas in northern lower Michigan occur from Benzie to Cheboygan and Presque Isle counties (W. L. Gelston and R. D. Wood, 1982. The Mute Swan in Northern Michigan.). Also nests in Muskegon, Allegan, Berrien, Jackson, Macomb, Monroe, Oakland, and Wayne counties (JPW 46:131, 1968; 59:143, 1981; DNR; UMMZ). Uncommon in winter in the southern counties, reported by half of the late December Christmas Bird Counts in Michigan in 1981 (JPW 60:91, 1982).

Greater White-fronted Goose, *Anser albifrons*. Occasional transient. No current specimen is known. The specimen in the Barron collection (Barrows, 1912) has been lost. Photograph of bird captured and released at Shiawassee National Wildlife Refuge, Saginaw County, in 1967 in UMMZ, also photos taken of bird at Silver Lake, Washtenaw County, in 1964 (JPW 43:45-46, 1965) and at Wintergreen Lake, Kalamazoo County, in 1966 (JPW 45:38-39, 1967; photo in UMMZ). As many as 11 seen in the Allegan State Game Area, Allegan County, in 1982. Observed in the Upper Peninsula in Houghton, Marquette, Schoolcraft, Chippewa, and Delta counties, and at scattered localities throughout the Lower Peninsula, with several observations in Gratiot and Tuscola counties. About 20 observations have been reported, but the species is probably more regular than this number suggests; they have been seen in 7 of the past 13 years in Kalamazoo County (KNC).

Snow Goose, *Chen caerulescens*. Common transient. Flocks of hundreds observed mainly in autumn, rather local, but regular at Muskegon sewage ponds, Muskegon County, and in Allegan State Game Area, Allegan County. Occasional in winter. Both white-phase birds and blue-phase birds ("Blue Goose") occur in Michigan; white-phase birds are somewhat more numerous.

Ross' Goose, *Chen rossii*. Vagrant. Photographed in Allegan State Game Area, Allegan County, on 27 October-12 November 1979 (AB

34:164, 1980; photos in UMMZ). Another bird was shot at Shiawassee National Wildlife Refuge, Saginaw County, on 9 October 1980 (AB 35:185, 1981).

Brant, *Branta bernicla*. Uncommon transient and winter visitor. One UMMZ specimen, 151927, Keweenaw Point, Keweenaw County, on 29 December 1956. Earlier Michigan specimens (1888, 1889) were described in Wood (1951). Observed at Whitefish Point and in Munuscong Bay, Chippewa County (JPW 59:143, 1981; UMMZ). Sight records in the Lower Peninsula at Wintergreen Lake, Kalamazoo County (ZVT; DNR), St. Joseph, Berrien County (photo in UMMZ), Grand Haven, Ottawa County (JPW 51:23, 1973), at Tawas Point, Iosco County (JPW 37:152–153, 1959), and Monroe, Monroe County (AB 33:179, 1979; UMMZ). Regular in the past few years in flight along Lake Erie and near Port Huron, in flocks of 20 and more (DAS; UMMZ).

Barnacle Goose, *Branta leucopsis*. Occasional transient. Two specimens, CMU 75-305 and 75-7, were collected at Shiawassee National Wildlife Refuge, Saginaw County, on 18 October 1973 and 25 October 1974 (also JPW 54:131–132, 1976, photograph). Two other birds, one photographed, were seen in Allegan State Game Area, Allegan County, on 25 October 1979 (AB 34:164, 1980). Immature reported from Naubinway, Mackinac County, on 21 May 1965 (JPW 43:157, 1965). Two birds were seen at Fish Point, Tuscola County, in October 1976 (JPW 58:20, 1980), and one on 30 March 1980 (JPW 58:112, 1980). All records are in normal migration season, indicating that they were wild birds.

***Canada Goose**, *Branta canadensis*. Common transient and breeding resident throughout Michigan. Breeding observed in recent years in Berrien County (Sarett Nature Center; Goldeneye 21(6):6, 1982). Winters locally where snow is not too deep. Some birds observed in all months in the southern counties. More than 10,000 seen in winter in Allegan County. Restocking of original population is responsible for the present high numbers. Population at Seney National Wildlife Refuge was established in 1936 from geese derived from Minnesota and North Dakota, in the breeding range of *B. c. maxima* (notes in UMMZ). Geese breeding in southeastern Michigan also are *B. c. maxima* (JPW 57:56–69, 1979; 58:99–103, 1980). Many specimens shot in autumn migration are of the smaller northern forms *B. c. interior*, *B. c. hutchinsii*, and *B. c. parvipes* (UMMZ).

***Wood Duck**, *Aix sponsa*. Common transient and summer resident. Regular in winter in small numbers in southern Michigan.

***Green-winged Teal**, *Anas crecca*. Common transient. Common but local summer resident. Breeding records scattered throughout state with nests on Isle Royale, at Seney in Schoolcraft County (several years in 1930's and 1940's), Sedge Point near Cheboygan, Cheboygan County (summer 1939), Mackinac Island (June 1937), near Grayling in Crawford County (June 1974), at Benton Harbor, Berrien County (late May 1973), in Kalamazoo County (1 July 1974, 12 July 1976), and Linwood, Bay County (9 June 1930) (Wood, 1951; Nelson, 1956; JPW 51:147, 1973; 52:182, 1974;

Jordan and Shelton, 1982; UMMZ). Uncommon in winter, observed regularly in Berrien County in winter in last 10 years (OBC).

A hybrid *Anas crecca* × *A. acuta* (UMMZ 867 1/2) from "Michigan" and taken in the last century has no further data.

***American Black Duck**, *Anas rubripes*. Common transient and locally common summer resident throughout state, probably most numerous in the southeast. Winters in suitable habitat in southern Michigan.

Anas rubripes occasionally hybridizes with *A. platyrhynchos* (14 hybrid specimens in UMMZ, 1 MSU specimen, and 1 CM specimen are known from Michigan).

***Mallard**, *Anas platyrhynchos*. Common transient and summer resident. Common in winter in suitable habitat throughout state.

***Northern Pintail**, *Anas acuta*. Common transient, occasional local summer resident. The few breeding records known are throughout the state (Wood, 1951; Kelley, 1978). Winters occasionally and locally in southern counties.

***Blue-winged Teal**, *Anas discors*. Common transient, common summer resident. A few have been observed in winter.

Cinnamon Teal, *Anas cyanoptera*. Occasional transient. One specimen: MSU 6161, Marcellus, Cass County, on 3 October 1969. Another (specimen not located) near Saginaw, was taken in early April in 1939 or 1940 (JPW 37:122, 1959). Observed at Zilwaukee, Saginaw County, on 19 April 1959 (JPW 37:154, 1959), at Grand Mere, Berrien County, on 6 May 1961 (UMMZ), at Fish Point Wildlife Area, Tuscola County, on 9 May 1968 (JPW 46:87, 1968), along Lake Michigan shoreline near St. Ignace, Mackinac County, on 2 May 1977 (DNR), and at Sugar Bush Road sewage pond, Macomb County, on 26–29 April 1982 (DAS).

***Northern Shoveler**, *Anas clypeata*. Uncommon transient and uncommon summer resident. Has nested in Michigan at Fish Point in Tuscola County, near Linwood in Bay County, at Muskegon sewage ponds in Muskegon County, in Portage Marsh in Delta County, and at Seney in Schoolcraft County (Wood, 1951; JPW 52:182, 1974; 54:162, 1976). Observed in summer in Berrien and Kalamazoo counties (JPW 49:122, 1971; 52:182, 1974; OBC). Occasional in winter.

***Gadwall**, *Anas strepera*. Common transient and uncommon summer resident. Breeds locally, with nesting records from Green Island, Gull Island, and Ile aux Galets in northern Lake Michigan; Black River Island, Lake Huron; Scarecrow Island, Thunder Bay; Little Charity Island, Saginaw Bay; and Pte. Mouillee, Monroe County (ZVT; JPW 47:127, 1969; MAS: UMMZ). Uncommon in winter, sometimes over 100 birds in Kalamazoo County (KNC).

Eurasian Wigeon, *Anas penelope*. Occasional transient. Specimens from Erie Marsh, Monroe County, taken at turn of the century, one examined by Barrows (1912). Another specimen in Carnegie Museum (CM 117705) was taken at Erie, Monroe County, on 25 October 1936. Several sight observations in southeastern Michigan (Kelley, 1978), also observed in Tuscola,

Muskegon, Ottawa, and Kalamazoo counties (DNR; KNC; MAS; UMMZ). Seen in the Upper Peninsula at Whitefish Point, Chippewa County (JPW 53:103, 1975).

***American Wigeon**, *Anas americana*. Common transient, uncommon and local summer resident. Nests at Seney National Wildlife Refuge, Schoolcraft County (Wood, 1951); occasionally nests in Oakland and Monroe counties (Kelley, 1978). Uncommon in winter, regular in small numbers in Kalamazoo County (KNC).

***Canavasback**, *Aythya valisineria*. Common transient; uncommon and local breeding resident. Nesting observed on St. Clair Flats, St. Clair County, in 1880 (Wood, 1951), where species is regularly observed in summer (Kelley, 1978; UMMZ), at Muskegon sewage ponds, Muskegon County, in 1974 (JPW 52:182, 1974), and in Portage Marsh, west of Escanaba, Delta County, female with small young on 18 July 1955 (UMMZ). Summer record at St. Joseph, Berrien County, on 29 June 1973 (Goldeneye 12(5):2, 1973). Winters locally in Berrien County, on Lake St. Clair, and on the Detroit and St. Clair rivers.

***Redhead**, *Aythya americana*. Common transient, most abundant in autumn, with thousands in a day along the shore of Lake Michigan in Berrien County in October. Breeds uncommonly and locally, with nesting records in Tuscola, Huron, Saginaw, Gratiot, St. Clair, Oakland and Wayne counties (Wood, 1951; ZVT; Kelley *et al.*, 1963; UMMZ). Nesting in southeastern Michigan has been observed in recent years also at Pte. Mouillee, Monroe County, and near Ann Arbor, Washtenaw County (MNFI, UMMZ). Nests in the Upper Peninsula in Munuscong Bay, Chippewa County (UMMZ). Winters in small numbers.

***Ring-necked Duck**, *Aythya collaris*. Common transient. Abundant in autumn along the shores of Lake Michigan. Breeds on Isle Royale, in the Upper Peninsula (numerous at Seney National Wildlife Refuge) and sparingly in northern Lower Peninsula; locally in southern Lower Peninsula, with 12 broods in Kalamazoo County from 1972 through 1976 (ZVT; JPW 49:130, 1971; 51:147, 1973; Pettingill, 1974; Jordan and Shelton, 1982; KNC). Occasional in winter.

Tufted Duck, *Aythya fuligula*. Vagrant. Specimen collected at Whitmore Lake, Livingston-Washtenaw County line, in October 1973; examined in UMMZ and photographed (JPW 52:150-151, 1974; photo in UMMZ) was a possible escapee, but the species has been recorded as an accidental in several northeastern states and in Ontario (Peterson, 1980; James *et al.*, 1976).

Greater Scaup, *Aythya marila*. Common transient. A nesting record (St. Clair Flats, 1879) is questionable, as it is based on description of eggs and nest, both indistinguishable from Redhead, plus a female said to be this species of scaup killed in flight over the nest (Bull. Nuttall Ornithol. Club 5:62, 1880). There is no earlier published record of the species in Michigan (Gibbs, 1879; Wood, 1951). Occasional in winter.

***Lesser Scaup**, *Aythya affinis*. Common transient, more numerous than Greater Scaup. Occasional in early summer, more or less regular into early winter. One breeding record, in Dickinson County on 20 May 1941 (ZVT).

Common Eider, *Somateria mollissima*. Occasional transient and winter visitor. Photographs at Marquette, Marquette County, of a female on 21 February 1971 and a male in November–December 1975 (JPW 49:10–11, 1971; UMMZ), and a female at St. Joseph, Berrien County, on 4 January 1981 (AB 35:302, 1981; UMMZ). Also observed at Port Huron, St. Clair County (three records in UMMZ).

King Eider, *Somateria spectabilis*. Occasional autumn transient and winter visitor. Winter observations of birds at Muskegon, Muskegon County, and Harbor Springs, Emmet County, on 2–3 February 1974 (UMMZ). One observed and photographed at Saginaw Bay in summer (17 June 1981; JPW 59:143, 1981). About 15 observations through 1982, including birds at Whitefish Point, Muskegon, Port Huron (flock of 20 on 1 December 1979; JPW 58:87, 1980), Detroit River, and Monroe (DAS; MAS).

Harlequin Duck, *Histrionicus histrionicus*. Occasional transient and winter visitor. Two UMMZ specimens: 156632, taken at Port Huron, St. Clair County, on 7 February 1962; 220311 (wing only) taken at St. Clair, St. Clair County, on 6 October 1971. GRPM 28505, Kent County, on 18 February 1962; HCMZ 620, at Saugatuck, Allegan County, on 31 December 1965. Regular in winter at Sault Ste. Marie, Chippewa County (JPW 57:151, 1979; MAS). Ten records for Berrien County (St. Joseph, New Buffalo, Berrien Springs) from October through May (OBC; photo in UMMZ), also seen in Presque Isle, Alcona, Benzie, Ottawa, Muskegon, Kalamazoo, St. Clair, Wayne (Grosse Ile), and Monroe counties (AB 32:207, 1978; UMMZ; DAS; KNC; MAS).

Oldsquaw, *Clangula hyemalis*. Uncommon transient and winter resident on southern Great Lakes, seen mainly on Lake Michigan. Often far offshore and not easily seen from land. One was seen at Seney National Wildlife Refuge, Schoolcraft County, on 7 June 1971 (JPW 49:122, 1971). Irregular transient and winter resident on larger inland lakes.

Black Scoter, *Melanitta nigra*. Uncommon transient, mainly on the Great Lakes. Occasional in winter and spring at St. Joseph, Berrien County (Goldeneye 20(3):1, 1981; OBC). Sighted regularly, sometimes in hundreds in autumn, at Whitefish Point, in Saginaw Bay, at Port Huron, at St. Joseph in Berrien County, and on the Detroit River (Goldeneye 20(3):1, 1981; DAS; MAS).

Surf Scoter, *Melanitta perspicillata*. Uncommon transient, observed mainly on Lakes Superior, Michigan, Huron, and St. Clair, and on the Detroit River. Seasonally regular on Lake Superior at Houghton and Whitefish Point and on Lake Huron in Saginaw Bay. Infrequent inland.

White-winged Scoter, *Melanitta fusca*. Uncommon autumn and spring transient on large lakes, sometimes remaining in winter. Has also been observed in mid-June between Beaver Island and High Island in northern Lake Michigan (UMMZ). Observed regularly at Whitefish Point, at St. Joseph in Berrien County, in Saginaw Bay in Chippewa County, at Port Huron in St. Clair County, and on the Detroit River (DAS; MAS); inland in Ingham and Clinton counties (McWhirter and Beaver, 1977) and in Kalamazoo County (KNC).

***Common Goldeneye**, *Bucephala clangula*. Common transient, summer resident nesting in northern Michigan, winters locally. In late 1960's, numbers to thousands on St. Joseph River above the dam at Berrien Springs, Berrien County, but no more than a few hundred in recent years.

Barrow's Goldeneye, *Bucephala islandica*. Occasional transient and winter visitor. UMMZ specimen 114543 from Gun Lake, Barry County, adult male, 7 November 1946. Another specimen (not located) from Black Lake, Ottawa County, female, 22 March 1907 (Barrows, 1912). Observed at Marquette harbor, Marquette County (JPW 41:62, 1962; AB 35:302, 1981), Sault Ste. Marie, Chippewa County (AB 35:302, 1981); St. Ignace, Mackinac County; Benton Harbor and Niles, Berrien County (Goldeneye 11:2, 1972; JPW 60:91, 1982), Port Huron, St. Clair County; on Lake St. Clair, Macomb County; and Grosse Ile, Wayne County (Kelley, 1978; UMMZ). Observed inland at Grand Rapids, Kent County; Hartland, Livingston County; and Kalamazoo, Kalamazoo County (JPW 44:87, 1966; 54:25, 1976; DNR; MAS).

Bufflehead, *Bucephala albeola*. Common transient. A few sight records in summer in the north. A report of breeding in the Upper Peninsula, 5 miles SE of Skanee, Baraga County, in 1959, lacks adequate description and data and may not refer to this species (UMMZ). Uncommon in winter.

***Hooded Merganser**, *Lophodytes cucullatus*. Common transient, uncommon summer resident in northern Michigan. Scarce in southern Lower Michigan during the summer, but a few breeding records south to Kalamazoo, Oakland, and Berrien counties (JPW 52:182, 1974; Kelley, 1978; OBC). Uncommon in winter.

***Common Merganser**, *Mergus merganser*. Common transient, common summer resident. Nests throughout northern Michigan south to Saginaw Bay. Winters locally, when common in southeastern corner of the state.

***Red-breasted Merganser**, *Mergus serrator*. Common transient on Great Lakes; uncommon summer resident. Occurs locally along the Great Lakes south to Berrien County and southeastern Michigan (OBC; Kelley, 1978; UMMZ). Nests regularly on High, Beaver, Garden, and Hog Islands in northern Lake Michigan (F. Cuthbert, in UMMZ). Winters locally, numbers up to 1000 birds throughout the winter in southeastern Michigan (Kelley, 1978).

***Ruddy Duck**, *Oxyura jamaicensis*. Common transient. Uncommon breeding bird, with nests in last 100 years from Dickinson, Bay, and Gratiot counties (JPW 51:141-142, 1973). Nested at the Erie Marsh, Monroe County, in July 1978 (JPW 56:202, 1978). Male observed and suspected nesting at Marquette, Marquette County, in July 1975 (UMMZ). Winters locally.

[**Black Vulture**, *Coragyps atratus*. Hypothetical. The specimen formerly in Barron collection (now discarded) was perhaps local but lacked data (Fort St. Joseph Museum records). Sight record of one at Sarett Nature Center, Berrien County, on 8 April 1972 (Goldeneye 11:3, 1972), and one observed at Good Harbor Bay, Leelanau County, on 26 May 1974 (JPW 53:114, 1975).]

***Turkey Vulture**, *Cathartes aura*. Common transient and summer resident in the Lower Peninsula, uncommon in the Upper Peninsula, but increasing there in numbers in recent years. Two observations on Isle Royale (Jordan and Shelton, 1982).

***Osprey**, *Pandion haliaetus*. Transient and summer resident. Breeding population in 1981 was about 123 nesting pairs (30 pairs in western Upper Peninsula, 46 in eastern Upper Peninsula, 47 in northern Lower Peninsula). In 1982, 131 nesting pairs were seen, 80 in the Upper Peninsula and 51 in the northern Lower Peninsula. Recent nesting records south and west to Muskegon, Mecosta, and Ogemaw counties. Notable concentrations of nesting Osprey are in Roscommon County (Houghton Lake and Dead Stream Swamp), Alpena and Montmorency counties (Fletcher Pond), and Mackinac and Luce counties (the Manistique Lakes) (DNR; MNFI).

American Swallow-tailed Kite, *Elanoides forficatus*. Vagrant. One specimen: UMMZ 55075, near Ann Arbor, Washtenaw County, collected 4 October 1924. Three other specimens (not located) were collected in 1880 and 1882 (Barrows, 1912). No recent observations.

[**Mississippi Kite**, *Ictinia mississippiensis*. Hypothetical. Listed in Barrows (1912) but the record was unsupported by a specimen (Swales, 1913). A subadult was seen at Whitefish Point, Chippewa County, on 24 May 1981 (AB 35:826, 1981; UMMZ).]

***Bald Eagle**, *Haliaeetus leucocephalus*. Uncommon transient and summer resident, breeding locally around small inland lakes in the Upper Peninsula and in northern Lower Peninsula south to Muskegon, Saginaw, and Allegan counties. Formerly widespread as a nesting species both inland and along the shoreline of the Great Lakes, but population declined due to pesticides. Now again nesting successfully near the shores of Lake Superior. Has not bred successfully in recent years on Isle Royale (Jordan and Shelton, 1982). In recent censuses there were 102 nesting pairs in 1981 and 96 nesting pairs in 1982 in Michigan (DNR). Eagles banded as nestlings in Michigan have been recovered in winter in Florida, Georgia, Arkansas, and Tennessee (Auk 93:835-836, 1976). A bird banded as a nestling in Florida was shot later in the same year at Grass Lake, Jackson County, on 14 May 1945 (UMMZ 113761). Bald Eagles sometimes remain into winter; 37 were counted in Michigan in mid-winter in 1979-1980 (AB 34:275, 1980).

***Northern Harrier**, *Circus cyaneus*. Uncommon transient and summer resident, decreasing greatly in numbers since 1960 but holding its own locally in the Upper Peninsula and the northern Lower Peninsula in recent years (DNR report). Seen in small numbers in winter.

***Sharp-shinned Hawk**, *Accipiter striatus*. Common transient. Common nesting resident in the Upper Peninsula, with 40 nests over several years at Huron Mountain Club, Marquette County. Uncommon as breeding bird in the Lower Peninsula. Uncommon in winter.

***Cooper's Hawk**, *Accipiter cooperii*. Uncommon transient and summer resident. Status is not well known, but reports indicate an increase in population in recent years. Some birds occur in winter, where they are seen especially around towns. Only 20 nests reported in Michigan for period

1960–1982, with records in the north only from Luce, Alpena, and Crawford counties (UMMZ), but probably more numerous than the nest reports suggest. Winters in small numbers mainly in southern half of state.

***Northern Goshawk**, *Accipiter gentilis*. Uncommon transient and winter visitant. Breeds on Isle Royale, in the Upper Peninsula (several nests in Houghton and Marquette counties), and in the northern Lower Peninsula. Recent (since 1970) nestings in 10 counties in the Upper Peninsula and 17 in the Lower Peninsula south to Mason, Osceola, Clare, and Midland counties.

***Red-shouldered Hawk**, *Buteo lineatus*. Uncommon transient and summer resident, now more numerous in the northeastern Lower Peninsula than in southern Michigan. A few pairs nest in southeastern Michigan, where formerly common, and a few nest in the Upper Peninsula north to Houghton County (JPW 58:73–75, 1980; UMMZ). Species reduced in numbers since before 1970, when 16 additional counties in the Lower Peninsula had reports of active nests. Occasional in winter in the south.

***Broad-winged Hawk**, *Buteo platypterus*. Common transient and local summer resident. Nesting south to Muskegon County and into southeastern Michigan, more numerous in the northern forests (ZVT; JPW 52:182, 1974; 56:204, 1978; UMMZ). This is the most numerous hawk seen in spring migration on points on the south side of Lake Superior (J. Hawk Migr. Assn. N. Amer. 2:24–33, 1980). Birds banded in migration at Whitefish Point, Chippewa County, have been recovered as far south as Guatemala, others north to Ontario and Quebec (JPW 59:51, 1981). No acceptable winter record.

Swainson's Hawk, *Buteo swainsoni*. Occasional transient. UMMZ specimens, 67350 from Manitou Island, Keweenaw County, on 1 May 1931; 43680 from Hessel, Mackinac County, on 13 October 1908; 36062 from Black Lake, Cheboygan County, in October 1883; 84425 from Grand Rapids, Kent County, in ?1904. USNM specimen 298229 from Whitefish Point, Chippewa County, on 19 May 1923. Recent sight records in Ontonagon, Kent, Cheboygan, Ottawa, and Berrien counties (DAS; DNR; KNC; OBC; UMMZ).

***Red-tailed Hawk**, *Buteo jamaicensis*. Common transient and permanent resident, more numerous in the south. Less common but regular in southern Michigan in winter. This is the most abundant hawk in agricultural areas in Michigan.

The common breeding form in Michigan is *B. j. borealis*. Pale specimens approaching form *B. j. krideri* taken in Michigan in spring and autumn (UMMZ). Sight records of *B. j. harlani* at Whitefish Point, Chippewa County, on 17 April 1979 (WPBO) and at Moran, Mackinac County, on 22 May 1982 (UMMZ).

[**Ferruginous Hawk**, *Buteo regalis*. Hypothetical. Sight records in Kalamazoo County on 9 January 1977 (JPW 56:51–52, 1978) and at Whitefish Point, Chippewa County, on 30 May 1979 (WPBO, 1979).]

Rough-legged Hawk, *Buteo lagopus*. Uncommon transient and winter visitor in most of the state, wintering mainly in southern half of state,

irregular in numbers. Common transient in the western Upper Peninsula. Occasional birds remain into June (JPW 56:204, 1978; AB 35:941, 1981). Best seen in spring hawk migration at Whitefish Point and on Keweenaw Peninsula (J. Hawk Migr. Assn. N. Amer. 2:24-33, 1980).

Golden Eagle, *Aquila chrysaetos*. Occasional transient and winter visitor. Golden Eagles are usually seen in migration, with several records at Houghton, Houghton County, at Whitefish Point, Chippewa County, on the jack-pine plains in northern Lower Peninsula, along Lake Michigan in Muskegon and Berrien counties, and at Pte. Mouillee, Monroe County. A summer record near Grayling, Crawford County, on 17 July 1965 (JPW 44:22, 1966) is questionable (photo in UMMZ is unidentifiable); also reported in summer in Marquette County (JPW 56:204, 1978). Occasionally winters in the Allegan State Game Area, Allegan County.

[**Crested Caracara**, *Polyborus plancus*. Hypothetical. Observed at Muskegon Dunes State Park, Muskegon County, on 3 September 1977 (UMMZ). Possible escapee.]

***American Kestrel**, *Falco sparverius*. Common migrant and summer resident; winters in smaller numbers in southern third of state.

***Merlin**, *Falco columbarius*. Uncommon transient. Rare breeding bird in the Upper Peninsula and on Isle Royale. Nesting records in 1950's and 1960's from Marquette, Huron Mountains, Luce County (13 miles E of Deer Park), in Schoolcraft County (Seney), Mackinac County (8.5 miles S of Gould City), and Isle Royale (DNR; UMMZ). Observations of possible nesting birds at St. Ignace, Mackinac County, in 1981, and Baraga County in 1982 (UMMZ). Three or four active nests seen each year 1979-1982 on Isle Royale; nests in spruce forests, usually near a shoreline (UMMZ; Jordan and Shelton, 1982). Nest of unidentified hawk at Gull Rocks near Isle Royale in 1890 (Ornithol. Oöl. 15:99, 1890) may have been this species, as the nest contained remains of a flicker and young gulls, and Merlin are known to take large woodpeckers and young gulls (Cramp and Simmons, 1980). Occasional in winter.

***Peregrine Falcon**, *Falco peregrinus*. Uncommon transient. Most records are along the shoreline of the Great Lakes during migration of shorebirds, gulls, and songbirds. Formerly nested in the Upper Peninsula (Huron Mountains and Lake Superior cliffs and at Marquette and "Michigumni" (Michigamme) in Marquette County, and Pictured Rocks in Alger County (Wood, 1951). Also nested on Mackinac Island and on South Fox Island, Leelanau County (Wood, 1951); specimen of nesting female of latter, UMMZ 104646, taken 20 June 1939. A bird banded as a nestling at Marquette, Marquette County, on 25 June 1939 was shot at Maumee Bay, Lucas County, Ohio, on 24 October 1939 (UMMZ 112900). The last documented nesting in Michigan was at Burnt Bluff, Delta County, in 1957 (D. D. Berger and H. C. Mueller, in J. J. Hickey (ed.), Peregrine Falcon Populations, 1969:119-120; JPW 53:77, 1975). It appears also to have nested in the Huron Mountains in the early 1970's, perhaps the last nesting by wild peregrines east of the Mississippi River (K. L. Christopher, MS thesis, "A Survey of Peregrine Falcon Habitat in Upper Michigan with

Emphasis on Reintroduction Potential," Michigan Technological University, 1980). Other historical records of nesting thought to be peregrines are described in Christopher (1980). A few birds have been observed in winter.

Most Michigan specimens are *F. p. anatum*, the subspecies breeding in eastern North America and formerly in Michigan. Five specimens, all immatures taken in fall migration, represent the northern tundra subspecies *F. p. tundrius*, which is small, pale, and has finer head markings (Auk 85:179–191, 1968). They are UMMZ 136040 taken 2 miles N of Imlay City, Lapeer County, on 2 October 1947; UMMZ 61474 from Norton Twp., Muskegon County, on 27 September 1929; UMMZ 61473 from Isle Royale on 15 September 1929; 41245 from the Charity Islands, Arenac County, on 3 October 1910; and PMNH 774 from Bay Shore, Bay County, on 6 October 1900.

Gyrfalcon, *Falco rusticolus*. Occasional winter visitor. One specimen: UMMZ 68416, Sault Ste. Marie, Chippewa County, on 21 January 1932. Regular transient along Lake Superior at Whitefish Point and Sault Ste. Marie, Chippewa County. Recent observations of wintering Gyrfalcons on the ice near Isle Royale, in Houghton County, in Ontonagon County, in Mackinac County, at Honor in Benzie County (photo in UMMZ), Muskegon in Muskegon County, Hudsonville in Ottawa County, St. Joseph in Berrien County, Port Huron in St. Clair County, Chesterfield Township in Macomb County (gray bird), Pte. Mouillee in Monroe County, and in Saline Township in Washtenaw County (white phase bird) (OBC 6:5, 1967; JPW 60:91, 1982; AB 36:296, 1982; MAS; UMMZ).

[**Prairie Falcon**, *Falco mexicanus*. Hypothetical. Sight record of bird flying north from Whitefish Point, Chippewa County, on 3 May 1982 (UMMZ).]

***Gray Partridge**, *Perdix perdix*. Introduced. Local resident, formerly uncommon, now rare. Wild-collected specimens in UMMZ and MSU from Washtenaw, Lenawee, and Isabella counties. First introductions were in 1910 (J. Wildlife Mgmt. 7:368–377, 1943). Most recent introduction was in Sanilac County in 1969, where seen recently near Deckerville; also observed in Lenawee County in spring of 1981 (DNR).

***Ring-necked Pheasant**, *Phasianus colchicus*. Introduced. Common resident in the south. Population extends north to Huron, Gladwin, Isabella, and Muskegon counties, also on Beaver Island, and in Menominee County in the Upper Peninsula (JPW 42:237, 1964; MA 27(4):2, 1979; DNR).

***Spruce Grouse**, *Dendragapus canadensis*. Local resident, fairly common in the Upper Peninsula; also in Lower Peninsula where uncommon and local south to Genesee (once), Crawford, and Roscommon counties (UMMZ).

[**Willow Ptarmigan**, *Lagopus lagopus*. Hypothetical. Irregular winter visitor in last century, with last observations in 1921 and 1930–31 (Wood, 1951). No known Michigan specimens. Kneeland (Proc. Boston Soc. Nat. Hist. 6:237, 1857) reported ptarmigan on the Keweenaw Peninsula, and

Schoolcraft noted in 1834 that specimens had been taken at Sault Ste. Marie (Barrows, 1912). Introduced populations in the Upper Peninsula in 1950's apparently were unsuccessful (ZVT; DNR.)

***Ruffed Grouse**, *Bonasa umbellus*. Common permanent resident in forests. Generally absent from islands in the Great Lakes (Hatt *et al.*, 1948; Jordan and Shelton, 1982), but has been seen on South Manitou Island, Leelanau County, where it has nested, and is now on Beaver Island, Charlevoix County, where it was introduced in 1948 (JPW 42:236, 1964; 51:8, 1973), and High Island, where it nests regularly (F. Cuthbert, in UMMZ). Both gray and brown color phases occur in Michigan.

***Greater Prairie-Chicken**, *Tympanuchus cupido*. Formerly widespread but local resident in both the Upper and Lower Peninsulas. Observed in the past few years only in one introduced population near Marion, Osceola County, where no more than 7 males were seen in spring 1981, and the estimated population was less than 20 birds (DNR). None were seen in 1982 (MNFI).

***Sharp-tailed Grouse**, *Tympanuchus phasianellus*. Common locally on Isle Royale and in the Upper Peninsula. Local and uncommon in the northern Lower Peninsula, where the current population was introduced. Observed mainly in cleared lands in Houghton, Baraga, Chippewa, Luce, Alger, Mackinac, and Schoolcraft counties. Four breeding populations are known in the Lower Peninsula, the largest near Gaylord, Otsego County (DNR). Introduced on Beaver Island, but not seen there for years (JPW 42:236, 1964). First recorded on Isle Royale in 1884 (Jordan and Shelton, 1982); earliest specimens were taken in 1905 (UMMZ 33365, 33366). Sharp-tailed Grouse are capable of flight across the 13 miles of water and they colonized Isle Royale from the mainland of Ontario (Jordan and Shelton, 1982). The species spread into the Upper Peninsula from Wisconsin in about 1922 (Wood, 1951).

***Wild Turkey**, *Meleagris gallopavo*. Common but local introduced species in the Lower Peninsula. Formerly occurred as wild birds north to Isabella and Bay counties, common until 1875, last known records were in 1897 (Barrows, 1912). Last observed in Calhoun County in 1874 (JPW 39:105, 1961; Walkinshaw, 1978). UMMZ specimens taken prior to 1900 include 6 adults, two with data: 99601, Almena Swamp, Van Buren County, on 27 February 1882; 84002, 3 miles SW of Reese, Saginaw County, in November 1886. A specimen in Fort St. Joseph Museum, Niles, was taken in 1837 by a Pottawatomi Indian at the Pawating crossing of the St. Joseph River at Niles, Berrien County, and was prepared by C. R. Barron. Another specimen, in GRPM, was taken at Grand Rapids "about 1880" (Wood, 1951), and a bird at CMU was taken near the end of the century, but no data are available with these specimens.

Introduced stock has become widespread, with 1982 estimate of 15,000 birds (DNR). Largest populations occur around Oscoda, Crawford, Lake, and Allegan counties, and on Beaver Island and North Manitou Island in northern Lake Michigan. One seen on High Island in 1981 and

1982, perhaps had crossed the ice in winter from Beaver Island (F. Cuthbert). Now regular near Pellston, Emmet County. In the Upper Peninsula, turkeys are common locally in Menominee County.

***Northern Bobwhite**, *Colinus virginianus*. Uncommon to common local resident in southern part of state, disappearing in severe winters. Birds were found in northern Lower Michigan as recently as 1973–1974, with specimens in CMU from Torch Lake in Antrim County and in Grand Traverse County as well as from Isabella County. Observed north to Montcalm, Midland, and Bay counties in the past few years (DNR).

***Yellow Rail**, *Coturnicops noveboracensis*. Uncommon transient and summer resident. Breeds locally in Upper Peninsula, including Seney National Wildlife Refuge, Schoolcraft County, at Sleeper Lake, Luce County, and at Munuscong Bay, Chippewa County. Field observations are needed to determine its local numbers and distribution.

Black Rail, *Laterallus jamaicensis*. Occasional transient, scarce and irregular north of its known breeding range. One specimen: UMMZ 119882 taken at Portage Lake, Jackson County, immature female, on 12 September 1951. Other observations in Berrien, St. Joseph, Ingham, Livingston, and Kalamazoo counties (ZVT; OBC; MAS; KNC).

***King Rail**, *Rallus elegans*. Uncommon transient and summer resident, has apparently decreased in numbers in recent years. Found north through Lower Peninsula to Emmet County. Seen recently in marshes near Lake St. Clair and Lake Erie, breeding on Harsen's Island in Lake St. Clair (JPW 58:160, 1980), also observed at Sterling State Park, Pte. Mouillee, and Erie Gun Club in Monroe County (MNF1), near Alpena, Alpena County (JPW 54:162, 1976), Boardman River in Grand Traverse County (JPW 48:98, 1970), and Grand Haven Marsh in Ottawa County (JPW 49:118, 1971). Observed in the Upper Peninsula at Marquette in Marquette County (JPW 47:104, 1969; photo in UMMZ). Occasional into winter.

***Virginia Rail**, *Rallus limicola*. Common transient and local summer resident; occasional in winter.

***Sora**, *Porzana carolina*. Common transient and summer resident; occasional in winter.

Purple Gallinule, *Porphyryla martinica*. Occasional visitor from its southern range. Two UMMZ specimens: 208197, Grand Marais, Alger County, on 10 May 1964, and 209703, Flint Township, Genesee County, on 29 May 1965. Photograph in UMMZ of bird at Maple River Game Area, Gratiot County, on 4 May 1969. Other records in Dickinson, Clinton, and Macomb counties (JPW 52:151, 1974).

***Common Moorhen**, *Gallinula chloropus*. Common migrant and summer resident, more numerous in the south. Occasional into early winter.

***American Coot**, *Fulica americana*. Common transient, common summer resident. Breeds throughout, most numerous in the south. Uncommon in winter in southern Michigan in areas with open water; locally numerous in Berrien County until the waters freeze (OBC 19:2, 1980).

A bird observed at Metrobeach Park, Macomb County, from 20 April through 4 June 1982, was identified by birders as a "Caribbean Coot" (*F.*

caribaea) by its white shield, lacking a red knob (photos in UMMZ). The bird bred with a normal red-shielded American Coot. Both members of the pair accompanied and fed the downy young on the nesting territory (UMMZ). The mating and breeding success of the pair indicates that the Michigan white-shielded coot was an American Coot and that occasional white-shielded individuals occur in breeding populations in North America.

***Sandhill Crane**, *Grus canadensis*. Common transient and common but local summer resident. About 200 breeding pairs now in southeastern Michigan, mainly in Jackson and Livingston counties, increasing with protection. Breeding populations also summer in Oceana, Mason, and Cheboygan counties. Breeding cranes in the Upper Peninsula are most numerous in Mackinac, Chippewa, Luce, Schoolcraft, Alger, and Delta counties, and they also breed in the western Upper Peninsula in Baraga and Houghton counties (JPW 56:107-121, 1978; UMMZ). Large numbers (flocks of as many as 900) stage in late autumn (November) in southern Jackson County in southeastern Michigan. Michigan birds migrate to Florida for the winter (Auk 89:541-548, 1972; Wilson Bull. 91:137-141, 1979). Occasionally a few birds remain; three wintered near Waterloo, Jackson County, in 1981-1982 (W. Koelz).

Black-bellied Plover, *Pluvialis squatarola*. Common transient, observed in spring and autumn.

Lesser Golden Plover, *Pluvialis dominica*. Uncommon transient, numerous in some years. Observed in spring and autumn.

[**Snowy Plover**, *Charadrius alexandrinus*. Hypothetical. Sight record at Escanaba, Delta County, on 23 May 1963 (JPW 42:201, 1964).]

Semipalmated Plover, *Charadrius semipalmatus*. Common transient. Observed mainly on shores of Great Lakes.

***Piping Plover**, *Charadrius melodus*. Uncommon summer resident. Formerly bred in numbers locally on shores and islands of Great Lakes, but recent total counts on Michigan shoreline showed only 31 pairs in 1979 (JPW 59:44-52, 1981), 16 pairs in 1981 (MNFI), and 12 pairs in 1982 (MNFI). Piping Plovers have been extirpated as a breeding species from Lakes Ontario and Erie, and they are endangered on Lakes Huron, Michigan, and Superior due to beach disturbance (MNFI).

***Killdeer**, *Charadrius vociferus*. Common transient and summer resident. A few remain into early winter, and some arrive by late February. Occasional birds may overwinter in southern Michigan.

[**Mountain Plover**, *Charadrius montanus*. Hypothetical. Reported for Watton, Baraga County, on 13 May 1976 (AB 30:845, 1976).]

[**Black-necked Stilt**, *Himantopus mexicanus*. Hypothetical. Sight records at Shiawassee National Wildlife Refuge, Saginaw County, on 6-13 June 1980 (AB 34:897, 1980; UMMZ).]

American Avocet, *Recurvirostra americana*. Occasional to uncommon transient seen regularly in recent years. UMMZ specimens: 152485, E of Monroe, Monroe County, on 22 September 1957; 214980, Mackinac Island, on 20 September 1968. Photographed in Port Sheldon Township,

Ottawa County, on 7 September 1969 (JPW 52:191, 1974). Observed at St. Joseph, Berrien County, with about 15 local records, all but one in autumn, and with 12 birds in September 1974 (JPW 47:48, 1969; OBC; photo in UMMZ). Photographed at North Cape, Monroe County, in spring (18–26 May 1963), at Muskegon, Muskegon County (JPW 41:72–73, 1963; L. H. Walkinshaw), and at Petoskey, Emmet County, on 1 May 1964 (UMMZ). Recorded in Kalamazoo County from 24 October to 2 November 1972 (KNC). Observed in the Upper Peninsula at Vermillion, Chippewa County, on 9 May 1981 (AB 35:826, 1981).

Greater Yellowlegs, *Tringa melanoleuca*. Common transient. Occasional in summer.

Lesser Yellowlegs, *Tringa flavipes*. Common transient. Occasional in summer; several recent records in counties near the Straits of Mackinac in July and August. Seen on Kingston Plains, Alger County, on 27 June 1979 (UMMZ).

Solitary Sandpiper, *Tringa solitaria*. Common transient, observed occasionally in summer.

Willet, *Catoptrophorus semipalmatus*. Uncommon transient. UMMZ specimens: 39066, Detroit, "1880"; 84842, Whitmore Lake, Livingston County, on 20 August 1935. Early transient in late summer and autumn, with July records apparently being early autumn migrants (Grand Marais in Alger County (UMMZ) and near Berrien Springs in Berrien County (OBC)).

***Spotted Sandpiper**, *Actitis macularia*. Common transient and summer resident, breeding throughout the state.

***Upland Sandpiper**, *Bartramia longicauda*. Uncommon transient. Uncommon and local summer resident in the south, more common in the northern two-thirds of the state, especially in Houghton, Baraga, and Marquette counties.

Eskimo Curlew, *Numenius borealis*. Vagrant. The species is nearly extinct (AB 31:127–138a, 1977). One Michigan specimen examined: UMMZ 99731, taken near Kalamazoo, on 28 October 1879. Only other known Michigan specimen is Berlin Museum 12406 taken at Detroit, autumn 1834 (Hahn, 1963:188).

Whimbrel, *Numenius phaeopus*. Uncommon transient. UMMZ has specimens 59582 from Whitefish Point, Chippewa County, on 24 September 1928; 67466 from same location, on 25 May 1922; 68833 from Sand Point, Huron County, on 26 May 1931; 136492 from North Cape, Monroe County, on 2 June 1965. Seen in sparse numbers in migration throughout the state. Large flocks observed in spring in recent years at Pte. Mouille, Monroe County (DAS).

[**Long-billed Curlew**, *Numenius americanus*. Hypothetical. Earlier records (Barrows, 1912) were undocumented and specimens are unknown. The specimen in Empey collection lacks data and apparently was taken W of the Mississippi River, not in Michigan. Sight record at the Au Train Goose Management Area in Alger County on 4 May 1981 (DNR).]

Hudsonian Godwit, *Limosa haemastica*. Uncommon transient. UMMZ specimens: 44271, St. Clair Flats, St. Clair County, "about 1879;" 55309,

Fish Point, Tuscola County, on 17 September 1925; 84366 and 84367, Kalamazoo River 2 miles above Saugatuck, Allegan County, on 11 May 1934; and 151578, Houghton, Houghton County, on 23 May 1956. Observed in spring and autumn.

Marbled Godwit, *Limosa fedoa*. Uncommon transient. UMMZ specimens: 47139, Detroit River, Wayne County, on 1 August 1882; 74844, Erie Marsh, Monroe County, on 1 September 1934; 98425, Erie Marsh, Monroe County, on 13 August 1938; and 210857, North Cape, Monroe County, on 21 August 1957. Observed in spring and autumn.

Ruddy Turnstone, *Arenaria interpres*. Common transient. Observed mainly on shores of the Great Lakes, where they feed in part by scavenging dead fish.

Red Knot, *Calidris canutus*. Uncommon transient. Observed mainly on shores of the Great Lakes. Seen regularly at Waugoshance Point, Emmet County, in late May. Irregular in spring in Berrien County. Autumn migrants seen as early as 27 July in Berrien County (AB 34:897, 1980).

Sanderling, *Calidris alba*. Common transient in spring. A few non-breeding birds remain in summer. The most abundant sandpiper on shores of Great Lakes in autumn where transients seen until November; one seen as late as 1 January 1979 in Berrien County (OBC). Uncommon transient inland.

Semipalmated Sandpiper, *Calidris pusilla*. Common transient. A few non-breeding birds remain in summer.

Western Sandpiper, *Calidris mauri*. Occasional to uncommon transient, most records in autumn. UMMZ specimens: 83569, Erie Marsh, Monroe County, on 8 August 1936; 112885, Erie Township, Monroe County, 21 August 1943; 212820 and 212821, same locality, on 31 August 1967. Another specimen KCS 657 (now in KNC) male from Kalamazoo on 19 August 1884. Photographs taken at St. Joseph, Berrien County, on 16 August 1969 and 23 August 1971, in UMMZ. Observed throughout the state, fairly regular in late summer (July and August) in Berrien County (OBC).

Least Sandpiper, *Calidris minutilla*. Common transient. A few non-breeding birds remain in summer.

White-rumped Sandpiper, *Calidris fuscicollis*. Uncommon transient. More numerous in spring than in autumn.

Baird's Sandpiper, *Calidris bairdii*. Uncommon transient, mainly in autumn.

Pectoral Sandpiper, *Calidris melanotos*. Common transient. A few non-breeding birds remain in summer.

Purple Sandpiper, *Calidris maritima*. Occasional but regular autumn transient. UMMZ specimen 155604 taken at Laketon Township, Muskegon County, on 10 December 1960. Photographed at St. Joseph, Berrien County, on 23 December 1970 and 5–23 November 1972 (UMMZ). Observations mainly in November and December along southern Lake Michigan from Ottawa, Muskegon, and Berrien counties, where it is recorded nearly every year, and from Pt. Huron to Lake Erie in the east. One spring record: near Cheboygan, Cheboygan County (not Kalamazoo as in JPW 54:121, 1976), on 22 May 1976 (KNC).

Dunlin, *Calidris alpina*. Common transient. Molting birds observed on shores of Great Lakes well into May. Occasional nonbreeding birds in summer. A few late autumn birds remain into December.

Curlew Sandpiper, *Calidris ferruginea*. Vagrant. Color photograph of bird in breeding plumage at Pte. Mouillee, Monroe County, on 13 May 1975 (UMMZ).

Stilt Sandpiper, *Calidris himantopus*. Uncommon transient. More numerous in autumn than in spring. Dates of specimens from Michigan range from 28 July to 15 September. Several summer observations probably refer to early autumn migrants (JPW 56:204, 1978).

Buff-breasted Sandpiper, *Tryngites subruficollis*. Uncommon but regular transient. Specimens: UMMZ 30228, Kalamazoo, Kalamazoo County, on 17 September 1875; 72066, Duncan Bay, Cheboygan County, on 18 August 1931; 210851, Whitefish Point, Chippewa County, on 3 September 1966; CMU 67-563, Nottawa, Isabella County, on 9 September 1967. Others were reported in Wood (1951) and ZVT. Autumn migrants seen as early as 24 July (AB 34:897, 1980). Less often seen in spring, sometimes locally numerous transient in autumn, especially on golf courses and sod farms in southeastern Michigan, where it associates with Lesser Golden Plovers.

Ruff, *Philomachus pugnax*. Occasional transient, few records but regular in spring in recent years. UMMZ specimen 209210 taken in Fort Gratiot Township, St. Clair County, on 29 April 1965. Also observed on Saginaw Bay (most recently at Fish Point, Tuscola County) (JPW 60:127, 1982), on Freemont sewage ponds in Newaygo County (MAS), in Isabella County (Cuthbert, 1963), Ottawa County (JPW 52:192, 1974), Ingham County (AB 30:845, 1976), Berrien County (3-4 records, OBC), Macomb County (AB 35:826, 1981), and Monroe County (Kelley, 1978; UMMZ).

Short-billed Dowitcher, *Limnodromus griseus*. Common transient. Sometimes hundreds observed in a flock in spring, usually more numerous in late summer and autumn.

Long-billed Dowitcher, *Limnodromus scolopaceus*. Common transient. UMMZ specimens were all collected in late summer and autumn. Field observations are needed to distinguish the times of migration of the two species of dowitchers.

***Common Snipe**, *Gallinago gallinago*. Common transient and local summer resident throughout. More numerous in the northern two-thirds of the state, but nests in the south as well (Wood, 1951; JPW 41:92-93, 1963; 52:184, 1974). Occasional in winter in southern counties.

***American Woodcock**, *Scolopax minor*. Common transient and summer resident. Occasional birds remain into winter (December and January). A young bird banded in Alabama was recovered in autumn in Michigan (Wilson Bull. 91:463-464, 1979). Woodcock banded in Michigan as juveniles move mainly into southern Louisiana, extreme eastern Texas, and southern Mississippi in winter. Michigan birds migrate southward mainly between the Mississippi River and the Appalachian Mountains (analysis of banding recoveries by G. Ammann). Most woodcock (30 of 54)

banded as chicks in Michigan that were recovered in a later year from spring to autumn were taken within 10 miles of their home site, and adults also usually return to the same site each year (BBL; UMMZ).

***Wilson's Phalarope**, *Phalaropus tricolor*. Uncommon transient and occasional summer resident. Formerly bred Jackson, Huron, and ?Bay counties (ZVT); UMMZ downy young in Jackson and Huron counties, all from the period 1929–1934. Recent summer records from Escanaba, Delta County, in 1965, Shiawassee, Saginaw County, in 1981, Buckhorn and Benton Heights, Berrien County, in 1968, and Pte. Mouillee, Monroe County, in 1981 (DNR; OBC; DAS). A half-grown young near Saginaw Bay in 1967 (JPW 45:113, 1967) and a nest (empty but with male defending area) at Pte. Mouillee in 1981 (AB 35:942, 1981) indicate recent breeding in the state.

Red-necked Phalarope, *Phalaropus lobatus*. Uncommon transient, seen mainly in autumn. Observed regularly (to 20 birds at a time) at Muskegon sewage ponds and near Saginaw Bay. Several records from Erie Marshes, Monroe County, from Linwood, Bay County, and from St. Joseph, Berrien County (Goldeneye 9(6):3, 1970), and at Dow Chemical Company holding ponds at Midland.

Red Phalarope, *Phalaropus fulicaria*. Occasional transient, mainly in autumn. UMMZ specimens: 66674, Sault Ste. Marie, on 20 October 1930; 91430 taken at Whitmore Lake, Livingston County, on 6 September 1937, and 152763 at the mouth of the Muskegon River, on 1 December 1957. MSU specimen 2826 was taken at L'Anse, Baraga County, on 26 October 1959. Photographed at St. Joseph, Berrien County, on 15 November 1973 (UMMZ). At least 16 sight records are known from September to December, several of these at St. Joseph, Berrien County. One spring record: Schoolcraft, Kalamazoo County, on 23 May 1973 (JPW 52:44, 1974).

Pomarine Jaeger, *Stercorarius pomarinus*. Occasional transient. UMMZ: one specimen, 106957 taken off Granite Point north of Marquette, Marquette County, on 7 January 1941. One observed at Erie Marsh on 1–2 December 1973 (JPW 52:84, 1974). Several were seen in migration at Port Huron in St. Clair County, in 1979, 1980, and 1981 (AB 34:275, 1980; DAS).

Parasitic Jaeger, *Stercorarius parasiticus*. Uncommon but regular transient, mainly along eastern shore of Lake Michigan and along Lake Huron at St. Clair River. UMMZ: two specimens, 61357, taken at Pte. Mouillee, Monroe County, on 27 November 1897; 77868, at mouth of Sebawing River, Huron County, on 3 November 1933. MSU: 3985M-440, Otter Lake, Lapeer County, mounted immature, on 28 September 1897. Photographs of two found dead at St. Joseph, Berrien County, where others observed over several years, all in October–November (specimens now in AU, no data on labels; photos in UMMZ; JPW 48:46–51, 1970).

Long-tailed Jaeger, *Stercorarius longicaudus*. Occasional transient. Specimens: UMMZ 158417, North Cape, Monroe County, found dead on 21 September 1963; MSU 4796, Keweenaw Bay, Baraga County, on 17 August 1965. An adult was photographed at St. Joseph, Berrien County,

on 16 September 1965 (JPW 48:46–51, 1970; photos in UMMZ), and an immature at Nayanquing Point, Bay County, on 16 August 1981 (photos in UMMZ).

Laughing Gull, *Larus atricilla*. Uncommon transient, regular in late spring, irregular in summer and autumn. Specimen UMMZ 218895, taken on High Island, near Beaver Island, Charlevoix County, on 4 June 1972, was an adult female with large ova. Observed regularly in every year but one since 1962 in spring and 2–4 times in autumn at St. Joseph, Berrien County (JPW 47:48, 1969; Goldeneye 20(4):3, 1981; photos in UMMZ). Reported in the Upper Peninsula on St. Mary's River, Chippewa County (AB 33:865, 1979) and at Whitefish Point, Chippewa County (WPBO), and in the Lower Peninsula at Petoskey, Emmet County (AFN 24:298, 1970), at Erie Marsh in Monroe County, at Harsen's Island in St. Clair County, and at Gibraltar in Wayne County (Kelley, 1978; AB 35:942, 1981; DAS; OBC; UMMZ).

Franklin's Gull, *Larus pipixcan*. Uncommon transient. Specimens: UMMZ 209997, 209998, both taken at North Cape, Monroe County, on 6 November 1965. MSU 4806, skeleton only, Beaver Island, Charlevoix County, on 16 October 1964. Sight observations indicate that it is a regular visitor in spring and autumn at St. Joseph, Berrien County, with hundreds in some years, and along Lake St. Clair and Lake Erie in Macomb, Wayne, and Monroe counties in recent years. Observed north to Whitefish Point, Chippewa County (WPBO). Infrequently seen inland, with observations in Berrien, Muskegon, Kalamazoo, and Ingham counties (McWhirter and Beaver, 1977; KNC; OBC; UMMZ).

***Little Gull**, *Larus minutus*. Uncommon transient, occasional summer resident. UMMZ specimens 209980 at North Cape, Monroe County, on 6 November 1965, and 217805 at North Cape on 4 May 1971. Observed regularly for several years in autumn along the shore of Lake Michigan in Ottawa and Berrien counties, where one was photographed 10 August 1972 (JPW 56:48, 1978; OBC; photo in UMMZ). Also seen at St. Joseph, Berrien County, in spring (JPW 56:48, 1978; OBC). More than 10 sight records on Lake Erie, Lake St. Clair, St. Clair River, and Detroit River. Seen on Saginaw Bay at Nayanquing Point, Bay County (UMMZ). Nested in the Upper Peninsula at Portage Marsh near Escanaba, Delta County, from 1976 to 1980 (AB 30:959, 1976; DNR; MNFI). Recorded as late as January in Monroe County (Kelley, 1978).

Common Black-headed Gull, *Larus ridibundus*. Occasional visitor. One specimen: UMMZ 210572 from Tawas Point, Iosco County, on 2 June 1966. Observed near Grand Haven, Ottawa County, on 23 November 1971 (JPW 52:192, 1972), another seen over four consecutive years near Monroe, Monroe County (AB 34:164, 1980), one on Saginaw Bay, Bay County, on 12 December 1981 (JPW 60:92, 1982), one near Port Huron on 1–2 January 1982 (UMMZ), and one at Whitefish Point, Chippewa County, on 4 June 1982 (WPBO).

***Bonaparte's Gull**, *Larus philadelphia*. Common transient on Great Lakes, less common inland. Said to have nested in Bay de Noc, Delta County, in 1880 (Kumlien and Hollister, 1903); it nested in Oconto Marsh,

Wisconsin, in 1935 (Oölogist 54:5-7, 1937). Other early nesting records on the St. Clair Flats, St. Clair County, and on the St. Mary's River, Chippewa County, (Barrows, 1912). June and July sightings suggest nesting in the state notably on St. Mary's River near Sugar Island in 1979-1982, but no recent breeding records are known. Sighted in recent summers in Berrien County (OBC). Observed along the southern Great Lakes shoreline in early winter.

Heermann's Gull, *Larus heermanni*. Vagrant. UMMZ 204634, Metrobeach, Macomb County, on 28 August 1979; bird seen to remove secondary remex feather from wing as it preened, specimen consists of this distinctive feather. Bird was seen from 27 August until 1 November (photos in UMMZ). One seen (same bird?) there also in 1980 and 1981 (AB 35:186, 1981; 36:181, 1982). Another bird was observed at St. Joseph, Berrien County, on 17-18 April 1968 (JPW 47:49, 1969; UMMZ).

[**Mew Gull**, *Larus canus*. Hypothetical. Sight record and undiagnostic photo of a bird at St. Joseph, Berrien County, in autumn 1969 (Goldeneye 9(1):8, 1970; UMMZ). Another reported near Port Huron on St. Clair River on 30 November 1979 (DAS).]

***Ring-billed Gull**, *Larus delawarensis*. Common transient and summer resident, nesting on northern Lake Huron and Lake Michigan islands and on islands in St. Mary's River in outlet of Saginaw River in Saginaw Bay, and in the Detroit River. Nests inland in sewage ponds in Muskegon County, on Dow Chemical Company holding ponds in Midland County, and limestone quarry at Rogers City, Presque Isle County. Species nests on all the Great Lakes, where populations in 1976 were estimated at 89,998 nesting pairs, including all states but not Canada (Scharf, 1979). Birds banded as chicks in Michigan winter mainly along the Atlantic and Gulf coasts from North Carolina to Louisiana (JPW 52:115-179, 1974). Ring-billed Gulls also winter in small numbers on the southern Great Lakes.

California Gull, *Larus californicus*. Occasional in spring and autumn. Young bird banded in colony at Great Salt Lake, Utah, was found dead in same year at Tawas City, Iosco County, on 11 August 1948 (Proc. Utah Acad. Sci., Arts, and Letters 29:27, 1952; ZVT). Another in the same colony was recovered two years later in Wisconsin (ibid 29:29, 1952). Sight records at Grand Marais, Alger County, on 10-12 September 1968 (JPW 47:12, 1969; UMMZ), Marquette Harbor, Marquette County, on 11-13 September 1975 (JPW 54:176, 1976; photos in UMMZ), Whitefish Point, Chippewa County, on 17 September 1968 (JPW 47:12, 1969; UMMZ) and on 23-25 May 1979 (UMMZ), Metrobeach, Macomb County, on 10 April 1978 (JPW 56:3, 1978; UMMZ), Monroe Power Plant, Monroe County, on 24 and 28 March 1978 (JPW 56:3, 1978; UMMZ), Macomb, Macomb County, on 30 August-1 September 1978 (AB 33:180, 1979), and near Port Huron on 20 December 1982 (photos in UMMZ).

***Herring Gull**, *Larus argentatus*. Common transient and summer resident. Some remain in Michigan waters in all seasons. Nests on islands in the northern Great Lakes and in St. Mary's River, Lake St. Clair, and Detroit River, also on cliffs on mainland of Lake Superior at Pictured Rocks. Nests on more islands and in many smaller colonies than Ring-billed Gulls.

Breeding population on U.S. Great Lakes (not all in Michigan) estimated in 1976 at 26,719 pairs (Scharf, 1979). Gulls from the Great Lakes winter on the Great Lakes, along the Atlantic coast, in the Mississippi River valley, and along the Gulf coast. Most winter recoveries of juveniles are south of the Great Lakes, while nearly all winter recoveries of birds two years and older are on the Great Lakes, in areas with open water (Bird-Banding 47:141-159, 1976).

Thayer's Gull, *Larus thayeri*. Occasional transient and winter visitor. Several sight records since 1973, from St. Joseph in Berrien County, Port Huron and Marysville in St. Clair County, Grosse Ile and Belle Isle in Wayne County, Monroe in Monroe County, and Whitefish Point in Chippewa County, all from November through May (OBC 17:3, 1978; JPW 56:155, 1978; 60:60, 91, 1982; UMMZ). Photos near Port Huron on 20-30 December 1981 (UMMZ).

Iceland Gull, *Larus glaucooides*. Uncommon transient and winter visitor. Only Michigan specimen was taken at Sault Ste. Marie in 1901, and was in the local high school collection until discarded in 1970 (photo examined by Barrows, 1912:52, photo since lost). Observed in winter in Straits of Mackinac (Pettingill, 1974). A few observed each winter and early spring over past 12 years along the shoreline of southern Lake Michigan, Lake Huron, Lake St. Clair, St. Clair River, and Lake Erie.

Lesser Black-backed Gull, *Larus fuscus*. Vagrant. Adult at Metrobeach, Macomb County, on 31 March 1979 (AB 33:773, 1979; photo in UMMZ). Observed at Gull Lake, Kalamazoo County, on 10 November 1976 (UMMZ), at Loon Lake, Benzie County, on 15 December 1979 (JPW 59:65, 1981), and at Port Huron, St. Clair County, on 24 November 1980 (UMMZ).

[**Glaucous-winged Gull**, *Larus glaucescens*. Hypothetical. Description of bird perhaps of this species seen at St. Joseph, Berrien County, on 19 December 1970 (Goldeneye 9(1):8, 1970; UMMZ).]

Glaucous Gull, *Larus hyperboreus*. Uncommon transient and winter visitor. Three UMMZ specimens: 111857 in Erie Marsh, Monroe County, on 20 March 1943; 159354 on North Cape, Monroe County, on 19 March 1963; 153872 at Cheboygan, Cheboygan County, on 27 December 1958, 154469 at Cheboygan on 12 February 1959. Other specimens: MSU 6218 at mouth of the Huron River, Baraga County on 15 December 1969, GRPM 10043 at Whitefish Point, Chippewa County, on 1 June 1928, and CMU 76-58 found dead at Traverse City, Grand Traverse County, on 13 March 1971. Photograph of bird at Grand Haven, Ottawa County, on 10 January 1968 (JPW 46:32, 1968; UMMZ). A few observed early each winter in recent years along the shoreline of the Great Lakes, with as many as 41 birds observed on Christmas Bird Counts in Michigan (JPW 59:61, 1981). Scarce inland, seen in Kalamazoo County on 1 January 1981 (MAS) and at Higgins Lake, Roscommon County, on 19 December 1981 (AB 36:587, 1982). Reported at Tawas Point, Iosco County, in late May 1979 (DAS). Summer observations at Waugoshance Point, Emmet County, on 18

July 1976 (photograph, JPW 55:95-96, 1977), and at St. Joseph, Berrien County, from 14 June through 10 July and on 12 and 17 August 1963 (OBC 2:3, 1963). More frequently seen than Iceland Gull.

Great Black-backed Gull, *Larus marinus*. Common transient and winter visitor on all the Great Lakes. Three UMMZ specimens: 111856, Erie Marsh, Monroe County, on 27 February 1943; 153259, North Cape, Monroe County, on 19 March 1963; 143873, Cheboygan, on 30 December 1958. One MSU specimen: 6218, mouth of Huron River, Baraga County, on 15 December 1969. Several observed (sometimes over 100) each autumn and winter on Lake Erie; less common on the other Great Lakes. Occasional inland: seen at Kellogg Bird Sanctuary, Kalamazoo County, on 9 April 1979 (KNC). Observed north to Keweenaw Bay and Whitefish Point on Lake Superior. Observed in late summer at Erie Marshes, Monroe County (Kelley, 1966; AB 34:897, 1980).

Black-legged Kittiwake, *Rissa tridactyla*. Uncommon transient. Three UMMZ specimens: 152779 found dead one mile N of Muskegon, Muskegon County, on 29 November 1957; 211266 found dead at St. Joseph, Berrien County on 30 November 1966; and 213052, taken at North Cape, Monroe County, on 7 November 1967. MSU specimens: 8293 from Neebish Island, Chippewa County (? 1892-1893, see Barrows, 1912:50); 2828, L'Anse, Baraga County, 27 October 1959; 7905 found dead in Charlevoix, Charlevoix County, on 1 December 1981. AU 1714 specimen from Stevensville, Berrien County, on 30 November 1968, another taken at Benton Harbor, Berrien County, on 4 November 1967 (MSU teaching collection, photo in UMMZ). Observed in Baraga, Ottawa, St. Clair, Monroe, and Berrien counties (more than six observations in each of these last three counties, and regular in autumn at Port Huron, St. Clair County). One was reported near South Manitou Island on 30 July 1977 (JPW 55:193, 1977).

Sabine's Gull, *Xema sabini*. Occasional transient. One UMMZ specimen: 134856, at West Olive, Ottawa County, found dead 1 November 1953. MSU specimen: 2827 at L'Anse Bay, Baraga County, on 26 October 1959. Observed at L'Anse Bay on 23 October 1957 and (three birds, one collected) on 26 October 1959 (JPW 38:23-24, 1960), at St. Joseph, Berrien County, on 26 October 1962 and 10 October 1967 (JPW 47:50, 1969) and on 17 September 1975 (OBC 15:13, 1975), in St. Mary's Channel, Sault Ste. Marie, in autumn 1971 (JPW 50:6, 1972), in Lake Huron on 7 October 1970 (AFN 25:63, 1971), at Erie Marsh on 29 November 1974 (Kelley, 1978), at Erie Power Plant and North Cape, Monroe County, on 28-31 October 1976 (JPW 55:9, 1977), and near Port Huron, St. Clair County, on 3 November 1972 (UMMZ), on 13 October 1978 (UMMZ), and several birds seen in October in 1980 (JPW 59:10, 1981; UMMZ).

[Ivory Gull, *Pagophila eburnea*. Hypothetical. Sight records reported between Trenton and Grosse Ile, Wayne County, on 12 January 1949 (JPW 27:60, 1949), at St. Joseph, Berrien County, on 15 March 1963 (JPW 47:50, 1969, a doubtful record), at Holland, Allegan County, on 31 December

1973 (JPW 52:134, 1974), and at Rockwood, Wayne County, on 21 December 1974 (JPW 53:18, 1975). A specimen is known from near Oconto, Wisconsin (Passenger Pigeon 9(3):120, 1947).]

***Caspian Tern**, *Sterna caspia*. Common transient and summer resident on Great Lakes, much less common inland. Nests on islands in northern Lake Michigan (Ile aux Galets, Hat Island, Shoe Island, High Island, Gravelly Island, Little Gull Island). Population estimated at 1650 breeding pairs in 1978 (Proc. Colonial Waterbird Group 1:146-156, 1978), 1900 breeding pairs in 1981 (MNFI), and 2150 in 1982 (W. C. Scharf, G. W. Shugart, and J. P. Ludwig; MNFI).

***Common Tern**, *Sterna hirundo*. Common transient and local nesting resident on islands in the Great Lakes; uncommonly nest inland. Colonies are known in St. Mary's River, northern Lake Michigan, Lake Huron, and Lake Erie. Current estimate of breeding population is 2150 pairs at 27 sites, including 271 at Pte. Mouille and a smaller number at the Fermi power plant in Monroe County (Scharf, 1979; W. C. Scharf, G. W. Shugart, and J. P. Ludwig; MNFI). Most winter recoveries of adults from the Great Lakes are from South America particularly the northwest coast, and of juveniles are from the Gulf of Mexico and the Caribbean. Migration in North America is mainly along the Atlantic coast. In the Great Lakes most birds breed in a colony other than the one where they were born (Bird-Banding 49:142-156, 1978).

[**Arctic Tern**, *Sterna paradisaea*. Hypothetical. Recent sight records: two in spring at Whitefish Point and mouth of the Tahquamenon River, Chippewa County, on 17 and 19 May 1979; one at Nayanquing Point, Bay County, on 9 June 1981; one at Pte. Mouillee, Monroe County, on 5 July 1982, and one at Muskegon State Park, Muskegon County, on 12 September 1981 (AB 35:942, 1981; JPW 60:37, 1982; UMMZ).]

***Forster's Tern**, *Sterna forsteri*. Common transient and locally common summer resident. Nests in Saginaw Bay (where first observed nesting in 1957; JPW 35:68-70, 1957) and in Lake St. Clair (where nested in 1880; Barrows, 1912). Breeding population in 1982 was 850 nesting pairs at 10 sites (W. C. Scharf and G. W. Shugart; MNFI). Nests also in Ontario in marshes on Long Point and at Rondeau, Lake Erie (Long Point Bird Observatory Newsletter, summer, 1976).

Least Tern, *Sterna antillarum*. Vagrant. One specimen: UMMZ 111957, Erie Township, Monroe County, on 10 June 1943. Also observed at St. Joseph, Berrien County, on 3-4 June 1970 (AFN 24:686, 1970).

***Black Tern**, *Chlidonias niger*. Common transient and summer resident. Breeds in marshes and harbors around the Great Lakes and on inland small lakes with marshes.

[**Black Skimmer**, *Rynchops niger*. Hypothetical. Two sighted in Saginaw Bay, 22 August 1981 (JPW 60:29-30, 1982).]

Dovekie, *Alle alle*. Vagrant. UMMZ specimens: 44274, Detroit River, Wayne County, taken 30 November 1881; 109683, Stuart Lake, near Marshall, Calhoun County, on 14 November 1939.

Thick-billed Murre, *Uria lomvia*. Occasional but highly irregular visitor in the last century, not recorded in recent years. Museum specimens were taken mainly along Lake Erie, the Detroit River, and Lake St. Clair, in 1894, 1896, 1907, and 1950, all in years of mass irruptive movements in Quebec and southern Ontario as well (Barrows, 1912; HCMZ; ROM; UMMZ).

Ancient Murrelet, *Synthliboramphus antiquus*. Vagrant. One record: beachwashed specimen found 4 miles N of Lake Macatawa Channel, Ottawa County, on 7 July 1965 was in Hope College (HCMZ 530; Wilson Bull. 78:320, 1966), but was discarded in 1970's.

***Rock Dove**, *Columba livia*. Introduced, common permanent resident. Feral populations are widespread and are nearly all associated with human populations.

Band-tailed Pigeon, *Columba fasciata*. Vagrant. A bird was seen and photographed near Niles, Berrien County, on 20–30 December 1967 (JPW 47:54–55, 1969).

***Mourning Dove**, *Zenaida macroura*. Common transient and common breeding bird especially in southern part of state. Uncommon in winter in Michigan except in the south, where common; flocks of more than 100 have been seen, mainly around farm buildings. Birds banded near Lansing have been recovered from September through March mainly in Georgia and Florida, but throughout the southeastern U.S. (JPW 37:29–33, 1959).

***Passenger Pigeon**, *Ectopistes migratorius*. Extinct. Species was abundant in Michigan during the last century (Barrows, 1912), and was exterminated with logging, clearing of the forests, and hunting. UMMZ has 13 specimens with Michigan localities. Other museum collections have 25 specimens known from Michigan, as far northwest as Ontonagon County (Hahn, 1963). Additional specimens in MSU (4) and Fort St. Joseph Museum, Niles (2 from C. R. Barron collection). Last Michigan specimen was taken in 1898 in Dearborn Township, Wayne County (now in ROM) (Wood, 1951). Two sets of eggs from Michigan in UMMZ, two others in Fort St. Joseph Museum, Niles, from Barron Lake, Cass County (unlabelled, but described in Ballard, 1948). Breeding localities are listed in Wood (1951).

Common Ground Dove, *Columbina passerina*. Vagrant. One specimen: UMMZ 210837, this bird was netted and photographed at Long Lake, Alpena, on 5 September 1966 (JPW 44:176, 1966). Another bird (tame, perhaps an escaped cage bird) was observed at Marquette on 29 September and 1 October 1972 (MAS).

***Monk Parakeet**, *Myiopsitta monachus*. Introduced. Scarce resident. Observed in several counties in the Lower Peninsula, mainly in the Detroit area. The first reported Monk Parakeet in the wild in Michigan was on a farm near Woodland, Barry County, in the spring of 1970. Nests were reported near Woodland, Barry County, and near Owosso, Shiawassee County, in 1970, in Eau Claire, Berrien County, in May 1973, and in Ann Arbor, Washtenaw County, in 1979 and 1981 (DNR; UMMZ). No success-

ful breeding was observed, however. The species adds sticks to its nests year-round and uses the nests for roosting; some or all local nests may have been roosting nests. Monk Parakeets are available in local pet shops and new releases continue as their owners discover how noisy the birds can be. It is uncertain whether any parakeets in Michigan are of feral origin. Michigan specimen (CMU 82-1), taken in a garden near Mt. Pleasant, Isabella County, on 14 August 1974, is of the subspecies *M. m. cotorra* (compared with UMMZ series from Paraguay).

[**Carolina Parakeet**, *Conuropsis carolinensis*. Extinct. Hypothetical. "Paroquets" were observed in the St. Joseph River Valley in 1718 (Wisc. Hist. Coll. 16:372, 1902), almost certainly in Michigan territory, as the Kankakee portage was only four miles into Indiana, and Fort St. Joseph (near Niles) was the only settlement in the St. Joseph Valley at the time. A specimen in C. R. Barron collection in Niles Senior High School, no data, may be a local bird. J. J. Audubon in 1831 wrote that "Parrakeets . . . could be procured . . . (at) the mouth of the Manimee [Maumee] at its junction with Lake Erie" (cited in J. M. Wheaton, Report on the Birds of Ohio, 1882), apparently not a first-hand report report by Audubon. The locality is on the Michigan-Ohio line; the record is not definite.]

***Black-billed Cuckoo**, *Coccyzus erythrophthalmus*. Common transient and summer resident. All October specimens examined are birds of the year.

***Yellow-billed Cuckoo**, *Coccyzus americanus*. Common transient and summer resident, less numerous than Black-billed Cuckoo in most of the state, but the more numerous cuckoo in southwestern Michigan. Uncommon in the Upper Peninsula in summer.

Groove-billed Ani, *Crotophaga sulcirostris*. Occasional nonbreeding visitor. Specimens: UMMZ 134124, found dead in Allegan Township, Allegan County, on 14 November 1951; CMU 79-28 taken at Rogers City, Presque Isle County, on 12 October 1978. Photograph of bird at Berrien Springs, Berrien County, on 3-4 November 1968 (OBC 7:7, 1968). Observed in Ottawa County (photographed at Allendale on 16 October 1976, in UMMZ; JPW 58:121, 1980), at Sarett Nature Center, Berrien County, on 20-24 October 1973, and at Parchment, Kalamazoo County, on 8-9 October 1975 (UMMZ). All observations of anis are in autumn (JPW 57: 218-219, 1979).

***Common Barn-Owl**, *Tyto alba*. Uncommon permanent resident. Formerly widespread, especially in southern Michigan. Nested north to Tuscola, Genesee, Saginaw, and Isabella counties (Wood, 1951; JPW 33:22, 1955; Cuthbert, 1963; UMMZ). Nearly all have disappeared in recent years. Birds observed in Ontonagon County in autumn 1980 (JPW 59:10, 1981), near Linwood, Bay County, on 1 March 1978 (Rose Lake Wildlife Research Center collection), and in Wayne County in autumn 1981 (DAS). Last nested successfully in Berrien County in 1971 (OBC). No more than four nesting pairs have been reported in any year since 1971, mainly in Monroe County. Only one known successful nesting pair in the state from 1980 through 1982 (MNFI).

***Eastern Screech-Owl**, *Otus asio*. Common permanent resident in the south, uncommon in northern Lower Peninsula, no records from Upper Peninsula or from most islands in the Great Lakes. Both rufous- and gray-plumaged birds occur in Michigan, but the gray birds are about four times as numerous (Wilson Bull. 75:183-190, 1963).

***Great Horned Owl**, *Bubo virginianus*. Common permanent resident throughout the state.

Snowy Owl, *Nyctea scandiaca*. Winter visitor along the shoreline of the Great Lakes in southern Michigan, where regular but varying in numbers from year to year; regular visitor in the Upper Peninsula. Irregular inland. Occasional birds in the Upper Peninsula remain into May and early June (AB 35:942, 1981).

***Northern Hawk-Owl**, *Surnia ulula*. Occasional winter visitor, most records in the Upper Peninsula. Regular in recent years near Sault Ste. Marie, Chippewa County. One breeding record for Isle Royale, a young bird able to fly but partly "in the down," on 4 August 1905 (Barrows, 1912).

Burrowing Owl, *Athene cunicularia*. Vagrant. UMMZ specimen 118163 taken near Chassell, Houghton County, on 2 May 1949. Observed 15 miles away at Redridge, Houghton County, on 24 April 1979 (JPW 57:218, 1979). Another recorded in Kalamazoo County on 26 June 1965 (JPW 57:99, 1979; KNC), and one shot in Oakland County in May 1966 (WSU 807, examined by W. L. Thompson, JPW 60:118, 1982).

***Barred Owl**, *Strix varia*. Permanent resident, locally common in both southern and northern Lower Peninsula and common in the Upper Peninsula, in moist coniferous and deciduous woods. Occasional on islands in the Great Lakes, with one record on Isle Royale (Jordan and Shelton, 1982), one on Beaver Island, Charlevoix County (UMMZ), and one on South Manitou Island, Leelanau County (JPW 51:10, 1973).

***Great Gray Owl**, *Strix nebulosa*. Occasional winter visitor. UMMZ specimen 54426 taken near Hillman, Montmorency County, about 25 November 1922. Other Michigan specimens are GRPM 29211 from Mackinac County on 9 May 1967, a UMBS specimen from Carp Lake, Emmet County, found 4 October 1972 (Pettingill, 1974), and USNM 204410 from Pine River, Marquette County, in March 1907. Observed and banded during owl migration at Whitefish Point, Chippewa County (photo JPW 49:64, 1971), and one photographed near Mackinaw City, Emmet County, on 2 June 1979 (JPW 58:112, 1980). One summer record from Isle Royale, 24 August 1976 (Jordan and Shelton, 1982). Summer observations 1979-1982 from Neebish Island, Chippewa County, and Trout Lake, Mackinac County, include recently fledged young on Neebish Island in 1981 (JPW 60:27-28, 1982; UMMZ).

***Long-eared Owl**, *Asio otus*. Uncommon transient and local resident. Breeds locally in southern Michigan, nesting on platforms in dense evergreens (Barrows, 1912; Wood, 1951). Has nested in the Upper Peninsula (ZVT), where now best known south of L'Anse, Baraga County (UMMZ).

***Short-eared Owl**, *Asio flammeus*. Uncommon transient and irregular

local summer resident. Irregularly recorded in Berrien and Monroe counties in southern Michigan in winter. Local and uncommon in Michigan in all seasons. Two were observed, probably in migration, 6 miles offshore Berrien County over Lake Michigan on 14 October 1973 (Goldeneye 13(1):2, 1974). An apparent migratory invasion was reported in Berrien County in October 1965 (Goldeneye 4(11):3, 1965). Nesting localities are known in southern Michigan (Wood, 1951; ZVT); there are few recent nesting records (DNR).

Boreal Owl, *Aegolius funereus*. Uncommon winter visitor in the Upper Peninsula. Regularly observed and many banded (36 in one spring) in April and May in migration at Whitefish Point, Chippewa County (MA 30(5):10, 1982). Occasional and irregular in the Lower Peninsula (JPW 56:210, 1978).

***Northern Saw-whet Owl**, *Aegolius acadicus*. Uncommon transient and seasonal resident. Most individuals in winter in southern Michigan are winter visitors. Numbers are observed and banded in migration in early spring at Whitefish Point, Chippewa County. Nesting records in the Upper Peninsula (Baraga, Iron, Marquette, Luce, and Dickinson counties) and in the Lower Peninsula (Alpena, Crawford, Roscommon, Isabella, Allegan, Oakland, and Clinton counties) (ZVT; JPW 41:110–112, 1963; 42:260, 1964; UMMZ), also summer records on Isle Royale and in Chippewa, Emmet, Cheboygan, and Kent counties (ZVT; Pettingill, 1974; UMMZ).

***Common Nighthawk**, *Chordeiles minor*. Common transient and summer resident. Most numerous on the jack-pine plains and other recently burned habitats with bare ground in northern Michigan, also nests on flat tarred or stone-covered rooftops in cities. Hundreds seen in migration along the shoreline of the Great Lakes in early autumn.

Chuck-will's-widow, *Caprimulgus carolinensis*. Occasional summer resident. Tape recorded near Spring Brook, Richland Township, Kalamazoo County, on 12 July 1976 (tape in UMMZ). Heard for six years (1976–1982) in Michigan in Kalamazoo County, with four birds in one season, and where first noted in May 1963 (AB 35:942, 1981; JPW 60:127, 1982). Identified at Rose Lake, Clinton County, in August 1972 (McWhirter and Beaver, 1977). Others reported in Van Buren and Monroe counties (MAS) and Shiawassee County (AB 33:774, 1979).

***Whip-poor-will**, *Caprimulgus vociferus*. Common transient and summer resident in wooded country.

***Chimney Swift**, *Chaetura pelagica*. Common transient and summer resident. Nests in tree hollows and in chimneys and outbuildings.

White-throated Swift, *Aeronautes saxatalis*. Vagrant. UMMZ 61955, Hillsdale, Hillsdale County, collected after it found its way alive into a laboratory building at Hillsdale College in August, 1926 (Auk 44:565, 1927). One was sighted at Pentwater, Oceana County, between 12–26 July 1969 (UMMZ).

***Ruby-throated Hummingbird**, *Archilochus colubris*. Uncommon transient and summer resident, perhaps mainly in swampy habitats.

[**Rufous Hummingbird**, *Selasphorus rufus*. Hypothetical. Sight records in St. Joseph County on 9 October 1974 (UMMZ) and at Niles, Berrien

County, on 17 May 1981 (questionable, as most eastern North American records are in autumn) (Goldeneye 20(2):4, 1981) and in autumn 1981 (MAS).]

***Belted Kingfisher**, *Ceryle alcyon*. Common transient and summer resident. A few winter on open rivers and lakes in southern Michigan.

***Red-headed Woodpecker**, *Melanerpes erythrocephalus*. Common transient and summer resident, most numerous in oak woodlands in the Lower Peninsula. Has nested successfully in the Upper Peninsula in Iron, Marquette, and Keweenaw (Copper Harbor) counties, paired birds observed at Iron Mountain, Iron County, and also observed in numbers in Garden Peninsula of Delta County (MAS; UMMZ). Large numbers observed migrating along Lake Michigan in some years (Goldeneye 12(3):3, 1973). Some individuals overwinter in southern Michigan, more rarely in the Upper Peninsula. Birds apparently are scarce in winter in years of poor acorn crops (AB 36:297, 1982).

***Red-bellied Woodpecker**, *Melanerpes carolinus*. Local permanent resident, common in the south. Probably also migratory to some extent; local numbers vary seasonally (Kelley, 1978). Nesting reported throughout southern Michigan north to Muskegon, Oceana, Lake, Roscommon, and Saginaw counties (Wood, 1951; UMMZ). Observed north to Emmet County (Pettingill, 1974). Uncommon and rather local in the Upper Peninsula; recorded in Chippewa and Marquette counties (ZVT; JPW 37:151, 1959; 60:92, 1982; WPBO). Much more numerous now in winter than they were 30 years ago (Kelley, 1966).

***Yellow-bellied Sapsucker**, *Sphyrapicus varius*. Common transient and fairly common summer resident, most numerous in the north. Uncommon but regular resident in southern Michigan in winter; visits feeders.

***Downy Woodpecker**, *Picoides pubescens*. Common permanent resident throughout the state.

***Hairy Woodpecker**, *Picoides villosus*. Common permanent resident, less abundant than previous species in the southern areas.

***Three-toed Woodpecker**, *Picoides tridactylus*. Occasional winter visitor and rare permanent resident. Five UMMZ specimens: 61576, Isle Royale, on 4 October 1929; 208666, Amasa, Iron County, on 29 November 1910; 208667, Huron Mountains, Marquette County, on 18 October 1920; 53736, Gogebic County, in December 1920; and 158256, Sugar Island, Chippewa County, on 1 March 1963. One nesting record in eastern Baraga County in August 1953 (ZVT). Summer records: near Two-hearted River, Luce County, on 25 June 1965, and Hulbert, Chippewa County, on 24 July 1982 (JPW 43:89, 1965; UMMZ). No satisfactory records for the Lower Peninsula (JPW 46:135, 168; UMMZ).

***Black-backed Woodpecker**, *Picoides arcticus*. Uncommon winter visitor; uncommon local summer resident in the Upper Peninsula, where it has nested in Schoolcraft, Alger, Keweenaw, Iron, and Marquette counties and on Isle Royale. Local permanent resident near Chassell, Houghton County, and observed in summer on Baraga plains, Baraga County, and at Hulbert, Chippewa County. Occasional summer resident in northern Lower Peninsula, has nested in Montmorency, Crawford, and Oscoda

counties (JPW 36:182, 1958; 52:148-150, 1974; Jordan and Shelton, 1982; additional records in UMMZ). Winter records throughout the state, but scarce and irregular in the south.

***Northern Flicker**, *Colaptes auratus*. Common transient and summer resident. Uncommon in winter in the southern counties, generally absent in winter in the north. Large numbers are seen in migration along the shoreline of Lake Michigan.

***Pileated Woodpecker**, *Dryocopus pileatus*. Uncommon, mainly a permanent resident in the north. Nests in the Upper Peninsula in pine forests. In the Lower Peninsula it nests in virgin pine stands in Hartwick Pines State Park, Crawford County, and Interlochen State Park, Grand Traverse County. It also nests in Ottawa County (JPW 58:121, 1980), in Allegan, Van Buren, and Barry counties (KNC), and at Warren Woods, Berrien County (OBC). First seen in Berrien County in 1972 where it has been regular in Warren Woods since 1976 (Goldeneye 11:6, 1972; OBC). Birds observed in the south in autumn outside of their present breeding area are apparently migrants.

***Olive-sided Flycatcher**, *Contopus borealis*. Common transient. Regular but uncommon summer resident in northern Michigan south to Crawford and Oscoda counties. Southern records are birds in migration; migrants are observed into early June (observed as late as 13 June in Berrien and St. Clair counties, JPW 49:123, 1971), and August birds in the south are early autumn transients.

***Eastern Wood-Pewee**, *Contopus virens*. Common transient and summer resident throughout the state.

***Yellow-bellied Flycatcher**, *Empidonax flaviventris*. Regular transient; common summer resident in the Upper Peninsula, also nests in bogs in Cheboygan County, and singing males in breeding season in spruce-tamarack-cedar swamp in Crawford County (JPW 45:2-9, 1967; D. Ewert).

***Acadian Flycatcher**, *Empidonax vireescens*. Common transient, local summer resident, common in southern third of state in mature deciduous forest. Nesting has been reported north to Muskegon and Lapeer counties (ZVT; JPW 49:119, 1971).

***Alder Flycatcher**, *Empidonax alnorum*. Local summer resident throughout the state; apparently common in northern Michigan, less common than Willow Flycatcher in the south. Summer records in southern Lower Peninsula in Berrien, Cass, Van Buren, Allegan, Muskegon, Kalamazoo, Jackson, Livingston, Oakland, Monroe, Lapeer, Isabella, and Clare counties. Nested in 1920's on same grounds with Willow Flycatcher at Spring Brook, Jackson County, where the distinctive nest types of both Alder Flycatchers and Willow Flycatchers were photographed (Wilson Bull. 40:218-221, 1928). Both species were still there in 1970's (UMMZ).

***Willow Flycatcher**, *Empidonax traillii*. Summer resident, common in the south, local in the north. Spring and summer records in the north from Cheboygan County (nesting) (Pettingill, 1974; UMMZ tape recordings and specimens), at Engadine in Mackinac County (UMMZ), at Seney National Wildlife Refuge in Schoolcraft County, in Delta County (AB 35:827, 1981), and in the Porcupine Mountains in Ontonagon County (UMMZ 31935).

***Least Flycatcher**, *Empidonax minimus*. Common transient and summer resident, more numerous in the north (JPW 44:150, 1966). Generally migrates by the end of September (Wood, 1951), but a late bird was banded at Kalamazoo on 18 November 1982 (KNC).

***Eastern Phoebe**, *Sayornis phoebe*. Common transient and summer resident in the south, uncommon in the Upper Peninsula. Numbers have decreased in recent years. A few birds remain in late autumn into November and December, feeding on berries and other small fruits.

Say's Phoebe, *Sayornis saya*. Vagrant. Photographed at Whitefish Point, Chippewa County, in April 1978 (UMMZ). Other sight records: Sturgeon River, Houghton County, on 2 May 1974 (JPW 53:76, 1975), Chassell, Houghton County, in May 1977 (UMMZ), Muskegon, Muskegon County, on 2 May 1975 (JPW 54:93, 1976), and Beaver Island, Charlevoix County, on 27 May 1979—a doubtful record of 4 birds, possibly Western Kingbirds (AB 33:774, 1979).

[**Vermilion Flycatcher**, *Pyrocephalus rubinus*. Hypothetical. Sight record at Mackinac Island on 8 October 1944 (ZVT; UMMZ).]

***Great Crested Flycatcher**, *Myiarchus crinitus*. Common transient. Summer resident, common in the south, uncommon in the Upper Peninsula, though increasing in numbers in Schoolcraft and Alger counties in recent years.

***Western Kingbird**, *Tyrannus verticalis*. Occasional transient and summer visitor. UMMZ specimens: 69059, 2 miles SE of Lovells, Crawford County, on 30 June 1932; 110423, North Manitou Island, Leelanau County, on 20 June 1940. MSU specimen: 5576, Shingleton, Alger County, on 28 May 1963. Observed several summers in Kalamazoo County (photos in UMMZ). About 30 observations throughout the state (Wood, 1951; ZVT; JPW 36:211, 1958; 37:26, 1959; 39:56, 1961; 40:58, 1962; 42:213, 1963; 43:167, 1965; 44:51-52, 1966; 45:22, 1967; 46:109, 1968; 57:156, 1979; AB 35:942, 1981; MAS; UMMZ). Nesting records in Barry and Kalamazoo counties (ZVT; JPW 39:55, 1961; 43:147-148, 1965). A mixed pair of Western and Eastern Kingbirds successfully raised a brood of hybrid young near Kalamazoo in 1964 (JPW 43:148, 1965).

***Eastern Kingbird**, *Tyrannus tyrannus*. Common transient and summer resident.

Scissor-tailed Flycatcher, *Tyrannus forficatus*. Occasional transient north of its breeding range. Photographs of bird seen 30 May through 2 June 1962, 5 miles S of Saginaw, Saginaw County (UMMZ). Also observed near Copper Harbor, Keweenaw County (JPW 51:150, 1973), Marquette County (JPW 48:102, 1970), Alger County (JPW 60:93, 1982), Delta County (UMMZ), Saginaw County (JPW 41:77, 1963), Monroe County (UMMZ), on Belle Isle in Wayne County (JPW 60:128, 1982), near Ann Arbor in Washtenaw County (19 July 1982) (UMMZ), on Beaver Island, Charlevoix County, in June 1980 (UMMZ), Leelanau County (JPW 41:25, 1962), and Mason County (AB 30:75, 1976).

***Horned Lark**, *Eremophila alpestris*. Common transient and summer resident. Nests in old corn fields by March if snow cover allows. Common in flocks in winter.

***Purple Martin**, *Progne subis*. Common transient and summer resident, local throughout state, perhaps more numerous in the south. Fall migration from mid-August to September with roosts and flocks of thousands of birds in the southern counties. Martins winter in South America; a nestling banded at Alpena, Alpena County, was recovered on 4 January 1977 in Bolivia.

***Tree Swallow**, *Tachycineta bicolor*. Common transient and summer resident. Nests in holes in dead trees and snags, often over water at dams and beaver ponds. Birds banded as nestlings in Michigan have been found breeding in Ontario and Wisconsin (BBL; Adams, 1982; R. A. Wolinski).

***Northern Rough-winged Swallow**, *Stelgidopteryx serripennis*. Common transient and summer resident; local throughout the state. Nests alone or in association with Bank Swallows. Several nest in close proximity where nest sites are available in drain tiles and other man-made structures.

***Bank Swallow**, *Riparia riparia*. Common summer resident. Nests in colonies in gravel pits, riverbanks, and undisturbed dunes. Banded birds often breed in different colonies, and sometimes different counties, in successive years, and the young usually do not return to breed in their natal colony. Several birds banded as breeding adults found in later years during the breeding period in Wisconsin, Indiana, Ohio, and Ontario. One banded nestling was recovered in another year in June in Ontario. Large migratory flocks are observed along the Great Lakes. Post-breeding recoveries of Michigan Birds include El Salvador and Peru (BBL; R. A. Wolinski).

***Cliff Swallow**, *Hirundo pyrrhonota*. Uncommon transient and local summer resident. Common and locally numerous in the northern Upper Peninsula. Breeding populations are found at Fort Wilkins State Park in Keweenaw County, on the Library at Michigan Technological University in Houghton in Houghton County, on the sawmill at Alberta in Baraga County, along Pictured Rocks in Alger and Marquette counties, at several locations in Chippewa County, near Wilderness State Park in Emmet County, near Walkerville in Oceana County, in Bowne Township in Kent County, and under bridges near New Buffalo in Berrien County, and smaller colonies occur throughout the state. Often migrates with Barn Swallows.

***Barn Swallow**, *Hirundo rustica*. Common transient and summer resident. More widely distributed in the Lower Peninsula than in the Upper Peninsula. Both single nests and colonial nests are found, often in man-made structures. Recoveries of banded nestlings show many returning to the state to breed, though not to the natal colony (BBL; R. A. Wolinski).

***Gray Jay**, *Perisoreus canadensis*. Uncommon and local permanent resident in the Upper Peninsula and on Isle Royale. Nesting records: Isle Royale (nest with young on 30 April 1935; Wood, 1951; photos in UMMZ; family groups seen in 1930, UMMZ juveniles grown but many wing feathers in sheath; Wood, 1951), on Baraga Plains, Baraga County (UMMZ), near Northland, Marquette County (nest with eggs laid in last

week of March, 1947; ZVT; UMMZ), near Iron River, Iron County (small juvenile attended by two adults on 2 July 1964; notes in UMMZ), and Crystal Falls bog, Iron County (nest with eggs on 22 April 1976 (UMMZ)). Juveniles also seen in late May 1977 and in early July 1981 south of Rookery Lake, Iron County. Adults seen regularly 1977–1982 at Cook's Run trout hatching pond and at Basswood and Stebbins Bog, Iron County. Permanent resident near Chassell, Houghton County (UMMZ). Immatures with adults seen in 1980 and 1981 at Hulbert Bog, Chippewa County (UMMZ; JPW 60:93, 1982), and adult with juveniles seen at Sleeper Lake, Luce County, on 13 July 1962 (JPW 41:77, 1963). Infrequent in the northern Lower Peninsula, mainly in winter (Wood, 1951). One seen near Ann Arbor, Washtenaw County, in December 1975 (UMMZ).

***Blue Jay**, *Cyanocitta cristata*. Common permanent resident and abundant migrant. Occurs in loose flocks of hundreds and thousands in migration along shorelines of Lake Michigan and Lake Huron and in large numbers at Whitefish Point, Lake Superior. "Banding records indicate that at least part of the local winter population is different from the summer population; winter birds may be replaced by returning migrants, some of which constitute the summer population" (records of W. P. Nickell, in Kelley, 1978). Recoveries of Blue Jays banded as nestlings or summer juveniles in Michigan have been mainly in the same locality where they were born. These birds are permanent residents in all seasons. Most birds in southern Michigan appear to be permanent residents based on the banding recovery data. Some Michigan jays, especially those from the northern counties, winter in the neighboring states, and a few birds born in Michigan have been recovered in winter in the southern states (Kentucky, Tennessee, Missouri, Mississippi). Several spring migrants banded as yearlings in southeastern Michigan have been recovered as adults in a later winter (December–March) in Ontario and Quebec (BBL; UMMZ).

[**Clark's Nutcracker**, *Nucifraga columbiana*. Hypothetical. Sight record at Whitefish Point, Chippewa County, on 16 December 1978 (AB 33:284, 1979).]

Black-billed Magpie, *Pica pica*. Occasional visitor. Two UMMZ specimens: 150871 taken near Ann Arbor, Washtenaw County, on 6 December 1955 (adult male, head in heavy molt); 199b, specimen taken in "southern Michigan about 1837–1838" by A. Sager of the Michigan Biological Survey. Several observations from western Upper Peninsula in 1880's (Barrows, 1912). Observed on Isle Royale in October 1976 (Jordan and Shelton, 1982), near Munising, Alger County, on 3 October 1968 (JPW 46:13, 1968), at Whitefish Point, Chippewa County, on 28 April 1972 (JPW 50:81, 1972), and at Germfask, Schoolcraft County, on 28 January–2 February 1975 (notes in UMMZ). Most records are in the Upper Peninsula. Noted in Berrien County at Sarett Nature Center in October 1973 (OBC 12:5, 1973) and at Grand Mere on 26 June 1977 (OBC 16:4, 1977).

***American Crow**, *Corvus brachyrhynchos*. Common transient and permanent resident. Numerous in winter in southern Michigan, and occasionally wintering north into the Upper Peninsula.

***Common Raven**, *Corvus corax*. Local common permanent resident on Isle Royale and in the Upper Peninsula. In recent years observed in summer in northern Lower Peninsula (Emmet, Cheboygan, Alpena, Missaukee, Kalkaska, and Crawford counties). Lower Peninsula populations were exterminated with logging in the last century. One recent nesting in the Lower Peninsula in Alpena County (JPW 56:45, 1978). Nested on High Island, Charlevoix County, in 1980 (F. Cuthbert). Common in winter as far south as Harrison, Clare County (M. J. Hamas). Occasional transient and winter visitor in southern Lower Peninsula, with specimens from Saginaw Bay (UMMZ specimen, no date) and from Van Buren, Berrien (all UMMZ), and Ottawa (HCMZ) counties.

***Black-capped Chickadee**, *Parus atricapillus*. Common permanent resident. Also in part a migrant, as shown by observations of birds moving along Lake Michigan in Berrien County (OBC), and by banding records at Tawas Point, Iosco County (JPW 51:111-115, 1973).

Carolina Chickadee, *Parus carolinensis*. Vagrant. One record: UMMZ 49667, Oakwood, Ecorse Township, Wayne County, immature male collected 17 July 1899. No recent sight observations. Breeds in Indiana and Ohio.

***Boreal Chickadee**, *Parus hudsonicus*. Uncommon winter visitor and local resident in the Upper Peninsula. Irregular winter visitor in the Lower Peninsula. Nesting records in Chippewa, Baraga, Luce, and Schoolcraft counties, in the period 1954-1956 (JPW 32:107-109, 1954; JPW 34:109, 1956; ZVT). Recent nests in Gogebic (1974), Baraga (1974), Alger (1975), and Chippewa (1975) counties, and seen during early summer at Cook's Run and Basswood, Iron County (UMMZ).

***Tufted Titmouse**, *Parus bicolor*. Common permanent resident throughout most of the Lower Peninsula. Has spread northward during this century; now common around Interlochen and Traverse City, Grand Traverse County, and nested in Benzie County in 1981. A few seen each winter inland north as far as Higgins and Houghton Lakes, Roscommon County; regular in Lake County, regular but local resident along Chippewa River in Isabella County (JPW 56:8, 1978; CMU records). Range in western Lower Peninsula extends north along Lake Michigan as far as Grand Traverse County. Reported in the Upper Peninsula at Marquette, Marquette County (AB 34:899, 1980). The range expansion has accompanied the widespread use of winter feeders.

***Red-breasted Nuthatch**, *Sitta canadensis*. Common winter visitor in the south, where it occurs regularly but in varying numbers as an irruptive migrant. Summer resident in northern Michigan, regular nesting in Schoolcraft and Alger counties. Widespread but sparse breeding resident in the Lower Peninsula where it nests as far south as Oakland and Wexford counties (ZVT; Kelley, 1978), Ingham County (JPW 47: 128, 1969; 48:111, 1970), Kalamazoo County (JPW 56:205, 1978; KNC), and Berrien County (Goldeneye 9(5):3, 1970), apparently by birds that remain after a winter invasion. Other summer records in recent years from Allegan and Berrien counties and from Grosse Ile, Wayne County.

***White-breasted Nuthatch**, *Sitta carolinensis*. Common resident, more numerous in the south, but it nests into the Upper Peninsula to Marquette County (JPW 49:119, 1971).

***Brown Creeper**, *Certhia americana*. Fairly common as transient in spring and autumn, breeds locally in small numbers throughout, more common in the Upper Peninsula. Uncommon winter resident.

Rock Wren, *Salpinctes obsoletus*. Vagrant. UMMZ 50838 taken in Wayne County, 10 October 1910. Observed near the Detroit railway station in 1937 or 1938 (Wilson Bull. 54:52, 1942), at Whitefish Point, Chippewa County, on 8–10 May 1979 (AB 33:774, 1979), and at Copper Harbor, Keweenaw County, on 29 October 1979 (AB 34:165, 1980).

***Carolina Wren**, *Thryothorus ludovicianus*. Local resident in the south, disappearing locally for a few years following cold winters (as in the late 1970's). Observed mainly in the southern three tiers of counties. A pair summered in the northern Lower Peninsula near Harrison, Clare County, in 1976 (M. J. Hamas). In some years one or two have wintered well into the northern Lower Peninsula (Alpena, Alpena County, and Traverse City, Grand Traverse County). In summer of 1981, reported only from Wayne County (AB 35:942, 1981), and in winter, only in Washtenaw and Berrien Counties (AB 36:297, 1982).

***Bewick's Wren**, *Thryomanes bewickii*. Formerly occasional, now scarce to rare, a summer resident and less commonly a permanent resident in southern part of state. Not currently known to breed in Michigan. Only two successful nestings are known, in Grand Rapids, Kent County (1894), and in Ann Arbor, Washtenaw County (1922) (Barrows, 1912; Wood, 1951). Several records in 1950's, when it was regular in Monroe County. Observed in Berrien County in spring in 1968 and 1970. One or two vagrants observed each season in migration. Seven of the 8 UMMZ specimens were taken in May and June. Two winter records. UMMZ 153859 was found dead on ice on a pond at Waterloo, Jackson County, on 11 February 1958 and had been seen alive during January and February (W. Koelz). A wintering bird near Otis Lake, Barry County, remained through autumn at least until 23 February 1980, roosting in the orbit of a deer skull (JPW 58:89, 1980; DNR).

***House Wren**, *Troglodytes aedon*. Common transient and summer resident, common in the Lower Peninsula, uncommon in the Upper Peninsula. The species occasionally remains into early winter.

***Winter Wren**, *Troglodytes troglodytes*. Common migrant in the south; common summer resident in the Upper Peninsula and the northern Lower Peninsula in coniferous woods and in spruce bogs. Common on Isle Royale. Has also bred in Lapeer and Kent counties, and observed in some summers in Muskegon, Berrien, and Oakland counties. Occasional in winter, uncommon but regular in Berrien County (OBC).

***Sedge Wren**, *Cistothorus platensis*. Uncommon transient and summer resident; occasional in winter. Nests in wet sedges and grassy marshes. Numerous around Munuscong Bay, Chippewa County, and Saginaw Bay, Bay County. Rather local in southern Michigan; it was more common in

1900–1920 when it nested in inland marsh meadows near Waterloo, Jackson County. The former wet grassy meadows are no longer cut for hay and the habitat is nearly gone in Michigan (W. Koelz).

***Marsh Wren**, *Cistothorus palustris*. Common transient and local summer resident, occasional into December (observed several years in marshes in southeastern Michigan in Monroe, Macomb, and St. Clair counties, also winter records in Berrien and Kalamazoo counties). Nests in cattail marshes, where common from Saginaw Bay southward, also in the northern Lower Peninsula and locally in the Upper Peninsula. Many nest in marshes of the St. Mary's River, Chippewa County.

***Golden-crowned Kinglet**, *Regulus satrapa*. Common transient. Summer resident in the north, occasionally south to Oscoda County (JPW 33:24, 1955), locally at Kellogg Forest, Kalamazoo County, in early 1970's (KNC), one record 12 June 1976 in Berrien County (OBC 15:5, 1976). Nesting known for Isle Royale, Porcupine Mountains (Ontonagon County), Seney Township (Schoolcraft County), Burt Township (Alger County), McMillan and Sleeper Lake (Luce County), Whitefish Point (Chippewa County), Wilderness State Park (Emmet County), Reese's Bog (Cheboygan County), and near Alpena (Alpena County) (Wood, 1951; JPW 34:110, 1956; Nelson, 1956; Pettingill, 1974; UMMZ). Irregular, sometimes locally common in winter.

***Ruby-crowned Kinglet**, *Regulus calendula*. Common transient, common summer resident in the Upper Peninsula (mainly in Chippewa, Mackinac, Schoolcraft, Luce, Alger, and Iron counties), uncommon in western Upper Peninsula, on Isle Royale, and in northernmost Lower Peninsula in Emmet and Cheboygan counties. Nesting records in Alger County, on Sugar Island (Chippewa County), and in Wilderness State Park (Emmet County) (Wood, 1951; Pettingill, 1974), also adults feeding fledged young on 3 June 1981 at Stebbins Bog (Iron County) (UMMZ). Occasionally birds summer in southern Michigan. A pair remained in Ann Arbor, Washtenaw County, until 23 June 1976 and nesting was suspected (notes in UMMZ), and a pair with one adult carrying food was reported in Berrien County on 12 June 1976 (AB 30:960, 1976). Occasional in winter.

***Blue-gray Gnatcatcher**, *Poliptila caerulea*. Uncommon transient and local summer resident throughout Lower Peninsula, uncommon in the Upper Peninsula. Regular transient at Whitefish Point, where observed as late as 25 November (W. Booth). Nesting known north to Muskegon, Isabella, Clare, Iosco, and Alpena counties and in eastern Upper Peninsula (JPW 49:120, 1971; 50:3, 1972; 56:206, 1978; 58:106, 1980; UMMZ).

Northern Wheatear, *Oenanthe oenanthe*. Vagrant. Observed at White Pine, Ontonagon County, on 12–15 October 1981 (JPW 60:38, 1982; photo seen at KNC), at McMillan, Luce County, on 7–9 October 1943, and at St. Ignace, Mackinac County, on 19 September 1980 (Auk 62:631–632, 1945; JPW 59:66, 1980; notes in UMMZ). Several have been observed and a few collected in Ontario (James *et al.*, 1976).

***Eastern Bluebird**, *Sialia sialis*. Uncommon transient and summer resident throughout state; apparently only partly migratory, occasional in winter. Bluebirds banded in Michigan have been recovered in winter in

Tennessee, Alabama, and Florida as well as in Michigan (JPW 49:40, 1971; Adams, 1982). Local resident populations may die off in severe winters (JPW 57:8-11, 1978). Has decreased in numbers throughout in last 20 years, due to loss of habitat, harsh winters, and interference and competition for nest holes by Common Starling.

[**Mountain Bluebird**, *Sialia currucoides*. Hypothetical. Sight records from Eau Claire, Berrien County, in June 1979, and St. Joseph, Berrien County, on 22 October 1980 (OBC; UMMZ).]

Townsend's Solitaire, *Myadestes townsendi*. Occasional transient and winter visitor. One specimen: UMMZ 151924, Waterloo Township, Jackson County, on 4 January 1944. Nine observations, including one in the Upper Peninsula, range from October to April (JPW 58:93-94, 1980; 60:92, 1982; MAS).

***Veery**, *Catharus fuscescens*. Common transient and locally common summer resident throughout Michigan.

Gray-cheeked Thrush, *Catharus minimus*. Common transient in spring and autumn. Breeds well N and E of Lake Superior, but two summer observations in the Upper Peninsula in the breeding season: one between Cedarville and Hessel, Mackinac County, on 14 June 1977, and a pair seen near Hulbert, Chippewa County, on 24 July 1982 (notes in UMMZ).

***Swainson's Thrush**, *Catharus ustulatus*. Common transient. Common summer resident on Isle Royale and in the Upper Peninsula. Also in northern Lower Peninsula, in Wilderness State Park and Cross Village forest, Emmet County, and near Duncan Bay, Grass Bay, and Douglas Lake in Cheboygan County. Local but regular summer resident in hemlock-balsam fir-sugar maple forest behind dunes on west side of Beaver Island, Charlevoix County (CMU). Not known except as transient elsewhere in Lower Peninsula, where nesting records were noted in last century (Barrows, 1912; Wood, 1951; Nelson, 1956; Pettingill, 1974). Reported as late as December (Kelley, 1978), though most late reports probably refer to Hermit Thrush.

***Hermit Thrush**, *Catharus guttatus*. Common transient; common summer resident in northern two-thirds of state, especially in jack-pine plains. It has nested south to Port Huron Game Area, St. Clair County, and to Kalamazoo County (JPW 51:153, 1973; Kelley, 1978). Breeds in coniferous woods, mixed woods, sparsely wooded plains, and bogs. Occasional in winter.

***Wood Thrush**, *Hylocichla mustelina*. Common summer resident in deciduous forests in southern two-thirds of state, local in the north, uncommon on Isle Royale. Recorded as late as December.

***American Robin**, *Turdus migratorius*. Common transient and summer resident. Winters in Michigan in smaller numbers, sometimes in large flocks, where there are winter berries such as mountain ash. Birds banded in Michigan have been recovered in winter in the southeast from Texas and Arkansas to Florida, South Carolina, and Tennessee (JPW 37:68-73, 1959; Adams, 1982).

Varied Thrush, *Ixoreus naevius*. Occasional transient and winter visitor. Photographs of birds in Battle Creek (Calhoun County), Muskegon

(Muskegon County), Bridgman (Berrien County), and Bay City (Bay County) in UMMZ. Observed in the Upper Peninsula at Sault Ste. Marie (Chippewa County) and Manistique (Schoolcraft County) (MAS; UMMZ). Also observed nearly every year within last 14 years in the Lower Peninsula at several localities. Reported in Van Buren County (throughout the winter), in Ludington State Park (Mason County), in Benzie County, at Gull Lake (Kalamazoo County), at Pontiac and Rochester (Oakland County), and in Detroit (Wayne County) (DAS; MAS; OBC; UMMZ; Kelley, 1978; JPW 60:92, 1982).

***Gray Catbird**, *Dumetella carolinensis*. Common summer resident; uncommon in jack-pine plains. Occasional in winter. Occurs mainly in shrubby habitats.

***Northern Mockingbird**, *Mimus polyglottos*. Uncommon local resident. Has increased its range northward through Michigan during this century. Barrows (1912) knew it as "a rare summer visitor to southern Michigan, having been reported perhaps a dozen times in the last twenty years." Largest population in 1970's in western (Stevensville, Eau Claire, Shoreham, Grand Mere) and northern (Sarett Nature Center) Berrien County, involved perhaps 50 birds. Local populations occur in Emmet, Cheboygan, Presque Isle, Grand Traverse, and Benzie counties, in Ottawa, Kent, Barry, Kalamazoo, and Calhoun counties, and in southeastern Michigan (Wayne, Oakland, Washtenaw, Macomb and Monroe counties). Uncommon in the Upper Peninsula (Ontonagon, Iron, Houghton, Baraga, Marquette, Delta, and Chippewa counties), one record for Isle Royale (JPW 46:138, 1968; Jordan and Shelton, 1982; notes in UMMZ), including autumn and winter records. Casual transient on jack-pine plains. Ann Arbor records scarce but year-round in recent years. Comes to feeders in winter, and feeders are apparently responsible for the northward expansion of the Mockingbirds.

***Brown Thrasher**, *Toxostoma rufum*. Common transient. Summer resident, common in the Lower Peninsula, more local and less common in the Upper Peninsula. Uncommon in winter, comes to feeders.

Water Pipit, *Anthus spinoletta*. Transient, sometimes common, especially in autumn. One summer report: Otsego Lake, Otsego County, on 18 July 1962 (JPW 41:91, 1963). Occasionally observed into December.

Sprague's Pipit, *Anthus spragueii*. Vagrant. One UMMZ specimen: 84587 taken near Lovells, Crawford County, on 26 June 1935. One was observed in Oakland County on 21 May 1960 (Kelley, 1978), and one was seen at Muskegon on 12 May 1979 (AB 33:774, 1979).

Bohemian Waxwing, *Bombycilla garrulus*. Irregular winter visitor, occurring every year in the Upper Peninsula but in varying numbers on Christmas Bird Counts. Irregular and scarce in the Lower Peninsula.

***Cedar Waxwing**, *Bombycilla cedrorum*. Common transient and summer resident. Nests commonly in late July and August. A late nest at Saline, Washtenaw County, had nestlings until 26 September 1979 (UMMZ). Large numbers observed in diurnal migration along the shoreline of Lake Michigan in Berrien County. Common but local in winter in the south.

Northern Shrike, *Lanius excubitor*. Winter visitor, uncommon but regu-

lar in the Upper Peninsula, occasional and irregular in the south, though regular in Berrien County. Reported from 41 counties in the winter of 1981–1982 (JPW 60:92, 1982). Most Michigan specimens in UMMZ are in immature plumage.

***Loggerhead Shrike**, *Lanius ludovicianus*. Transient and summer resident in most of state, permanent resident in southernmost counties. Formerly common but now nearly extinct as a breeding species in Michigan as elsewhere in northeastern North America. Observed in greater numbers in winter than in summer in the southern counties, where it is now unusual to see one in any season. No more than one or two nesting pairs have been found in Michigan in any of the past few years (AB 35:943, 1981; MNFI).

***European Starling**, *Sturnus vulgaris*. Introduced. Common transient, especially in agricultural areas. Common permanent resident (some wintering birds are observed in all areas) also partially migratory especially in the north. Abundant as both resident and seasonal migrant in the south. First records in 1924, widespread in state by 1931 (Wood, 1951).

***White-eyed Vireo**, *Vireo griseus*. Uncommon transient and summer resident in southernmost Michigan. Local in summer in southwestern Michigan in Berrien County (Grand Mere, Spring Creek W of Three Oaks, Galien River) and Cass County (McKinzie Creek 5 miles NE of Niles). Observed regularly in recent years in Livingston, Washtenaw, St. Clair, Macomb, Oakland, and Wayne counties. Rare further north; one netted and photographed on North Manitou Island, Leelanau County, on 11 May 1979 (JPW 58:9, 1980), one record for the Upper Peninsula (Whitefish Point, Chippewa County, 10–11 May 1979) (JPW 57:206, 1979). One old nesting record, no details (Barrows, 1912). Observed nesting in Kalamazoo County in 1960 and 1966 (JPW 39:55, 1961), in Jackson County in 1960 (JPW 29:55, 1961), in Port Huron Game Area, St. Clair County, in 1979 (DAS), and at Pte. Mouillee, Monroe County, in 1982 (DAS).

***Bell's Vireo**, *Vireo bellii*. Occasional transient and summer resident. UMMZ specimens: 53628 taken at Warren Dunes, Berrien County, on 22 May 1920; 214112 taken near Ann Arbor, Washtenaw County, on 27 May 1968. A specimen taken at Detroit on 26 May 1885 is now in MCZ (ZVT). Observed at Houghton, Houghton County, on 17 May 1973 (Inland Bird-Banding News 46:68, 1974), at Metropark, Macomb County, on 6–20 May 1982 (JPW 60:129, 1982), in Kalamazoo County in 3–4 years during May (KNC), and in Berrien County at Warren Woods on 14 May 1966 and at St. Joseph and at Three Oaks in May 1978 (Goldeneye 17(6):3, 1978; OBC). One or more birds observed at Jericho, near Stevensville, Berrien County, 1977–1981 (OBC; tape recording in UMMZ); nested successfully in 1980 (young fed by adults on 28 June) (OBC 19:5, 1980). The local subspecies is *V. b. bellii*.

***Solitary Vireo**, *Vireo solitarius*. Uncommon transient. Summer resident nesting in the Upper Peninsula and in northern Lower Peninsula (Emmet, Cheboygan, Crawford, and Iosco counties). Also summers uncommonly south to Allegan, Berrien, and Kalamazoo counties (JPW 53:158–159, 1975). Nesting observed in Muskegon State Park, Muskegon

County (UMMZ), in Kalamazoo County (JPW 51:153, 1973; 52:186, 1974), and in Port Huron Game Area, St. Clair County, in 1979 (DAS).

***Yellow-throated Vireo**, *Vireo flavifrons*. Uncommon transient. Summer resident, locally common in the south, uncommon in northern Lower Peninsula, and occasional on Isle Royale and in the Upper Peninsula (AB 35:827, 1981; JPW 49:120, 1971; 51:153, 1973; 60:92, 1982; Jordan and Shelton, 1982).

***Warbling Vireo**, *Vireo gilvus*. Common transient and summer resident. Most numerous in the Lower Peninsula but occurs in the Upper Peninsula and on Isle Royale.

***Philadelphia Vireo**, *Vireo philadelphicus*. Uncommon transient and a rather scarce summer resident. Breeding records: Thumb Lake, Charlevoix County, on 8 July 1966 (JPW 44:170, 1966; notes in UMMZ), and Grand Sable Falls, Alger County, on 20 July 1970 (JPW 48:85, 1970). Birds also summer and may nest near Interlochen, Grand Traverse County (JPW 55:195, 1977).

***Red-eyed Vireo**, *Vireo olivaceus*. Common transient and summer resident in deciduous woods throughout state.

***Blue-winged Warbler**, *Vermivora pinus*. Locally common summer resident as far north as Midland County. Vagrants observed north to Whitefish Point, Chippewa County. Uncommon in extreme southern Michigan 100 years ago (Barrows, 1912). Now uncommon but regular as far north as Midland and Isabella counties, where only one earlier observation through 1961 (Cuthbert, 1963; JPW 59:97, 1981). Observed north to Newaygo and Montmorency counties by 1982 (OBC). Increasing in numbers and northern range in recent years (JPW 36:37-73, 1958; Auk 97:1-18, 1980), perhaps at expense of Golden-winged Warbler.

***Golden-winged Warbler**, *Vermivora chrysoptera*. Common transient. Uncommon to occasional as a breeding resident in summer in southern three tiers of counties, locally common in northern Lower Peninsula, and an uncommon summer resident on South Manitou Island, Leelanau County (JPW 51:13, 1973). Uncommon in the Upper Peninsula, local in Iron and Ontonagon counties, one record for Isle Royale.

Hybrids of *Vermivora pinus* × *V. chrysoptera* (including "Brewster's" and "Lawrence's" warblers) are observed throughout the zone of overlap in southern Michigan. Intermediate specimens from Michigan in UMMZ include 15 adults taken in the breeding season. Intermediates are scarcer than either parental species in all localities (Evolution 26:282-293, 1972).

***Tennessee Warbler**, *Vermivora peregrina*. Common transient, local summer resident in the north. Breeds locally in the Upper Peninsula, with nests found 12 miles N of Seney, Schoolcraft County, on 23 June 1956 and other nests in several years through 1982 (JPW 35:97-98, 1957; UMMZ) and near Hulbert Corners, Chippewa County, with 11 nests in June and July (JPW 57:25-26, 1979; UMMZ), where it is second in abundance among warbler species only to Nashville Warbler.

***Orange-crowned Warbler**, *Vermivora celata*. Uncommon transient. Occasional in late autumn and winter in southeastern Michigan (Kelley, 1978; DAS).

***Nashville Warbler**, *Vermivora ruficapilla*. Common transient, common summer resident in the north, particularly in spruce-tamarack bogs, also in leatherleaf bogs in Sanilac County. Has nested though uncommon in several localities in south to Kalamazoo and Jackson counties (Wood, 1951; JPW 43:169, 1965; 57:102, 1979). Occasional into late December (Kelley, 1978).

***Northern Parula**, *Parula americana*. Common transient, uncommon summer resident. More numerous near the shoreline of the Great Lakes, where usnea lichens are abundant and are used as nesting sites. Nests found in Iron, Luce, Schoolcraft, Alger, Emmet, and Cheboygan counties (ZVT; Pettingill, 1974; UMMZ). Late autumn record in Ann Arbor, Washtenaw County, on 25 November 1969 (notes in UMMZ).

***Yellow Warbler**, *Dendroica petechia*. Common transient and summer resident. Nests in willows and shrubby edge habitat. Observed as late as 25 November in southern Monroe County (JPW 57:20, 1979).

***Chestnut-sided Warbler**, *Dendroica pensylvanica*. Common transient, local summer resident throughout most of Michigan, breeding south to Livingston, Jackson, and Berrien counties. Occurs in forest edges and forest clearings. Associated with moose browsing, beaver cutting, and windfalls on Isle Royale (Jordan and Shelton, 1982), where it is perhaps the most numerous summer warbler.

***Magnolia Warbler**, *Dendroica magnolia*. Common transient. Common summer resident on Isle Royale and throughout Upper Peninsula, much more local in northern Lower Peninsula. Recent nests in Chippewa, Luce, Schoolcraft, Alger, Baraga, and Emmet counties, where it nests in cedar, spruce, and balsam woods and forests. Regular in summer in Benzie, Crawford, and Roscommon counties, and has occurred in summer in St. Clair, Macomb, and Kalamazoo counties (Wood, 1951; Kelley *et al.*, 1963; Kelley, 1978; KNC). Has also nested along the South Branch of the Galien River near New Buffalo in Berrien County, where adults were seen feeding young (OBC 14:5, 1975; W. Booth).

***Cape May Warbler**, *Dendroica tigrina*. Common transient, local summer resident in northern half of state. Good numbers noted in spruce bogs and jack-pine forests of Chippewa and Luce counties (JPW 56:94-95, 1978) and around Camp Filbert Roth, Cook's Run, Stebbins Bog, and Basswood in Iron County (UMMZ). Recorded nesting in Cheboygan County (Reese's Bog, Burt Lake) (JPW 49:125-126, 1971) and in Crawford County (hemlock grove in Hartwick Pines State Forest) in the Lower Peninsula (UMMZ), also in Iron, Schoolcraft, Alger, and Chippewa counties in the Upper Peninsula, where spruce budworm outbreaks are noted (UMMZ). Winter records in Berrien and Kalamazoo counties (OBC; KNC).

***Black-throated Blue Warbler**, *Dendroica caerulescens*. Common transient and fairly common summer resident throughout the Upper Peninsula and on Isle Royale, south less commonly along Lake Michigan as far as Muskegon. Breeding territories on Isle Royale are usually in sugar maple-yellow birch forest (Jordan and Shelton, 1982), nesting in beech-maple forests and in yew in Schoolcraft and Alger counties. Nesting has been recorded south to Muskegon, Ottawa, and Kalamazoo counties (Wood,

1951; JPW 46:48, 1968). Observed once in summer in Berrien County (OBC). Rare in winter (observed in Berrien County, photo in UMMZ).

***Yellow-rumped Warbler**, *Dendroica coronata*. Common transient. Common summer resident in the Upper Peninsula and in northern Lower Peninsula south to Oscoda and Crawford counties, where it nests (Wood, 1951), and in Ogemaw County (DNR). Uncommon but regular in southern counties in winter, it is the only warbler seen regularly in the winter in Michigan, and the first in numbers in spring.

Black-throated Gray Warbler, *Dendroica nigrescens*. Vagrant. UMMZ 152892 in Ann Arbor, Washtenaw County, 1 May 1958; 158158 in Northville, Wayne County, on 15 November 1962. Observed at Greenfield Village, Wayne County, on 29 April 1975 (Kelley, 1978).

***Black-throated Green Warbler**, *Dendroica virens*. Common transient, common summer resident in the north. Summers and has bred throughout north, mainly as far south as Roscommon, Ogemaw, and Oscoda counties, south to Huron, Macomb, Muskegon, Allegan, and Kalamazoo counties (Wood, 1951; ZVT; Kelley, 1978; JPW 43:169, 1965; 46:50, 1968; 49:120, 1971; KNC; UMMZ), and summers in hemlock remnants along dunes of Lake Michigan south to Grand Mere, Berrien County, where it was rare but regular into the 1970's.

***Blackburnian Warbler**, *Dendroica fusca*. Common transient. Summer resident in the Upper Peninsula and northern Lower Peninsula, regularly breeding south to Emmet and Cheboygan counties, and territorial males noted south to Oceana, Clare, and Crawford counties. Has also nested south to Muskegon and Huron counties and 100 years ago nested in Kalamazoo and Montcalm counties (Barrows, 1912; Wood, 1951). Occasionally observed south to Macomb, St. Clair, Kalamazoo, Berrien, and Allegan counties in summer (Kelley, 1978; AB 30:960, 1982; KNC; OBC).

***Yellow-throated Warbler**, *Dendroica dominica*. Uncommon local summer resident. Now found sparingly, a few birds only, locally regular in Berrien County (Spring Creek west of Three Oaks, also South Branch of the Galien River), occasional at Warren Woods (OBC). Formerly occurred in southeastern Michigan (River Raisin, Monroe County) and Kalamazoo County. Singing and nesting males observed in sycamores along Black River in Port Huron Game Area, St. Clair County, in 1982 (notes in UMMZ). Vagrants appear further north in spring.

***Pine Warbler**, *Dendroica pinus*. Common transient. Summer resident with most records in northern Lower Peninsula and eastern Upper Peninsula. Regular nesting species in Hartwick Pines State Park, Crawford County. Nest records south to Muskegon, Huron, and Washtenaw counties (Wood, 1951; JPW 30:94-99, 1952; 52:186, 1974). Seen in nesting season in Berrien, Kalamazoo, and Allegan counties (AB 30:960, 1976; OBC; KNC; MAS). Winter records in Kalamazoo, Wayne, and Monroe counties (Kelley, 1978; AB 36:588, 1982; MAS).

***Kirtland's Warbler**, *Dendroica kirtlandii*. Local summer resident, breeding in jack-pine plains in the north-central Lower Peninsula in Crawford, Iosco, Kalkaska, Ogemaw, Oscoda, and Roscommon counties (JPW

59:93-95, 1981). One record for the Upper Peninsula, a singing male near Gwinn, Marquette County, in 1982. Population in 1961 was 502 pairs, but since annual censuses began in 1971 there have been fewer than 250 pairs; 232 males were reported in 1981 census and 207 in 1982 (DNR). The breeding distribution of the species is restricted to Michigan. Few records are known of birds in migration. Kirtland's Warblers winter in the Bahama Islands (Mayfield, 1960).

***Prairie Warbler**, *Dendroica discolor*. Common transient and local summer resident. Uncommon and local in the Upper Peninsula, with records in Baraga, Marquette, Alger, and Schoolcraft counties (ZVT; UMMZ). Evidence of nesting in the Upper Peninsula includes juveniles caught and banded in Baraga County in July and August (UMMZ). Most numerous in the Lower Peninsula in jack-pine plains, and regular around Sleeping Bear Dunes, Leelenau County, and Sturgeon Bay, Emmet County. Observed nesting south to Livingston County (E. S. George Reserve) and in western lower Michigan in Muskegon, Ottawa, and Oceana counties. Observed regularly in summer until early 1970's in Berrien County (UMMZ; AFN 24:688, 1970; JPW 58:32, 1980; OBC).

***Palm Warbler**, *Dendroica palmarum*. Common transient. Uncommon local summer resident in the north, especially in the eastern Upper Peninsula. Has nested in the Upper Peninsula in Schoolcraft County and in the northern Lower Peninsula in Crawford and Iosco Counties (Wilson Bull. 69:338-351, 1957). Observed in southern counties as late as December (JPW 60:92, 1982; OBC).

***Bay-breasted Warbler**, *Dendroica castanea*. Common transient, most records in autumn. Local summer resident in the north, with nesting records in Keweenaw, Alger, Chippewa, and Cheboygan counties, and recent summer occurrence in Schoolcraft County (JPW 53:33-34, 1975; UMMZ). Perhaps the rarest local breeding species of the northern warblers known to nest in Michigan.

Blackpoll Warbler, *Dendroica striata*. Common transient in late spring and in autumn. Late May records for Isle Royale (Krefting *et al.*, 1966) probably refer to transients; Blackpolls are among the latest migrant warblers in spring. A bird was reported in Kalkaska County in July 1971 (JPW 49:123, 1971), and a singing male remained through summer in 1977 and 1978 in Wilderness State Park, Emmet County (UMMZ). One of the most numerous warbler species during fall migration. Blackpolls move eastward through Michigan in the fall and then southward from New England. A breeding recovery in Connecticut of a bird banded in September at Muskegon, Muskegon County (JPW 54:93, 1976), is evidence of this movement through Michigan.

A hybrid *Dendroica striata* × *D. castanea* was collected at Warren Dunes, Berrien County, on 19 May 1920 (UMMZ 53692).

***Cerulean Warbler**, *Dendroica cerulea*. Uncommon transient and summer resident mainly in the southern third of state. Nesting records occur north to Muskegon County (Wood, 1951; JPW 46:51, 1968). Breeds in mature deciduous forests.

***Black-and-white Warbler**, *Mniotilta varia*. Common transient, uncommon summer resident. Nests in the Upper Peninsula, where the species is common in bogs and mixed woods, and in the northern Lower Peninsula south to Calhoun, Oakland, and Macomb counties (Wood, 1951; Kelley, 1978; Walkinshaw, 1978). Occasional in summer and may nest in Berrien and Kalamazoo counties (OBC; KNC).

***American Redstart**, *Setophaga ruticilla*. Common transient and summer resident. More numerous in northern Lower Michigan and in the Upper Peninsula and on Isle Royale. This is also the most numerous breeding warbler in forests along Lake Michigan in Muskegon County (JPW 46:55, 1968). Breeds in mesic and swampy forests, both deciduous and coniferous. Numerous on limestone-based soils with white cedar such as Mackinac Island and in Presque Isle County, also common in sugar maple forest and in hemlock and spruce.

***Prothonotary Warbler**, *Protonotaria citrea*. Uncommon transient and uncommon and local summer resident in southern third of state, mainly in rich bottomland woods along rivers (Muskegon, White, St. Joseph, Paw Paw, Kalamazoo, Battle Creek, Huron, Raisin, *et al.*). Nesting records are known north to Oceana, Muskegon, Livingston, Oakland, Wayne, and Macomb counties (UMMZ).

Worm-eating Warbler, *Helmitheros vermivorus*. Occasional spring vagrant, sometimes remaining through the breeding season in southern Michigan. UMMZ specimens: 157920, Berrien Springs, Berrien County, on 26 April 1962; 156914, North Cape, Monroe County, 30 April 1962. Photographs of birds in Laketon Township, Muskegon County, on 27 October 1970, and Bloomfield Hills, Oakland County, on 20 May 1961 (UMMZ). Observed regularly at Grand Mere, Berrien County (OBC; tape recording in UMMZ), and in southeastern Michigan (Kelley, 1978), particularly north of Ferndale, Oakland County (DAS), at Metrobeach, Macomb County (UMMZ), at Fairlane, Wayne County, and at Ann Arbor, Washtenaw County (notes and photo, UMMZ).

***Ovenbird**, *Seiurus aurocapillus*. Common transient and summer resident in forests throughout the state.

***Northern Waterthrush**, *Seiurus noveboracensis*. Common transient. Summer resident in the Upper Peninsula and on Isle Royale and in boggy habitat in most of the Lower Peninsula south to Livingston, Macomb, and Oakland counties. Nests have been observed in the last two of these counties (Kelley, 1978). Nest and 4 eggs taken in sect. 5, T5N R12E in Macomb County (UMMZ 198909). Juvenile UMMZ 119136, one of two being fed by a pair of adults, taken in White Cedar Swamp, Imlay City, Lapeer County, on 25 June 1950. Another nest found there on 22 May 1955; adult UMMZ 136598 and immature UMMZ 150880 taken on 3 July 1955.

***Louisiana Waterthrush**, *Seiurus motacilla*. Uncommon and local summer resident in southern part of state. Nests in Berrien, Kalamazoo, Calhoun, Kent, Livingston, Washtenaw, Oakland, St. Clair, Lenawee, and Monroe counties (Wood, 1951; Kelley, 1978; JPW 57:103, 1979; UMMZ).

Older nest records from Isabella and Newaygo counties (Wood, 1951). Common along Pere Marquette River in Mason and Lake Counties in spring. Recent observations of nesting north to the White River in Oceana County (short-tailed juvenile taken on 4 July 1961, UMMZ 156639; JPW 46:54, 1968) and nests with adults on Pine River in Lake, Wexford, and Manistee counties 1978–1981; photos of nest in Wexford County and adult in Lake County (UMMZ). Nests in the same wet woods as Northern Waterthrush in Hartland Township, Livingston County, and in Highland Recreation Area, Oakland County (JPW 53:153, 1975; UMMZ).

***Kentucky Warbler**, *Oporornis formosus*. Uncommon local summer resident in southernmost counties, nowhere regular. Casual as migrants beyond their usual range, a few seen in northern Lower Peninsula (photo of bird in Alpena County, JPW 48:88, 1970). Once observed breeding in Michigan: 4 young just fledged, in Waterloo Recreation Area, Jackson-Washtenaw county line, on 28 June 1982 (D. Baker).

***Connecticut Warbler**, *Oporornis agilis*. Uncommon transient, uncommon local summer resident in the Upper Peninsula and in the northern Lower Peninsula south to Crawford County (JPW 33:12–19, 1955). More common in the western Upper Peninsula. Nesting records: UMMZ 155603, feathered nestling (4 others banded), nest 5 miles N of Ewen, Ontonagon County, on 1 July 1960 (also JPW 39:58, 1961); male and female observed at close range carrying food (nest and young not seen) north of McMillan, Luce County, in 1976 (UMMZ); territorial and carrying food in the Porcupine Mountains, Ontonagon County, in 1980 (JPW 58:162, 1980).

***Mourning Warbler**, *Oporornis philadelphia*. Common transient. Summer resident throughout most of the state, more common in the north. Nests on Isle Royale, in the Upper Peninsula, and in the northern Lower Peninsula. Summers south to Berrien, Macomb, Wayne, and Calhoun counties, nesting south to Kalamazoo and Livingston counties (Wood, 1951; OBC; Kelley, 1978; JPW 49:121, 1971; 57:91–105, 1979).

A hybrid male warbler (DEL 54985) taken at Russ Forest, Cass County, on 28 May 1948, is *Vermivora pinus* × *Oporornis philadelphia*, as indicated by its size and by a trace of gray on the nape. The song was *Oporornis*-like, but the description of song (JPW 28:66–72, 1950) does not rule out other species of *Oporornis*.

***Common Yellowthroat**, *Geothlypis trichas*. Common transient and summer resident. Nests in shrub, swamp, and marsh habitats. Occasional winter records in the southern counties.

***Hooded Warbler**, *Wilsonia citrina*. Uncommon and local summer resident in southern Michigan. Several pairs are seen every year in Berrien County at Warren Woods, irregularly at Grand Mere and Madron Lake. Nesting records in Muskegon, Ottawa, Allegan, Kalamazoo, Calhoun, and Ingham counties (Orn. Oöl. 9:44, 1884; Barrows, 1912; Walkinshaw, 1978; JPW 55:195, 1977; 58:162, 1980). Also occurs in summer in Kalamazoo County, Washtenaw County (Ann Arbor), Jackson County (Summit Township), and Livingston County (E. S. George Reserve). Occasional in

summer in recent years in Oakland and Macomb Counties (Kelley, 1978). Vagrant individuals have been seen north to Alpena and Cheboygan counties (Nelson, 1956; JPW 48:87, 1970).

Wilson's Warbler, *Wilsonia pusilla*. Common transient. Two males sang on Isle Royale during July, 1980 (UMMZ), but there is no record of breeding in Michigan.

***Canada Warbler**, *Wilsonia canadensis*. Local summer resident, common to uncommon in north on Isle Royale, in the Upper Peninsula, and in the northern Lower Peninsula. Also occurs locally at Grand Mere and Warren Woods, Berrien County, and in Muskegon, Kalamazoo, Calhoun, Ingham, Livingston, and Oakland counties (Wood, 1951; JPW 46:55, 1968; 57:103, 1979; McWhirter and Beaver, 1977; MAS; UMMZ). Nested in Lapeer and Macomb counties in 1950's (JPW 33:23, 1955; Kelley, 1978).

***Yellow-breasted Chat**, *Icteria virens*. Local summer resident, common in southernmost counties, uncommon in the rest of southern Michigan, a few seen in the northern Lower Peninsula and on islands in Lake Michigan. Observed once in the Upper Peninsula (JPW 41:63, 1963; 51:14, 1973). One winter specimen: UMMZ 116345, Grosse Pointe, Wayne County, on 26 January 1949.

Summer Tanager, *Piranga rubra*. Occasional transient and summer resident. UMMZ specimens: 116078 near Pinckney, Livingston County, immature female on 6 November 1948; 155506 north of Rudyard, Chippewa County, on 11 July 1960; 215482 at Tawas Point, Iosco County, on 24 October 1968; and 153002 in Jackson County on 28 April 1958. Another bird (MTech specimen 1411) was found dead on road in Ontonagon County in 1980. Photographed at Portage Lake, Jackson County, in spring 1958, and tape recorded at Grand Mere, Berrien County in spring 1971 (UMMZ). Eleven recent observations from 1970 in Berrien County (Grand Mere, St. Joseph, Buchanan) and sightings in several years in Kalamazoo County and Washtenaw County (Ann Arbor) (Adams, 1982; OBC; UMMZ). Also reported at Elberta Marsh, Benzie County, on 10 May 1975 (JPW 53:154, 1975), at Metrobeach, Macomb County, on 14 May 1978 (JPW 56:158, 1978), at Fairlane, Wayne County, on 1–2 May 1979, and at Greenfield Village, Wayne County, on 26–28 April 1973 and 8–16 May 1981 (JPW 57:160, 1979; DAS). Observed in the Upper Peninsula at Brimley, Chippewa County, on 11 May 1972 (UMMZ) and in Marquette County on 19 May 1978 (JPW 56:158, 1978).

***Scarlet Tanager**, *Piranga olivacea*. Common summer resident throughout most of the state in deciduous woods. Uncommon to scarce in northern Upper Peninsula and on Isle Royale.

[**Western Tanager**, *Piranga ludoviciana*. Hypothetical. Sight records at Little Girl's Point, Gogebic County, on 3 August 1973 (JPW 52:46, 1974; UMMZ), Kensington Metropark, Oakland County on 12 May 1965 (Tordoff, 1966), in Ross Township, Kalamazoo County, on 27 May 1974 (KNC), Hoffmaster State Park, Muskegon County, on 31 August 1977 (AB

32:209, 1978), and one N of Newberry, Luce County, on 3 June 1981 (UMMZ).]

***Northern Cardinal**, *Cardinalis cardinalis*. Common permanent resident in southern half of the Lower Peninsula, local but widespread throughout the northern Lower Peninsula and in the Upper Peninsula. A resident population lives at Marquette (JPW 49:8, 1971), and another apparently was established at Escanaba, Delta County, by 1966 (JPW 45:23, 1967). In 1981 and 1982 birds were observed in Houghton, Dickinson, Delta, Schoolcraft, and Chippewa counties in the Upper Peninsula (JPW 58:90, 1980; 60:93, 1982; UMMZ). Absent on most islands in the Great Lakes; reported on Beaver Island (JPW 42:236, 1964). The range of the species has increased northward through this century (Barrows, 1912; JPW 36:19–21, 1958) due to clearing of forests in the last century and to the limited dispersal of the birds, and to winter bird feeders. Cardinals are generally local and sedentary, though one bird recovered in Michigan was banded 184 miles SW in Indiana (Canad. J. Zool. 49:185–198, 1971).

***Rose-breasted Grosbeak**, *Pheucticus ludovicianus*. Common transient and summer resident, uncommon on Isle Royale. Occasional in winter: near Honor, Benzie County, on 22 December 1980 (photo in UMMZ), also in Alpena and Grand Traverse counties in 1981–1982 (JPW 60:93, 1982).

Black-headed Grosbeak, *Pheucticus melanocephalus*. Occasional winter visitor. One specimen: UMMZ 158256, male, Ann Arbor, on 25 March 1963. A female was observed at Flint, Genesee County, from 20 November 1963 to 18 January 1964 (letter in UMMZ); another was seen at Mt. Pleasant, Isabella County, from 21 December 1981 until 4 January 1982 (JPW 60:93, 1982). Females have been reported elsewhere in the state in winter, but their identity has been questioned (AB 35:827, 1981). Two were reported in Baraga County on 30 May 1982, and one was reported at Tawas, Iosco County, on 23 May 1982 (JPW 60:129, 1982).

[**Blue Grosbeak**, *Guiraca caerulea*. Hypothetical. The two records in Barrows (1912) are unsupported by any existing specimens. Sight records in Berrien, Barry, Muskegon, Ottawa, Kalamazoo, and Calhoun counties (ZVT; UMMZ; JPW 50:83, 1972; OBC 18:6, 1979). Some sight records may apply to Indigo Buntings with buffy wing bars.]

***Indigo Bunting**, *Passerina cyanea*. Summer resident, common in the Lower Peninsula, local in the Upper Peninsula and on Isle Royale. Several buntings banded as nestlings in Cass and Livingston counties have been recaptured as breeding birds in their home area (UMMZ). The nesting season extends from mid-May to late August; many pairs rear two broods in a season, and young hatch as late as September.

Painted Bunting, *Passerina ciris*. Occasional transient north of the species' breeding range. Observed and photographed at Marquette on 5 May 1968 (JPW 46:72, 1968; photo in UMMZ); another bird at feeder at Port Huron, St. Clair County, on 2 May 1973 (Kelley, 1978). Also observed at Vicksburg, Kalamazoo County, in 1920 (F. W. Rapp, 1931, Bird list of Vicksburg, Michigan), at Tapiola, Houghton County, in April 1961, and at

Benton Harbor, Berrien County, on 30 April 1966 (notes in UMMZ), and a female was reported at Grand Mere, Berrien County, on 15 September 1973 (OBC 12:8, 1973).

***Dickcissel**, *Spiza americana*. Irregular summer resident, common in south in some years and scarce to absent in others. Uncommon in the northern Lower Peninsula and the Upper Peninsula, one record on Isle Royale (ZVT; Jordan and Shelton, 1982). Northernmost nesting records are in Emmet and Presque Isle counties (JPW 43:43, 1965). Few Dickcissels have been reported in Michigan in recent years (JPW 59:129, 1981), but the species is still regular in Berrien and Cass counties.

Green-tailed Towhee, *Pipilo chlorurus*. Vagrant. One observed in Allegan, Allegan County, in December 1974 (JPW 53:68, 1975; photo in UMMZ). First report from Port Inland, Schoolcraft County, on 1 November 1955 (ZVT; notes in UMMZ). Observed at feeder at West Olive, Ottawa County, on 20 May 1979 (AB 33:775, 1979).

***Rufous-sided Towhee**, *Pipilo erythrophthalmus*. Common summer resident, widespread in the Lower Peninsula, more local in the Upper Peninsula. Uncommon in the south in winter.

Bachman's Sparrow, *Aimophila aestivalis*. Occasional transient north of its breeding range. Two UMMZ specimens: 112892 taken in Erie Township, Monroe County, on 29 April 1944; 114180 taken at Dearborn, Wayne County, on 13 May 1946 (and present 8–13 May). Singing males observed at Ann Arbor, Washtenaw County, on 23 April 1948, and at Pinckney, Livingston County, on 27 July 1954 (ZVT), and a bird seen at Metrobeach, Macomb County, on 26 April 1964 (UMMZ).

American Tree Sparrow, *Spizella arborea*. Common transient and winter visitor.

***Chipping Sparrow**, *Spizella passerina*. Common transient and summer resident. Occasional in winter.

***Clay-colored Sparrow**, *Spizella pallida*. Uncommon transient in southern Michigan, locally common summer resident in the Upper Peninsula (including population at Sable Dunes, Alger County) and in the northern Lower Peninsula. It breeds on Beaver Island, Charlevoix County (JPW 46:133, 1968). Other populations live at Minden City Game Reserve, Sanilac County, in Genesee County, and in Kenockee Township, St. Clair County (JPW 47:128, 1969; Kelley, 1978; UMMZ).

***Field Sparrow**, *Spizella pusilla*. Common transient and summer resident in the Lower Peninsula; apparently rare in the Upper Peninsula. Occasional in winter in the south.

***Vesper Sparrow**, *Pooecetes gramineus*. Common transient and summer resident. Occasional in winter in the south.

***Lark Sparrow**, *Chondestes grammacus*. Formerly an uncommon transient and breeding summer resident in the southern Lower Peninsula, occasional transient or vagrant in the Upper Peninsula and on Isle Royale. Now a scarce casual transient in Michigan even in the south. No current breeding populations are known in Michigan, but the species formerly nested locally in several southern counties into 1950's (Wood, 1951; ZVT).

Lark Bunting, *Calamospiza melanocorys*. Occasional visitor in spring, summer, and autumn. Photographed at Port Inland, Schoolcraft County, on 23 to 25 July 1964 (JPW 43:44, 1965; UMMZ). Observations from Keweenaw, Emmet, Cheboygan, Missaukee, Eaton, Calhoun, and Wayne counties (ZVT; Pettingill, 1974; JPW 54:42, 1976; Kelley, 1978; MAS).

***Savannah Sparrow**, *Passerculus sandwichensis*. Common transient and summer resident. A bird banded as a nestling near Ann Arbor, Washtenaw County, returned as an adult and bred in the same field (JPW 52:50-51, 1974). Occasional in winter.

***Grasshopper Sparrow**, *Ammodramus savannarum*. Uncommon transient and summer resident, mainly in the south, nesting north to Cheboygan County (Pettingill, 1974). Has also nested in the Upper Peninsula on tailing basins of Cleveland Cliffs Iron Company near Republic, Marquette County (UMMZ), and observed in summer in Luce County (ZVT).

***Henslow's Sparrow**, *Ammodramus henslowii*. Uncommon transient; uncommon but widespread summer resident in the Lower Peninsula. Locally common in Berrien, Ottawa, St. Clair, and Washtenaw counties in the south and in Benzie and Alpena counties in the northern Lower Peninsula.

***Le Conte's Sparrow**, *Ammodramus leconteii*. Uncommon transient in spring and autumn, with most records in autumn. Uncommon local summer resident. Nesting known in several localities in the Upper Peninsula: Munuscong Lake and Lake Nicolet, Chippewa County; Pullup Lake, Mackinac County; along Fox River in western Luce County; near Seney, Schoolcraft County; and near Shingleton, Alger County (Wood, 1951; ZVT; JPW 51:155, 1973; DNR).

Sharp-tailed Sparrow, *Ammodramus caudacutus*. Uncommon transient, scarce and irregular, observed mainly in autumn (Wilson Bull. 70:284-286; 1958).

Fox Sparrow, *Passerella iliaca*. Uncommon transient. Occasional in winter.

***Song Sparrow**, *Melospiza melodia*. Common transient and summer resident. Regular permanent resident in small numbers in winter in southern Michigan, fairly common in Berrien County.

***Lincoln's Sparrow**, *Melospiza lincolni*. Uncommon transient, local summer resident. Common in the Upper Peninsula and in north-central Lower Peninsula in jack-pine plains and black spruce bogs (JPW 50:96-97, 1971; 55:196, 1973; Amer. Midl. Natl. 108:46, 1982). Isolated breeding population in a leatherleaf bog in Minden City Game Reserve, Sanilac County (JPW 48:94-96, 1970). One wintered near Haslett, Ingham County, in 1972 (JPW 51:162, 1973).

***Swamp Sparrow**, *Melospiza georgiana*. Common transient and summer resident. A few individuals remain in south in appropriate habitat in the winter. The species occurs regularly in winter in Berrien County.

***White-throated Sparrow**, *Zonotrichia albicollis*. Common transient. Common summer resident in north; perhaps the most abundant bird on Isle Royale. Nesting records throughout the Upper Peninsula and in

northern Lower Peninsula. Nests in black spruce-tamarack bogs south to Clare County (Amer. Midl. Natl. 108:46, 1982). Has nested locally in bogs in Lapeer County in southeastern Michigan (JPW 35:99-101, 1957). Stragglers occur in summer in southern Michigan (Kelley, 1978). A few are seen in winter in the southern counties.

Golden-crowned Sparrow, *Zonotrichia atricapilla*. Vagrant. Immature bird banded and photographed at Dowling, Barry County, on 12 January 1978. The bird was possibly a hybrid *Zonotrichia atricapilla* × *Z. albicollis* (Auk 96:596-599, 1979; photos in UMMZ).

White-crowned Sparrow, *Zonotrichia leucophrys*. Common transient, generally less abundant than White-throated Sparrow. Occasional in winter, regular in Berrien County.

Harris' Sparrow, *Zonotrichia querula*. Uncommon transient in the western Upper Peninsula, occasional transient elsewhere in the state. Most records in the Upper Peninsula and western Lower Peninsula are in autumn (JPW 47:3-10, 1969). Regularly observed in migration at Marquette. Occasional into early winter.

***Dark-eyed Junco**, *Junco hyemalis*. Common transient, common winter visitor in southern half of state. Summer resident in northern half of state, where it nests. Summer birds occur throughout much of the Upper Peninsula and northern Lower Peninsula occasionally as far south as Kalamazoo County, regularly south to Missaukee County. A November specimen (UMMZ 219328) from Long Lake, Alpena County, has two white wing bars but is smaller (wing 78 mm) than South Dakota *J. h. aikenii*. Other plumage variants in Michigan include an isabelline immature female with all gray replaced by buff (UMMZ 151599) and an adult male with white pied plumage on the wings, head, and back (UMMZ 203716). Several UMMZ specimens of *J. h. "cismontanus," "Oregon" juncos J. h. montanus*, and intermediates from Michigan were taken from November to March.

McCown's Longspur, *Calcarius mccownii*. Vagrant. One observed at Whitefish Point, Chippewa County, on 27-29 May 1981 (AB 35:827, 1981; photos and notes in UMMZ).

Lapland Longspur, *Calcarius lapponicus*. Transient and winter visitor, common in wintering flocks in southern Michigan, uncommon in winter in the north. A few remain until late May in the Upper Peninsula.

Smith's Longspur, *Calcarius pictus*. Vagrant. Photograph of bird (JPW 49:127, 1971) at Midland, Midland County, on 25 April 1971 in UMMZ. Another was observed on 20 October 1981 in Ontonagon County (JPW 60:39, 1982).

[**Chestnut-collared Longspur**, *Calcarius ornatus*. Hypothetical. Sight record of a male in breeding plumage at Whitefish Point, Chippewa County, on 31 May 1980 (AB 34:781, 1980). Another bird was reported from Brockway Mountain, Keweenaw County, on 9 May 1982 (JPW 60:130, 1982).]

Snow Bunting, *Plectrophenax nivalis*. Winter visitor, sometimes in large flocks. Occasionally birds remain into May. Four birds banded in winter in the Upper Peninsula (McMillan, Luce County, and Blaney Park, School-

craft County, from 1931 to 1944) were later recovered in western Greenland (Salomonsen, 1971).

***Bobolink**, *Dolichonyx oryzivorus*. Common but local summer resident. Nests in mesic old fields and alfalfa fields.

***Red-winged Blackbird**, *Agelaius phoeniceus*. Common transient and summer resident. Michigan birds migrate to winter throughout the southeastern United States. Most banding recoveries in winter are from South Carolina, Georgia, the Florida panhandle, Alabama, and Mississippi (Bird-Banding 49:17-34, 1978). Occasional flocks, mainly males, remain in winter in southern Michigan, especially in Monroe and Berrien counties. Color-ringed individuals breeding near Ann Arbor, Washtenaw County, have been seen on their nesting territories as late as November and as early as mid-February in periods of fine weather. Many birds banded as nestlings return to breed within a mile of their birth site in Michigan (UMMZ).

***Eastern Meadowlark**, *Sturnella magna*. Common summer resident in the Lower Peninsula, less common in the Upper Peninsula. Uncommon in winter in the southern counties.

***Western Meadowlark**, *Sturnella neglecta*. Uncommon and local summer resident throughout the state. Numbers low in recent years, notably in Missaukee, Kalamazoo, and Berrien counties, where they were more common in the early 1970's. UMMZ 150883 from Lapeer County on 3 July 1955 was heard to give both calls and songs of both Eastern and Western Meadowlarks (specimen label), as was a bird in Kalamazoo County in 1972 (KNC). Occasional in winter in the south, regular in Berrien County (OBC).

One apparent hybrid *Sturnella magna* × *S. neglecta*: UMMZ 84621 from southern Williamston Township, Ingham County, on 22 June 1935.

***Yellow-headed Blackbird**, *Xanthocephalus xanthocephalus*. Uncommon transient and local summer resident. Michigan specimens: UMMZ 151379 in Gogebic County, on 20 June 1956; UMMZ 155573 in Bay County on 14 June 1960; MSU 1980 taken at Iron Mountain, Dickinson County, on 17 May 1890; Empey bird at Lone Tree Island, Huron County, on 2 June 1935. Nesting in recent years around Saginaw Bay, in Maple River Game Area, Gratiot County, and in Detroit area in Macomb County, all on eastern side of the Lower Peninsula (JPW 39:55, 1961; 58:163, 1980; AB 35:943, 1981). Nested in Cheboygan City Park, Cheboygan County, in 1970's. On western side of the Lower Peninsula it has nested at Grand Haven Marsh, Ottawa County (JPW 49:121, 1971). In the Upper Peninsula nesting was first observed in Gogebic County in 1956 (Wilson Bull. 69:183, 1957), also nests in Portage Marsh near Escanaba, Delta County, and on Munuscong Island, St. Mary's River, Chippewa County (UMMZ). Occasional in early winter, seen at Lake St. Clair, Macomb County, on 19 December 1981 (AB 36:583, 1982).

***Rusty Blackbird**, *Euphagus carolinus*. Common transient, local summer resident in the Upper Peninsula. Nesting reported in willows of inlet of the Paint River, Iron County, on 4 June 1943 (JPW 38:146, 1960). Occasional in winter.

***Brewer's Blackbird**, *Euphagus cyanocephalus*. Common summer resi-

dent in the Upper Peninsula; local summer resident in the Lower Peninsula from Cheboygan County to Berrien County and to Saginaw Bay. Most regularly observed on Baraga Plains in Baraga County, in jack-pine plains clearings in Oscoda, Missaukee, and Kalkaska counties, and around Saginaw Bay (Condor 63:162–177, 1961; notes in UMMZ). It has nested in southeastern Michigan once in Oakland County (Kelley, 1978).

***Common Grackle**, *Quiscalus quiscula*. Common transient and summer resident. Birds banded in Michigan migrate to winter sites in the southern states (Kentucky, Tennessee, Alabama) (Adams, 1982). Uncommon in winter in the southern counties, though some birds occur throughout the year in Berrien County (OBC).

***Brown-headed Cowbird**, *Molothrus ater*. Common transient and summer resident. Breeding birds are numerous throughout Michigan (JPW 50:110–113, 1972). Uncommon in the south in winter. A brood parasite, it lays its eggs in the nests of more than 40 species of fosterers in Michigan (Wood, 1951; UMMZ) including 31 species in Cheboygan and Emmet counties (JPW 58:77–84, 1980). Michigan cowbirds winter throughout the southeastern United States from the mid-Atlantic to the Gulf coast states as far as Texas (N. Amer. Bird Bander 2:7–11, 1977).

***Orchard Oriole**, *Icterus spurius*. Uncommon transient and summer resident in southern counties. Nests north to Kent, Kalamazoo, Calhoun, and Midland counties (ZVT; JPW 48:100, 1970; 49:121, 1971). Regular in the last few years in Berrien and Kalamazoo counties. Vagrants are observed north to Whitefish Point in spring.

***Northern Oriole**, *Icterus galbula*. Summer resident, common in the south, less common and local in the north. Occasional in winter (JPW 45:49, 1967; MAS).

[**Rosy Finch**, *Leucosticte arctoa*. Hypothetical. “Brown-capped Rosy Finch” (*L. a. australis*) reported at feeder in Houghton on 23 December 1966 (UMMZ). The Gray-crowned Rosy Finch *L. a. tephrocotis* is more likely to occur, based on its wintering range and its occasional occurrence in winter at Thunder Bay, Ontario (James *et al.*, 1976) and in Minnesota (AB 35:303, 1981).]

***Pine Grosbeak**, *Pinicola enucleator*. Winter visitor, irregular in the south. Observed locally in summer in the Upper Peninsula. Breeding record for Isle Royale: 3 3/4 miles N of Windigo on Greenstone Ridge Trail on 9 August 1965, female with nearly-grown young (JPW 43:166, 1965; notes in UMMZ). One summer specimen from Isle Royale: UMMZ 33231, adult female, 14 August 1905; also seen on Isle Royale in 1970 (Jordan and Shelton, 1982). A grown immature female, UMMZ 54151, taken at Ontonagon County on 15 August 1921, is the only other summer specimen, probably from a local nesting. Seen in summer near Milstrand, Alger County (MAS). A male was observed in southern Michigan in Barry County on 21 May 1982 (KNC).

All Michigan Pine Grosbeaks are now recognized as *P. e. leucura* (Wilson Bull. 89:380–395, 1977).

***Purple Finch**, *Carpodacus purpureus*. Common transient. Common summer resident nesting in northern two-thirds of state. It occasionally nests in the southern part of the state (ZVT; JPW 52:187, 1974; Kelley, 1978; KNC), and it has been seen in summer as far south as Berrien County (JPW 48: 102, 1970). Common in winter, irregular in the south. A bird banded in Muskegon County in August was recovered at Nashville, Tennessee, in March (JPW 58:136, 1980), and one banded at McAlester, Oklahoma, was recaptured at Kalamazoo (Adams, 1982). Some individuals migrate and others may live year-round in the state.

***House Finch**, *Carpodacus mexicanus*. Uncommon and local, increasing in numbers in recent years. Permanent resident to some extent with winter birds at feeders (AB 33:775, 1979; JPW 60:93, 1982). First observed in Michigan in Berrien Springs, Berrien County, on 13 February 1972 (OBC 11:10, 1972) and near Muskegon on 2-3 February 1974 (UMMZ). One Michigan specimen: UMMZ 205134, a juvenile found in Detroit, Wayne County, on 17 July 1982. Photo in Laketon Township, Muskegon County, on 6 August 1976; photo in Rockwood, Wayne County, in May 1976 (UMMZ; JPW 55:95, 1977). Observed in East Lansing, Ingham County, 17-26 May 1981 (UMMZ) and in Shorewood Hills south of Warren Dunes State Park, Berrien County, in summer 1980 and 1981; resident throughout summer in latter locality (photo in UMMZ). First nestings in Michigan were seen in 1981: in Southfield, Oakland County, 17-30 July 1981, fledglings begging and being fed by both parents, and in Shorewood Hills, Berrien County, on 3-4 June 1981, male feeding fledgling (UMMZ). Michigan birds are derived from expanding populations in northeastern United States, where species was introduced from California in 1930's (AB 36:347-353, 1982). By 1982, House Finches were reported in 11 counties in Michigan (in addition to those above, in Leelanau, Kalamazoo, Cass, Lenawee, Bay, Washtenaw, and Macomb) (JPW 60:39, 130, 1982; UMMZ).

***Red Crossbill**, *Loxia curvirostra*. Nomadic, occurs at all seasons, but irregular and irruptive. More common in the north, and more often seen in winter. Breeding records: Hillsdale, Hillsdale county, in February 1893 or 1894 (Barrows, 1912), on Isle Royale on 27 July 1960 (Jordan and Shelton, 1982), in Huron Mountains, Marquette County, on 7 May 1921 (UMMZ 208831, a bob-tailed juvenile) and on 27 January-12 February 1941 (laying female, UMMZ 110722, cf. Wilson Bull. 53:240-241, 1941), in Marquette County again on 30 April 1968 and 7 May 1979 and at Escanaba, Delta County, on 7 May 1969 (JPW 46:133, 1968; 47:128, 1969), near Traverse City, Grand Traverse County, in June 1974 (JPW 52:187, 1974), at Elberta, Benzie County, on 26 April 1970, nestbuilding and male courtship feeding the female (JPW 48:100, 1970; UMMZ), in jack-pine plains around Lovells, Crawford County (young being fed out of the nest 1-8 June 1979, young fed by parents 21 and 24 May 1980, two different family groups) (P. Young), at Holland, Ottawa County, on 17 May 1968 (JPW 46:132, 1968), and in a cemetery near Rose Lake Wildlife Experiment Station, Clinton County, on 23 March 1964 (JPW 43:37, 1964;

UMMZ). Specimens in juvenile plumage may be local or may have moved with their flock from another nesting area. However a juvenile UMMZ 116280 taken 1.5 miles NE of Red Oak, Oscoda County, on 15 June 1948 was probably born locally because the bill is short and the mandibles are barely crossed; also 10 adults and 2 other juveniles were taken in Oscoda County that year in February, March, and June, and three of these were adult males with large testes (4–6 mm length) taken in February, March, and June (UMMZ). The gonads were large enough to have sperm (Condor 67:416–422, 1965). Independent juveniles banded on Baraga Plains, Baraga County, on 18 July 1966 and 19 June 1967 (notes in UMMZ) also indicate widespread but local breeding in Michigan. The known breeding records in Michigan occur between February and July.

Geographic variation and subspecies limits in *L. curvirostra* are not well understood. The breeding specimens from the Huron Mountains, Marquette County, in 1921 and in 1941, are small-billed birds identifiable as *L. c. minor*. The same form was collected there in 1920, 1921, 1922, 1924, 1925, 1928, 1941, 1960, and 1961 (UMMZ specimens). I have compared the series with a photograph of the type specimen of *minor* (Trans. San Diego Soc. Nat. Hist. 7:plate 27, 1934) and find the bill size and shape to be similar. The breeding adults from Oscoda County in 1948 are similar but one is slightly large-billed and is close to a series taken at Saginaw Forest, Ann Arbor, Washtenaw County, in the winters of 1959–1960, 1960–1961, and 1963–1964. This last series of 14 birds, all adults with small gonads, are similar in bill size and in plumage color to the type series of *L. c. benti* from Grafton, North Dakota, in 1931, and all have larger bills than the Huron Mountains birds. *L. c. benti* and *L. c. pusilla* visit, especially in winter. It remains to be seen whether *L. c. minor* and *L. c. pusilla* are distinct breeding populations. Intermediate specimens from the Upper Peninsula in winter flocks containing both large- and small-billed birds, some with large gonads, suggest not.

***White-winged Crossbill**, *Loxia leucoptera*. Irregular and irruptive, observed mainly in winter and most often in the north. Usually uncommon in all seasons. Nesting records near Escanaba, Delta County, on 27 April 1891 (Barrows, 1912) and in Huron Mountains, Marquette County, on 19 January 1941 (Wilson Bull. 53:240–241, 1941). Several observations in summer in the northern Lower Peninsula and on the islands in northern Lake Michigan (ZVT; Pettingill, 1974). Seen once in summer in the Port Huron Game Area, St. Clair County, on 5 June 1974 (Kelley, 1978).

Common Redpoll, *Carduelis flammea*. Winter visitor, common in the north, irregular but often numerous in southern third of state. Attracted to thistleseed feeders in winter.

The subspecies *C. f. flammea* is the most common in Michigan. Subspecies *C. f. rostrata*, breeding on Baffin Island, Greenland, and northern Labrador, is uncommon, with no UMMZ specimens since 1941. UMMZ specimens of this form are from Kalamazoo in 1878, Houghton County in 1904, Marquette County in 1941, and Otsego County in 1934, all mentioned by Wood (1951). Species limits in the redpolls are not well understood.

Hoary Redpoll, *Carduelis hornemanni*. Winter visitor. Irregular but sometimes locally numerous in the Upper Peninsula; unusual in southern Michigan. Reported throughout the state, mainly in the Upper Peninsula, usually in flocks of Common Redpolls. At Houghton, Houghton County, the ratio of Hoary to Common Redpolls in winter flocks is about 1:100 (N. F. Sloan, UMMZ). First records in southeastern Michigan were at St. Clair Shores, Macomb County, and Marysville, Macomb County, in 1972 (photo in UMMZ). Hoary Redpolls reports were received from 17 counties throughout the state in the winter of 1981–1982, a redpoll invasion year (JPW 60:93, 1982).

UMMZ specimens show two forms wintering in Michigan: *C. h. hornemanni*, the subspecies breeding in Greenland and in the Canadian arctic, represented by 74824 from McMillan, Luce County, on 11 March 1934; 216629–216630 from 5 miles S of Paradise, Chippewa County, on 18 January 1970. *C. h. exilipes*, the subspecies breeding through most of subarctic North America and in northern Eurasia, represented by 134117 from Marquette on 16 March 1953; 208821 from Conway Point, Marquette County, on 13 January 1942; 131037–131038 from 2 miles W of Creighton, Schoolcraft County, on 25 March 1941; and 82860–82861 from McMillan, Luce County, on 14 February 1936.

***Pine Siskin**, *Carduelis pinus*. Common but irregular transient and winter visitor. Summer resident nesting in the Upper Peninsula, local in the Lower Peninsula. Breeding records in Marquette County; nesting locally in recent years in southeastern and southwestern Michigan in Midland, Berrien, Kalamazoo, and Washtenaw counties (Kelley, 1978; JPW 39:147, 1961; 41:63, 1963; 58:34–35, 1980; KNC; UMMZ). Nested in Ann Arbor on or near the campus of the University of Michigan from 1976 through 1982. Migrates in large flocks; up to 6000 seen in autumn moving along the shoreline of Lake Michigan (Goldeneye 10(6):7, 1971).

***American Goldfinch**, *Carduelis tristis*. Common transient and summer resident. Goldfinches banded in winter in other states (West Virginia, Tennessee, Indiana) have been recovered in Michigan during the breeding season from late June through August, and a young bird banded in Michigan was recovered in New York two years later in June. A bird banded in December at Grand Rapids was recovered in the following winter in Oklahoma. Most banding recoveries of Michigan birds are local and at the same time of year as the banding, though one bird at Grand Rapids was in the same spot in February and in August (BBL; recovery analysis by W. A. Buttemer). As in the other local species of cardueline finches, a bird may be either a resident or a migrant according to local conditions. Seasonal movements of up to 8000 have been observed along the shoreline of Lake Michigan (Goldeneye 10(6):7, 1971). Winters regularly, more common in southern Michigan.

***Evening Grosbeak**, *Coccothraustes vespertinus*. Common summer resident in the Upper Peninsula and an uncommon and local bird in summer in the northern Lower Peninsula. Nesting records from Isle Royale and Baraga, Marquette, Chippewa, Mackinac, Schoolcraft, and Luce counties (Wood, 1951; Wilson Bull. 68:321–322, 1956; JPW 41:62, 1963; 43:166,

1965; 51:154, 1973; Jordan and Shelton, 1982; UMMZ). Birds in the Upper Peninsula live in hardwood forests and enter the jack pines during jack pine budworm outbreaks (N. F. Sloan). In the Lower Peninsula nesting has been reported in Presque Isle, Roscommon, and Alpena counties (JPW 48:100, 1970; 52:187, 1974; 53:154, 1975; 55:196, 1977). A bird was seen on Beaver Island in July (JPW 46:132, 1968) and one on South Manitou Island in July (JPW 55:196, 1977). The species has apparently expanded its breeding range eastward into Michigan within the last 100 years (Barrows, 1912; *Canad. Field-Nat.* 54:15–25, 1940). The first nesting records in Michigan were at Whitefish Point, Chippewa County, in 1923 (*Auk* 40:314–316, 1923). Irregular, usually uncommon winter visitor throughout the state. Some remain in Michigan in winter and others migrate to the east coast. Birds banded at Mt. Pleasant, Isabella County, have been recovered in Ontario, Quebec, Maine, Connecticut, Vermont, New York, Pennsylvania, and Wisconsin, as well as elsewhere in Michigan (Cuthbert, 1963).

***House Sparrow**, *Passer domesticus*. Introduced species. Common and abundant permanent resident in the Lower Peninsula, less abundant in the Upper Peninsula. House Sparrows were first introduced to Michigan and released in 1876 (Barrows, 1912).

REJECTED SPECIES

The following birds have been reported but without photographs or specimens known to have been taken in the state, or without a reasonable likelihood, in my opinion, that the species occurred in Michigan under natural circumstances. In most cases the identification is questionable and the species is unknown even as a vagrant in this region of North America. Not included are most exotic caged birds and waterfowl and game birds that have been released to establish introduced populations for hunting, except where these have established breeding populations in Michigan; established introduced birds (for example, Ring-necked Pheasants) are in the main checklist.

[**Bar-headed Goose**, *Anser indicus*. Rejected. Observed and photographed at Shiawassee National Wildlife Refuge, Saginaw County, 1–24 April 1962 (JPW 41:24–25, 1963). It breeds in central Asia and migrates to the Indian subcontinent; no wild birds are known in North America or Europe (AOU, 1982; Cramp and Simmons, 1980).]

[**Black-shouldered Kite**, *Elanus caeruleus*. Rejected. Report of observers “seeing a white-tailed kite at their feeders” at Charlevoix in first weekend in January 1982 (*The North Woods Call*, Charlevoix, issue of 17 February 1982) was presumably of a shrike.]

[**Smooth-billed Ani**, *Crotophaga ani*. Rejected. Observation of ani in Ottawa County in autumn, 1971 (JPW 50:62, 1972) was probably of a juvenile Groove-billed Ani.]

[**Lewis’ Woodpecker**, *Melanerpes lewis*. Rejected. A listing in Peterson (1980) was in error (R. T. Peterson, in litt., UMMZ).]

[**Golden-fronted Woodpecker**, *Melanerpes aurifrons*. Rejected. Reported at Cheboygan, Cheboygan County, on 17 November 1974 (photo in AB 29:63, 1975; head pattern indeterminate, resembles certain specimens of Red-bellied Woodpecker).]

[**Red-cockaded Woodpecker**, *Picoides borealis*. Rejected. Reported along St. Joseph River near Berrien Springs, Berrien County, on 19 April 1962 (letter in UMMZ). The nearest population is in eastern Kentucky, where it is rare and sedentary.]

[**Curve-billed Thrasher**, *Toxostoma curvirostre*. Rejected. Reported at Grand Rapids, Kent County, on 12 May 1965 (UMMZ files). Unlikely on basis of distribution; no adequate description was recorded.]

[**Hooded Oriole**, *Icterus cucullatus*. Rejected. One reported with group of Northern Orioles at North Point, Alpena County, on 17 May 1969 (JPW 47:96, 1969). The record is unlikely on the basis of the species' distribution; no adequate description was recorded.]

[**Audubon's Oriole**, *Icterus graduacauda*. Rejected. One reported at Lamont, Ottawa County, on 9 May 1982 (MAS), was not well described and was probably misidentified.]

[**European Goldfinch**, *Carduelis carduelis*. Rejected. Introduced species, very local in North America. Observation at Muskegon in 1976 is most likely of an escaped captive bird (UMMZ files). Others have been seen in the Detroit area (DAS).]

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