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Cover photo: Fledgling Merlin, Pokagon State Park, Steuben Co. 15 Aug 2013. Photo by Fred Zilch

Back cover photo: Swallow-tailed Kite at Arvin property, Tippecanoe Co., 4 June 2013. Photo by Marty Jones.

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FIRST RECORDED INDIANA MERLIN NESTING: AN EXCLAMATION TO AN ALREADY MAGICAL BIRD YEAR AT POKAGON STATE PARK

Fred Wooley



Figure 1. Juvenile Merlin learning a lesson, 24 August 2013, Steuben Co. Photo by Rhoda Gerig

The year had already started out as significant for birding at Pokagon State Park. The lakes country area of northeast Indiana has played host in recent years to wintering Bald Eagles. For several years, we have had Osprey nesting in Steuben County, but never eagles. Come spring, they would take flight for more familiar nesting territories and we would just hear tales of nesting eagles at sites in northwest Ohio, or some river/reservoir sites to the south.

I asked our IDNR, non-game bird biologist, John Castrale, several years ago, if he thought we'd have Bald Eagles nesting in Steuben County. He replied, "Fred, it's just a matter of time. They are numerous enough now in Indiana, and expanding into new areas every year, that we may soon end our detailed surveys from the air." Though records are still kept to track nesting territories, the intense surveys of years past are no longer done. John was right too; the time for eagles nesting in Steuben County would come...and it did, in 2013.

I figured, deep down, they would nest in our corner of the state, but I would have never imagined they would first choose Pokagon State Park! We started getting reports in January of nest building near our park group camp. Though five Bald Eagles were tallied on last year's Christmas Bird Count, I fully expected to drive down to our group camp and observe a substantial red-tailed Hawk nest, as a pair has made their home there for several years.

On Valentine's Day, fellow interpreter, Lauren Loffer, and I went to the camp and indeed noted a very substantial nest, not where I expected to see it, nor did we expect to see a beautiful, mature, Bald Eagle sitting inside of it! Its mate soon joined it and both provided a Hallmark moment as both beaks held on to the same stick on a cold, but now very exciting, Valentine's Day!

What a treat it was for group campers, park hikers, and lake enthusiasts to watch and hear these two birds and their two offspring make themselves quite at home this summer, amid the bustle of one of Indiana's busiest lakes.

Unbeknownst to park users and summer beach goers early this summer, was a much more rare nesting bird for Indiana, right above our heads at the south beach parking lot. It was a beautiful August 12 when Fred Zilch from nearby Montgomery, Michigan, was enjoying a picnic with his wife Martha and grandson under some scattered evergreens near the parking lot and playground. He heard a loud raucous call, similar to a Kestrel he thought, but he knew different. Fred is a longtime visitor to the park and an avid naturalist and nature photographer. He was quite surprised and excited to observe a Merlin darting from one conifer to another. He knew this was special and captured photos of an adult Merlin. He



Figure 2. Merlin with prey at South Beach parking lot, 25 August 2013, Steuben Co. Photo by Nicole Davison

returned on August 15 and 16 and got some wonderful photos of not only an adult Merlin, but a juvenile as well!

Fred came to the Nature Center on the 15th and reported these Merlins. While not a life bird for either of us, neither of us had extensive experience with the bird. A quick review determined it highly unusual to see a likely family of birds at a time of year when their kind is normally nesting in Canada, or possibly very northern Michigan Upper Peninsula at the very most southern end of its range.

I posted it on IN-Bird on August 15 and it quickly caused a stir in the birding world. Within the next week, many birders came to the Pokagon south beach parking lot and within a relatively short time and with the relative ease of leaning against their car or sitting at a picnic table, were able to observe one bird, or more. To great delight, the birds remained and reports continued of a male, a female, and up to two juveniles.

Noting an even rarer occurrence than nesting eagles, I exchanged e-mails with John Castrale. Though finding

it exciting, John felt it was not entirely unexpected. He pointed out that the species “seems to be expanding its range southward.” The 2010, sixth edition of the Peterson Field Guide to Eastern and Central North American birds states “breeding range spreading south.”

John and Kathy Kendall spent a great deal of time here on August 19, getting great photos and discovering the likely nest, an old crow’s nest atop a tall red pine, just feet from the picnic area bathroom. At one point a juvenile bird was observed perched on the nest edge. Below the nest, John found a freshly killed juvenile Barn Swallow, a likely Merlin meal that was dropped upon transfer. Though a very busy parking lot and picnic area below, the area reminds one of open, coniferous woodlands of the far north, a normal nesting setting for Merlins.



Figure 3. A watchful Merlin 29 August 2013, Steuben Co. Photo by Alexandra Forsythe

Other birders followed and so too did detailed reports and great photographs. I was able to join forces with, bump into, or later read of Merlin encounters from Alexandra Forsythe, John Winebrenner, Del Striegel, Jim Haw, Sandy Schacht, Rodger Rang, Dan Klopfenstein, Rhoda Gerig, Leland and Thaddaeus Shaum, Nicole Davison, Marjorie Hershman, and Lauren Loffer. I know I am leaving out people, but I thank Fred Zilch first of all, and everyone else for your enthusiasm and photos. I saw everything from cameras with lenses as long as a boy’s leg to people getting postcard quality photos with cell phones hand held to a spotting scope.



Figure 4. Juvenile Merlin with prey at South Beach parking lot 22 August 2013, Steuben Co. Photo by Leland Shaum

For the next few weeks the birds worked the tops of tall pines and Norway spruce. At times they would perch on leafless branches in tall deciduous trees, but preferred the conifers. One would often be seen on the tall spruce in the park manager’s front yard just east of the parking lot. Two sets of morning hikers on interpretive led walks over Labor Day weekend enjoyed Merlin views. Photos from one hike, lead to an article on the local newspaper front page.



Figure 5. Merlin on Labor Day, 2 Septembe 2013, Steuben Co. Photo by Fred Wooley

I noticed a bird of prey from the corner of my eye dart from a conifer to the west, into the picnic area in front of me. Almost immediately, I heard bird alarm calls and a mourning dove exploded from an old apple tree in front of me! I instantly ducked, as it nearly clipped my cap and zoomed by with a Merlin in hot pursuit. They veered from sight as quickly as they arrived

Wow! What a great last view and punctuated ending to a story of a new, breeding bird record for Indiana. The stories for next nesting season, 2014, begin with questions. Will the bald eagles and Merlins return?...

The largest viewing, no doubt, came on the last Saturday of September, during our Autumn Harvest Hoedown dance in that very same parking lot. While doing my welcome and introduction to a group of about 200 people, with IAS President Brad Bumgardner in the audience, I mentioned the year's Bald Eagles and Merlins. I no sooner said Merlin and one flew in and perched in their most popular tree! "And there it is!" I shouted, as I withdrew a green laser and pointed it out.

My last view was much more private, on October 2. I was getting into the park van across from the Nature Center.

FIRST RECORD OF NESTING LEAST TERNS AT GOOSE POND FISH AND WILDLIFE AREA

Amy J. Kearns, Indiana Division of Fish and Wildlife, 562 DNR Rd, Mitchell, IN 47446

Abstract

Beginning 17 June 2013, four adult Least Terns (*Sternula antillarum*) were seen engaging in courtship behavior on the tern nesting island in Main Pool West at Goose Pond Fish and Wildlife Area, Linton, Greene County, Indiana. This was only the sixth time Least Terns had been reported at Goose Pond, and the first time terns had been seen showing any interest in the tern nesting island. Over the next two and a half months, the terns made three or four nesting attempts and successfully fledged one young. This colony is the furthest north that Interior Least Terns have nested east of the Mississippi River, and represents a range expansion of over 50 miles.



Figure 1. An adult Least Tern flies over the tern nesting island at Goose Pond Fish and Wildlife Area, 30 July 2013, Greene Co. Photo by Michael Carney

Introduction

The interior population of Least Terns (*S. a. anthalassos*) was listed as federally endangered in 1985. Interior Least Terns nest in colonies located on bare or sparsely vegetated gravel islands and sand bars of major river systems (Thompson et al. 1997). These breeding habitats are altered by river channelization and dams, and human recreational use can make them unsuitable due to disturbance during the nesting season (Thompson et al. 1997). Least Terns will use man-made sites for nesting and the vast majority of nesting records in Indiana are from these anthropogenic sites (Castrale et al. 1999).

In 2013, there were three known nesting areas in the state, and all were located at man-made sites (Mills 2013). The largest nesting area is in Gibson County at Gibson Lake, a large shallow cooling lake for a coal-fueled power plant. Indiana's first unambiguous nesting record occurred here in 1986, and terns

have nested here every year since then with the exception of 1988 (Mills 1987, Castrale et al. 1999). In the Gibson Lake area, approximately 125 terns nested on a two-mile long narrow stone dike bisecting the lake, a wet ash disposal area (50 adults), and a three-acre artificial island just south of the lake at Cane Ridge Wildlife Management Area (50 adults) (Mills 2013). The second largest nesting area in the state is located at the American Electric Power plant in Rockport, Spencer County. Least Terns first nested here in 2003; in 2013, 30 adults nested on stone dikes surrounding ash ponds (Mills 2013). The third nesting area in the state was the tern island at Goose Pond Fish and Wildlife Area, which attracted five adults. Sites along the Ohio and Wabash Rivers that have held small colonies of nesting terns in previous years were surveyed, but no nesting activity was found on these rivers in 2013 (Mills 2013).

Site Description and Methods

Goose Pond Fish and Wildlife Area is an 8,064-acre property located in what was historically a glacial basin wetland approximately 35,000 acres in size (Brittain et al. 2010). The property was purchased by the Indiana Department of Natural Resources (IDNR) in 2005 and the USDA's Natural Resources Conservation Service (NRCS) completed wetland restoration efforts in 2009 with approximately 4,000 acres of shallow water and more than 30 miles of earthen dikes (Brittain et al. 2010). A three-acre tern nesting island was built in the southern portion of the Main Pool West unit. The island has river rock scattered on the top surface, which mimics the substrate Interior Least Terns nest on when using the gravel islands and sandbars of rivers. Hundreds of acres of open, shallow water surround the island. A three-foot tall chain link fence outlines the perimeter, and two strands of electric wire add additional protection against mammals that could prey on the terns and their nests. Each spring, the island is treated with herbicide to keep vegetation growth to a minimum. Least Tern decoys are set out to aid in attracting the terns to the island. After terns were sighted showing interest in the island on 17 June, signs were placed 200 yards from the island, closing the area to unauthorized use in an effort to protect the terns from human disturbance.



Figure 2. The first confirmed Least Tern chick at Goose Pond Fish and Wildlife Area is well-camouflaged in the nest alongside an egg on 5 August 2013, Greene Co. Photo by Amy Kearns

Initial observations of the nesting terns were made from an elevated bridge on a dead end county road approximately 1/4 mile south of the island. The island was not visited until later in the breeding season in order to minimize disturbance to the nesting terns. As the season progressed, vegetation growth on the island made it difficult to observe the terns after they landed. Consequently, chicks could not be confirmed from the first nesting attempts. A month after the first nest was seen, the island was visited and numbers of adults and nesting evidence were noted. Infrequent trips to the island and regular observations from a distance were continued until the terns left the area for the season.

Results

Three to four total nesting attempts and a high of five adults were observed. One to two attempts were suspected while viewing from a distance and two nesting attempts were confirmed with a visual of the nest contents. One chick made it to fledging and was last observed 4 September.

On 17 June, I observed four adult terns in flight and engaging in courtship behaviors on and around the island. The first apparent nest was reported by Lee Sterrenburg on 24 June, when he observed a tern making fish deliveries to an incubating bird. On 10 July I observed five adult terns and probable chicks for the first time. The chicks were not seen (due to thickening vegetation and extreme distance from the observer) but were assumed due to frequent fish deliveries to the nest site by the adults. On that date I also observed adult tern activity at a second possible nest site. On two visits over the next week, Lee Sterrenburg observed frequent (five deliveries in 45 minutes and six to seven deliveries in an hour and five minutes) fish deliveries to the two nest areas. At this point, vegetation was heavy enough to completely obscure the adult terns once they had landed on the island. However, the high number of fish deliveries observed in a short time is highly suggestive of tern chicks. On 18 July, Lee Sterrenburg and I observed fish deliveries to areas on the island away from the two probable nest locations. At the time, we assumed the adult terns were feeding older chicks that had moved away from the original nests. However, it is also possible that the initial nesting attempts had failed, and what we observed were terns selecting new nest sites or beginning incubation. On 23 July, property manager Brad Feaster, Lee Sterrenburg, and I visited the island for the first time. We hoped to find older chicks (with probable chicks first observed on 10 July, and a 22-day incubation begun on 18 June, estimated fledge date was on or around 30 July). We were heavily harassed by five adult terns, found no chicks, and were surprised to find a nest with one egg. Least Tern chicks are masterful at hiding from predators, and their small size and camouflaged plumage makes them extremely difficult to detect. It is possible that chicks were overlooked. The nest with a single egg may have been a second nesting attempt by a pair of terns whose first attempt had failed, or it may have been a single unhatched egg from a nest that had produced chicks old enough to have wandered away from the nest area. The single egg had vanished by 30 July and is not thought to have resulted in a fledgling. On 25 July, I observed the island from a distance and had the strong impression that there were no chicks on the island at that time. If the initial two nesting attempts had produced chicks, I would have expected heavy activity around the island in late July, with frequent fish deliveries by the adults and the initial flights of the fledgling terns. Instead, during visits on six days out of the last seven days of the month, observers saw very little activity. Adult terns were only occasionally seen making fish deliveries, and always to the same area on the island (where a nest was found 5 August). On 30 July, the island was visited and no chicks or nests were found. Three adult terns were last observed on 31 July. Low activity continued until a 5 August island visit when I was harassed by two adults and found a nest with one egg and one chick about two days old. Assuming an incubation period of around 22 days, this nest would have been present beginning around 12 July, and had been overlooked on island walks twice. After 12 August, no more than one adult tern was seen around the island. On 19 August, I found a tern chick on the island that looked close to fledging. On 24 August, a fledgling was observed in flight with an adult over and around the nesting island. This fledgling stayed in the area for twelve days and was last observed on 4 September in flight about two miles northwest of the tern nesting island in Goose Pond unit 16.



Figure 3. This Least Tern chick was found close to fledging on 19 August 2013. It is likely the same individual that was seen flying over the island with an adult five days later. Greene Co. Photo by Amy Kearns

Discussion

Weather plays a major role in the location of Interior Least Tern nesting colonies. June 2013 was the eleventh wettest Indiana June on record, with rainfall in the southwest measuring 7.44 inches; this is 3.34 inches above average and 181 percent of normal (Indiana State Climate Office). In Indiana, there is strong correlation between high water levels in rivers and large numbers of nesting Least Terns at colonies located on anthropogenic sites, which are less prone to flooding. There were no tern nesting colonies found on Indiana rivers in 2013. With rivers high and few gravel islands and sandbars available in late May and early June, Least Terns had to travel farther to find suitable nesting locations. This is likely what led them to the Goose Pond tern island, located 20 miles east of the Wabash River, 6 miles northwest of the West Fork White River, and over 50 miles north of the nearest tern nesting colony at Gibson Lake. An 1882 record of a Least Tern nest in Lake County, Indiana, has been discredited because the nest description (“a depression on a pile of reeds”) is a better fit for that of Black Tern (*Chlidonias niger*) or Forster’s Tern (*Sterna forsteri*) (Mumford and Keller 1984). Thus, Goose Pond Fish and Wildlife area is the furthest north that Interior Least Terns have nested east of the Mississippi River, expanding their nesting range by over 50 miles.

The Least Terns that nested on the Goose Pond Fish and Wildlife Area tern nesting island likely came from the Mississippi, Wabash, or Ohio Rivers where nesting habitat was mostly absent due to high

water. The late date of nest initiation (compared to dates from other Indiana colonies) may be explained by the increased time it takes prospecting terns to discover a new appropriate nest site. Possibly they were young birds; Least Terns try nesting for the first time at two to three years old and young birds attempting to nest for the first time begin later in the season than experienced adults (Thompson et al. 1997). Another possibility is that they came from the Gibson Lake tern nesting colonies. In 2013, initial nests at Gibson Lake were noted on 30 May (Mills 2013). The Goose Pond terns were not observed until 17 June and may have been reneesting after their initial nests at Gibson Lake failed. If so, these terns may have attempted to nest three times during the season. If the nesting adults return to Goose Pond in 2014, I would expect them to arrive earlier in the season (late May to early June). Water levels on the Wabash and Mississippi Rivers will likely influence whether or not Least Terns nest again at Goose Pond.



Figure 4. An adult Least Tern incubates eggs near Gibson Lake in 2011 Gibson Co. Photo by Steve Gifford

While watching the terns from a distance early in the season, we identified two probable nest locations. Based on behavior of the adult terns, both nests were thought to have chicks in early July. During walks on the island during the second half of the season, I found two nests, one with one egg and one with one egg and one young chick. These late nests may have been second nesting attempts by the same two pairs of adult terns that had the initial two nests, but it is impossible to be sure of this. Second nesting attempts by Least Terns frequently contain only one egg, but there is no way of knowing that the nest with one egg wasn't an unhatched egg from an earlier nest which was located in the same area on the island. I believe that we observed two or three tern nests that failed for reasons we can speculate on but not prove. Nest failure may have come from parental abandonment, difficult weather conditions, or nest predation. I suspect that the primary factor was nest predation on chicks, and that this occurred sometime between 10 July and 18 July. The electric fence surrounding the island worked well early in the season but was found to be nonfunctional during a check in late July. This fence, designed to keep out mammalian predators like mink and raccoons, had likely not been working at any time the terns were present, leaving them vulnerable to nest predation. Other potential predators include snakes and birds. The island is a popular roost for Great Blue Herons (*Ardea herodias*), and it was common

throughout the season to see up to seven herons preening and resting on the island. Black-crowned Night-Herons (*Nycticorax nycticorax*) were not observed on the island during the day, but were seen roosting ½ mile west of the island and could have been visiting the tern colony at night. These species of wading birds are opportunistic predators, and their diets frequently include small bird species and their chicks. High chick mortality from suspected nest predation has been noted before at Least Tern nesting colonies in Indiana. An extreme example occurred at Gibson Lake in 1991, when all but 1 of 20 chicks were lost to predation (Johnson and Castrale 1993). The following year, various efforts were made to discourage predators and six out of eight chicks successfully fledged (Johnson and Castrale 1993).

The two pairs of Least Terns nesting at Goose Pond successfully fledged one young. This is a success rate of 0.50 fledglings/pair which is comparable to nesting populations of Interior Least Terns in the Dakotas, Nebraska, Kansas and Oklahoma, and only slightly less than the highly productive colonies at Gibson Lake (Sidle and Harrison 1990, Castrale et al. 1999). Other species nesting on the Goose Pond tern island included a pair of Black-necked Stilts (*Himantopus mexicanus*) and several pairs of Killdeer (*Charadrius vociferus*). A stilt was observed incubating a nest on the island early in the season, and was last seen 10 July, with no young noted. Nesting success of Killdeer was not closely monitored due to time restrictions on the observers while in the tern nesting colony.

Least Terns nesting on the Goose Pond tern island were frequently harassed by swallows including Northern Rough-winged (*Stelgidopteryx serripennis*), Tree (*Tachycineta bicolor*), Bank (*Riparia riparia*), Barn (*Hirundo rustica*), Cliff (*Petrochelidon pyrrhonota*), and Purple Martin (*Progne subis*) as well as Red-winged Blackbirds (*Agelaius phoeniceus*). Goose Pond Fish and Wildlife Area is a major staging area for migrating swallows and swallow numbers had swelled into the thousands by late July. I noted terns spending at least a quarter of their foraging time in evasive flight trying to escape swallows that were chasing and diving on them. Blackbirds were a problem to a lesser extent, but similarly aggressive to the flying terns, and on one occasion a male Red-winged Blackbird repeatedly flushed a pair of terns that were roosting on the island. I have not observed this harassment of Least Terns at other Indiana tern colonies, and I wonder how much of a negative impact it might have had on the Goose Pond terns. Other avian interactions observed were occasional tern chasing of and by Killdeer, and, on three occasions, the mobbing of Great Blue Herons by Least Terns.

In June, Least Terns were frequently seen plunge diving in areas immediately around the nesting island. Later in the season, terns were most often seen flying away from the island in a northeasterly direction, possibly toward lowering water levels in the nearby Main Pool East unit which may have resulted in high densities of small fish. Goose Pond Fish and Wildlife Area supports a variety of small, thin, surface-swimming fishes. Although terns were often seen flying with small fish in their bills, the distance from the observer made it impossible to identify fish species. Results from a 2010 biodiversity survey conducted on the property indicate that the most common prey species are gizzard shad (*Dorosoma cepedianum*) and western mosquito fish (*Gambusia affinis*) and it is likely that the terns fed heavily of these two species (Karns 2012).

The nesting of Interior Least Terns at Goose Pond Fish and Wildlife Area is another success story for the restored wetland and for the Indiana Division of Fish and Wildlife. I hope to see the terns return to Goose Pond for the 2014 nesting season.

Acknowledgments

Goose Pond Fish and Wildlife Area was acquired and restored through the hard work of many individuals and organizations. Thanks to their dedication, millions of birds have a home through all or part of the year. Katie Smith administers the Interior Least Tern Project in Indiana and was instrumental in making the tern nesting island at Goose Pond a reality. John Castrale provided instruction on tern monitoring and site preparation and edited this manuscript. Chuck Mills supplied guidance and advice on monitoring terns. Goose Pond Fish and Wildlife Area staff did an excellent job preparing the nesting island for the terns this year. Special thanks to property manager Brad Feaster for coordinating those efforts. Lee Sterrenburg, Jim Brown, Michael Brown, Jerry Downs, Don Gorney, Jim Hengeveld, Kirk Roth, and Vern Wilkins helpfully emailed me about their tern sightings; this was much appreciated. Monitoring efforts were funded by State Wildlife Grants and the Indiana Nongame Fund through donations to the state income tax checkoff.

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INDIANA WINTER BIRD FEEDER COUNT 2012-2013

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The statewide feeder count sponsored by the Indiana Audubon Society was continued for the twentieth year during the winter of 2012-2013. The purpose of this survey is to obtain information about the relative abundance and distribution of birds frequenting feeders during winter months in Indiana. Planned as an annual activity, changes and population trends in bird populations may be tracked. A secondary objective of this project is to increase enjoyment of winter bird feeding.

Methods

A standardized form was developed that included 45 bird species expected to occur at feeders in Indiana. Space was also provided to write in additional, less common species. Survey periods were 6 consecutive days (20th-25th of the month) each during the months of November, December, January, and February. During these survey periods, participants were asked to record the maximum number of individuals of each bird species during any one observation period. Information about the feeder site, number of feeders, types of feeders, food provided, temperatures, and snow cover was also solicited from each participant.

The state was divided into north, south, and central regions in an identical way used in the Summer Bird Count (Kearns and Castrale 2010). Bird occurrence data were treated two ways. The maximum number of individuals of each species seen during each 6-day count period was averaged. Because this variable may be greatly influenced by a few feeders where a species may be unusually common or by flocking species, frequency of occurrence was also calculated. Not all count forms were usable. Some participants did not report total birds properly (cumulative total used instead of maximum count), so these figures were used only in calculating frequency and not average numbers. In rare cases, the identification skills of observers were questionable and the reports not used. Counts were analyzed by region, time period, and year. A statistical test (chi-square goodness of fit test) was used to determine differences in the frequencies in which species occurred by region and survey period. This test compares observed and expected (based on overall pattern of occurrence) frequencies and was only applied to species in which the expected number of occurrences in each cell was >5 .

Results and Discussion

The winter of 2012-2013 averaged somewhat warmer than usual with nearly normal precipitation. Temperatures were below average for November (-2.2 degrees Fahrenheit), near normal for February (-0.6), but above average for December (+6.2 degrees) and January (+3.7). During the count period, November minimum temperatures were generally in the low 20's with maximums in the 60's. Reported temperatures in December were mostly in the teens for lows and the 40-50's for highs. Most participants reported lows just above zero in January with highs in the 30's and 40's. These increased somewhat in February with lows in the teens and highs in the 40's and 50's. November was dry (28% of normal precipitation), January was wet (193% precipitation), while December and February had near normal amounts of precipitation (105% and 98% of normals, respectively). Days with falling snow were infrequent (three in November, seven each in December and January, and six days in February). During the count periods, no snow cover was reported in November with 0-3" sporadically reported in December. Snow amounts varied from 0-2" in January, while 0-1" was found southern and central Indiana during February with amounts of up to 7" reported in some areas of northern Indiana.

Participation in the Winter Bird Feeder Count for 2012-2013 was the lowest in its history, with the change mostly due to fewer counts in central Indiana (Table 1). Most counts came from northern Indiana and should be considered when comparing annual abundance for species with strong regional trends (i.e., chickadees, Carolina Wren). Counties with the greatest participation were: Allen, St. Joseph, and Steuben. Individuals submitting counts are listed in Appendix I.

The overall number of species detected annually has not varied greatly over the years, especially the number of species that were found on >3% of counts (Table 1). The order of abundance for most species was similar to previous years, with House Sparrow again most numerous and Northern Cardinal most prevalent (Table 2). Most woodpeckers were reported at or near record levels along with the Yellow-rumped Warbler. With the exception of the Purple Finch, all irruptive “winter finches” (including the Red-breasted Nuthatch), made a good showing in Indiana this year.

Other species occurring with a relative frequency of <3% were Canada Goose, Rusty Blackbird, Horned Lark, Red-tailed Hawk, Hermit Thrush, Black-throated Blue Warbler, Evening Grosbeak, American Black Duck, Northern Shrike, Chipping Sparrow, and Lapland Longspur. Rare and unusual species are seldom documented by participants.

As in past years, over half of the species displayed statistically significant differences in regional occurrence (Table 3). Feeders in southern Indiana generally have a greater variety of species and most species with regional differences are found at higher levels in the south. American Tree Sparrow is an exception, and along with Black-capped Chickadee and Common Redpoll were found in greater numbers in northern Indiana. House Sparrow and Pileated Woodpecker were most frequently encountered in the central part of the state.

Only four species showed significant differences in frequency among the four time periods surveyed (Table 4). Differences were mostly due to higher values in later winter, with Red-winged Blackbirds and other black showing greater frequencies in February due to northward migratory movements by the end of the count period.

Appreciation is extended to all participants in this count, especially those who donated to the printing costs.

Literature Cited

Kearns, A. and J. Castrale. 2010. Indiana Audubon Society Summer Bird Count - 2009. *Indiana Audubon Quarterly* 88:26-33.

Appendix I. Participants in the 2012-2013 Indiana Winter Bird Feeder Count.

North - *Allen*: Fox Island County Park, Louise Larsen, Ed & Cynthia Powers, Marty & Don Ryan, Mark & Kim Weldon, Jada White, Phil Wixom; *Lagrange*: Elma Chapman; *Lake*: Matt Kalwasinski, Irmie Kohanyi; *LaPorte*: Dennis & Frances Richardson; *Marshall*: Carrolyne Babcock, Steve & Cindy Odiorne; *Porter*: Indiana Dunes State Park; *Saint Joseph*: Brian Miller, Lindsay & Scott Namestuik, Marge & Vic Riemenschneider; *Steuben*: Pokagon State Park, Bert Schulz, Jim Somers, Fred Wooley; *Whitley*: Stan Needham.

Central - *Adams*: Larry Parker; *Boone*: Cloyce Hedge, Roger & Michelle Hedge; *Cass*: Landon Neumann; *Fountain*: Harmon & Sally Weeks; *Grant*: Joy Sellers; *Hancock*: Gail McNierney; *Marion*: Gordon Chastain, Becky Lomax-Sumner; *Morgan*: Cindy Breedlove, Robert Gregory; *Tippecanoe*: Delano Arvin, Lynne Lesley; *Warren*: Susan Ulrich; *Wells*: Jerry & Rose Moser.

South – *Dearborn*: Connie McNamee, Greg Mendell; *Floyd*: John Graf; *Greene*: Maureen Forrest, Jess Gwinn; *Knox*: Gary Bowman; *Lawrence*: John Castrale, Amy & Noah Kearns; *Monroe*: Cathy Meyer; *Ripley*: Gary Stegner; *Vigo*: Diana Hews, Marty Jones, Peter Scott; *Warrick*: Tim Griffith.

Table 1. Participation and bird species counts on the Indiana Winter Bird Feeder Count.

Year	12-13	11-12	10-11	09-10	08-09	07-08	06-07	05-06	04-05	03-04	02-03	01-02	00-01	99-00	98-99	97-98	96-97	95-96	94-95	93-94
Count locations	47	50	66	63	69	80	88	67	74	83	86	101	109	147	133	108	88	109	71	94
North	21	18	30	26	20	24	26	21	22	24	23	32	35	43	33	51	30	39	19	40
Central	15	20	24	24	29	39	47	32	37	44	42	38	50	58	43	41	41	49	37	44
South	11	12	12	13	13	17	15	14	15	15	21	31	24	46	57	16	17	21	15	10
Counties with counts	29	31	33	34	36	42	41	36	36	41	41	41	46	49	43	38	33	36	34	34
North	9	8	11	12	10	11	9	11	11	11	10	11	14	12	9	12	9	9	7	10
Central	11	13	14	13	17	19	22	16	14	19	18	17	18	20	18	18	16	18	19	17
South	9	10	8	9	9	12	10	9	11	11	13	13	14	17	16	8	8	9	8	7
No. survey periods	184	192	253	237	243	296	316	265	271	312	319	371	408	547	473	402	331	409	263	341
No. bird species	55	58	62	51	55	58	62	56	59	60	59	59	62	70	57	61	59	65	48	64
No. bird species on >3% of counts	41	40	40	40	41	42	38	39	40	39	39	37	36	41	37	37	36	40	33	40
Average no. bird species/count	16.6	15.5	16.9	14.9	16.0	16.3	13.7	14.2	15.1	13.8	14.4	13.4	14.2	14.0	14.0	13.7	13.5	15.0	12.5	14.2

Table 2. Abundance of birds visiting feeders during the past five Indiana winters.

Species	Average number / feeder					Percent of counts					
	Year	12-13	11-12	10-11	09-10	08-09	12-13	11-12	10-11	09-10	08-09
	<i>Number of surveys</i>	184	192	253	237	243	184	192	253	237	243
House Sparrow	16.9	14.9	16.4	14.3	21.2	72	68	77	63	70	
American Goldfinch	10.4	11.4	13.9	11.7	12.2	89	91	94	92	93	
Northern Cardinal	9.6	9.7	9.9	9.0	9.5	98	98	98	94	98	
Dark-eyed Junco	8.4	7.4	10.3	9.0	12.4	93	94	97	91	95	
House Finch	6.8	6.6	7.9	6.4	7.4	86	84	85	76	81	
Mourning Dove	6.7	5.6	8.5	6.7	7.6	84	83	86	88	91	
Blue Jay	3.3	2.9	3.4	2.7	2.8	80	80	85	78	81	
European Starling	3.2	3.7	4.9	2.4	5.1	48	43	45	32	40	
Downy Woodpecker	2.8	2.8	2.5	2.5	2.5	96	95	96	97	93	
Tufted Titmouse	2.6	3.0	2.6	3.4	2.2	80	89	89	86	79	
American Tree Sparrow	2.3	2.4	4.5	3.5	3.7	45	36	56	42	51	
White-breasted Nuthatch	2.2	2.3	1.8	2.6	1.9	95	92	91	89	87	
Carolina Chickadee	2.1	2.7	1.7	2.3	1.8	57	64	60	57	65	
Red-bellied Woodpecker	1.7	1.5	1.3	1.4	1.3	91	84	81	81	82	
Pine Siskin	1.4	0.2	1.8	<0.1	1.1	22	5	21	2	25	
Black-capped Chickadee	1.1	0.8	1.2	1.1	0.7	39	33	37	38	26	
Wild Turkey	1.0	1.2	0.9	0.7	0.6	2	3	4	6	4	
White-throated Sparrow	0.9	1.0	1.0	0.9	1.7	26	30	36	32	50	
Hairy Woodpecker	0.8	0.6	0.8	1.0	0.8	54	41	47	53	48	
American Robin	0.7	0.8	0.9	0.2	0.7	23	14	19	9	15	
Carolina Wren	0.7	0.6	0.8	0.7	0.7	43	46	50	43	49	
Red-breasted Nuthatch	0.6	<0.1	0.1	<0.1	0.1	40	2	11	5	5	
Brown-headed Cowbird	0.6	0.7	2.3	0.6	1.4	11	8	16	12	12	
Song Sparrow	0.6	0.8	0.9	0.5	0.9	39	43	50	31	47	
White-crowned Sparrow	0.5	0.4	0.7	0.2	0.4	15	14	21	8	18	
Purple Finch	0.5	0.7	1.0	0.9	1.0	20	22	21	15	24	
American Crow	0.5	0.4	0.6	0.9	0.6	16	13	18	18	16	
Red-winged Blackbird	0.4	0.6	0.7	0.7	0.3	10	12	16	8	6	
Northern Flicker	0.4	0.3	0.4	0.4	0.3	28	24	23	17	19	
Common Redpoll	0.3	<0.1	0.0	0.0	0.2	9	1	0	0	3	
Red-headed Woodpecker	0.3	<0.1	0.1	0.2	0.1	15	4	9	7	6	
Cooper's Hawk	0.3	0.3	0.3	0.2	0.2	27	24	28	24	24	
Common Grackle	0.3	0.3	0.4	0.4	0.3	9	9	9	7	9	
Yellow-rumped Warbler	0.3	0.2	<0.1	0.0	<0.1	5	3	2	0	2	
Pileated Woodpecker	0.3	0.2	0.2	0.2	0.1	15	15	13	15	10	
Eastern Bluebird	0.2	0.4	0.3	0.6	0.4	9	15	11	14	10	
Fox Sparrow	0.2	0.1	0.4	0.2	0.3	13	6	14	12	12	
Mallard	0.2	<0.1	0.6	0.9	0.5	3	2	3	5	2	
Eastern Towhee	0.2	0.3	0.3	<0.1	0.3	11	13	17	6	13	
Brown Creeper	0.1	0.1	0.2	0.1	0.1	12	12	14	13	10	
Northern Mockingbird	0.1	<0.1	<0.1	<0.1	<0.1	10	5	4	7	4	
Yellow-bellied Sapsucker	<0.1	<0.1	<0.1	<0.1	0.1	7	6	6	5	6	
Sharp-shinned Hawk	<0.1	<0.1	<0.1	<0.1	0.1	4	6	5	4	7	
Field Sparrow	<0.1	<0.1	<0.1	<0.1	<0.1	3	2	2	3	3	

Table 3. Regional abundance of birds frequenting feeders in Indiana during the winter of 2012-2013.

Species	Average number / feeder			Percent of counts			Test ^a	
	Region	North	Central	South	North	Central		South
	Number of surveys	80	61	43	80	61		43
House Sparrow		12.5	19.0	22.2	69	87	58	**
American Goldfinch		8.3	8.6	17.0	86	90	93	NS
Northern Cardinal		7.8	8.1	14.8	96	98	100	NS
Dark-eyed Junco		7.0	8.9	10.4	91	93	98	NS
House Finch		5.3	7.2	9.1	83	92	86	NS
Mourning Dove		5.0	6.0	10.9	79	85	93	NS
Blue Jay		2.1	2.4	6.8	76	75	95	*
European Starling		2.9	3.8	3.1	44	56	44	NS
Downy Woodpecker		2.4	2.9	3.3	96	93	100	NS
Tufted Titmouse		2.3	2.0	4.1	83	64	98	***
American Tree Sparrow		2.8	2.8	0.7	48	51	33	***
White-breasted Nuthatch		2.4	2.0	2.3	94	93	98	NS
Carolina Chickadee		0.6	2.7	4.3	15	82	98	***
Red-bellied Woodpecker		1.3	1.9	2.1	89	93	91	NS
Pine Siskin		0.8	1.8	2.1	18	21	30	NS
Black-capped Chickadee		2.3	0.2	0.0	83	10	0	***
Wild Turkey		0.0	0.0	4.3	0	0	9	**
White-throated Sparrow		0.0	0.6	2.7	3	33	60	***
Hairy Woodpecker		0.7	0.9	0.8	55	52	53	NS
American Robin		0.1	0.5	2.1	10	30	40	***
Carolina Wren		0.2	0.8	1.3	16	59	70	***
Red-breasted Nuthatch		0.4	0.6	1.1	28	44	58	**
Brown-headed Cowbird		0.2	0.5	1.6	5	13	19	NS
Song Sparrow		0.2	0.9	0.9	11	56	65	***
White-crowned Sparrow		0.6	0.6	0.2	14	20	9	NS
Purple Finch		0.3	0.4	1.2	14	15	37	**
American Crow		0.6	0.4	0.4	10	23	19	NS
Red-winged Blackbird		0.2	0.1	1.4	6	10	16	NS
Northern Flicker		0.3	0.5	0.4	28	31	26	NS
Common Redpoll		0.6	0.2	0.0	18	3	0	***
Red-headed Woodpecker		0.4	<0.1	0.4	13	3	37	***
Cooper's Hawk		0.3	0.3	0.2	28	30	21	NS
Common Grackle		0.1	<0.1	0.8	3	7	23	***
Yellow-rumped Warbler		0.0	<0.1	1.1	0	2	21	***
Pileated Woodpecker		<0.1	0.6	0.2	4	34	9	***
Eastern Bluebird		0.3	<0.1	0.4	10	2	16	*
Fox Sparrow		<0.1	0.2	0.6	4	11	33	***
Mallard		0.0	<0.1	0.7	0	3	7	NS
Eastern Towhee		<0.1	<0.1	0.5	4	5	33	***
Brown Creeper		<0.1	0.2	0.2	9	18	9	NS
Northern Mockingbird		0.0	0.0	0.4	0	0	42	***
Yellow-bellied Sapsucker		0.0	<0.1	0.2	0	10	16	**
Sharp-shinned Hawk		0.0	<0.1	0.1	0	3	14	**
Field Sparrow		0.0	<0.1	<0.1	0	7	2	NS
Total species		14.4	17.2	19.9				

^aNS (not statistically different), * (statistically different at probability level of 5%), ** (statistically different at probability level of 1%), *** (statistically different at probability level of 0.1%).

Table 4. Monthly abundance of birds frequenting feeders in Indiana during the winter of 2012-2013.

<i>Month</i> <i>Number of surveys</i>	Average number / feeder				Percent of counts				Test ^a
	Nov.	Dec.	Jan.	Feb.	Nov.	Dec.	Jan.	Feb.	
	45	47	46	46	45	47	46	46	
Species									
House Sparrow	16.0	17.5	18.2	16.1	71	70	72	76	NS
American Goldfinch	7.7	10.6	13.1	10.3	87	89	89	91	NS
Northern Cardinal	5.1	8.1	11.9	13.0	96	98	100	98	NS
Dark-eyed Junco	5.1	7.9	10.6	10.0	89	94	96	96	NS
House Finch	4.7	7.9	7.8	6.7	84	89	85	87	NS
Mourning Dove	4.0	6.9	8.4	7.5	78	81	89	89	NS
Blue Jay	3.0	3.6	3.3	3.2	80	89	76	76	NS
European Starling	0.7	1.9	5.2	5.2	20	40	63	67	***
Downy Woodpecker	2.2	3.0	3.1	2.9	96	96	98	96	NS
Tufted Titmouse	2.6	2.8	2.4	2.5	82	77	78	83	NS
American Tree Sparrow	0.5	1.2	3.5	3.8	20	38	59	63	***
White-breasted Nuthatch	2.4	2.3	2.0	2.1	98	98	89	93	NS
Carolina Chickadee	2.1	2.3	2.2	2.2	60	57	61	57	NS
Red-bellied Woodpecker	1.4	1.7	1.8	2.0	87	94	91	91	NS
Pine Siskin	1.8	1.8	1.6	0.5	24	28	22	13	NS
Black-capped Chickadee	1.1	1.1	0.9	1.0	38	38	33	39	NS
Wild Turkey	0.7	0.8	1.2	1.3	2	2	2	2	NS
White-throated Sparrow	0.5	0.6	1.2	1.1	29	21	26	28	NS
Hairy Woodpecker	0.7	0.7	0.9	0.8	47	49	63	57	NS
American Robin	0.8	0.5	0.5	1.0	20	21	22	30	NS
Carolina Wren	0.5	0.7	0.7	0.8	36	45	43	48	NS
Red-breasted Nuthatch	0.7	0.6	0.6	0.6	44	38	39	39	NS
Brown-headed Cowbird	<0.1	1.0	0.8	0.6	4	11	17	11	NS
Song Sparrow	0.3	0.4	0.7	0.9	27	32	48	48	NS
White-crowned Sparrow	0.2	0.4	0.7	0.8	11	13	17	17	NS
Purple Finch	0.2	0.5	0.7	0.7	13	21	26	17	NS
American Crow	0.3	0.3	0.9	0.5	9	19	20	17	NS
Red-winged Blackbird	0.2	0.1	0.7	0.8	4	6	2	26	***
Northern Flicker	0.1	0.4	0.6	0.5	11	26	41	35	**
Common Redpoll	0.1	0.1	0.5	0.5	4	6	11	13	NS
Red-headed Woodpecker	0.2	0.2	0.3	0.4	9	13	17	22	NS
Cooper's Hawk	0.2	0.3	0.4	0.2	16	32	37	22	NS
Common Grackle	<0.1	0.3	0.2	0.6	4	9	7	15	NS
Yellow-rumped Warbler	0.3	0.2	0.3	0.3	7	4	4	7	NS
Pileated Woodpecker	0.1	0.2	0.3	0.3	9	13	20	20	NS
Eastern Bluebird	0.1	0.3	0.3	0.2	7	9	9	11	NS
Fox Sparrow	0.2	0.3	0.2	0.2	7	15	17	13	NS
Mallard	0.3	0.3	<0.1	0.1	2	2	2	4	NS
Eastern Towhee	<0.1	0.1	0.2	0.2	4	9	13	17	NS
Brown Creeper	0.2	0.1	0.1	0.2	9	11	11	17	NS
Northern Mockingbird	0.1	<0.1	0.2	<0.1	11	9	13	7	NS
Yellow-bellied Sapsucker	0.1	<0.1	<0.1	<0.1	13	6	7	2	NS
Sharp-shinned Hawk	<0.1	<0.1	<0.1	<0.1	4	2	2	9	NS
Field Sparrow	<0.1	<0.1	<0.1	<0.1	4	2	2	2	NS
Total species	14.9	16.3	17.4	17.8					

^aNS (not statistically different), * (statistically different at probability level of 5%),

** (statistically different at probability level of 1%), *** (statistically different at probability level of 0.1%).

2013 SUMMER FIELD NOTES SUMMARY

David Ayer

The summer of 2013 was almost the complete opposite of 2012. Unlike 2012 much of the summer was unusually cool and wet. Highlights include a new Least Tern nesting site, Neotropical Cormorants once again appearing at Goose Pond, Western Kingbirds in Evansville, the *Tippecanoe* Swallow-tailed Kite lingering into June, a summering Canvasback at Wolf Lake, and Pine Siskins lingering into June in extreme SW Indiana.

Trumpeter Swan Single individual observed at Chase St. Wetland, *Lake*, on June 3 (Matt Kalwasinski).

Snow Goose Single individual observed at AEP, *Spencer*, on June 4 (David Ayer).

Gadwall 2 individuals reported from Goose Pond, *Greene*, on June 3 (Lee Sterrenburg). 3 observed at Goose Pond, *Greene*, on June 2 (Robert Kissel).

Northern Shoveler Single individual observed at Eagle Creek, *Marion*, on June 2 (Don Williams). Single individual observed at Goose Pond, *Greene*, on June 2 (Lee Sterrenburg) and on June 5 (Don Whitehead). Single individual observed in Highway 35 Marsh, *Cass*, on July 25 (Landon Neumann).

Northern Pintail 4 observed at LaSalle FWA, *Newton*, on June 20 (Jed Hertz).

Green-winged Teal 2 observed at Kankakee Sands, *Newton*, through at least July 08 (Jed Hertz).

Redhead Single individual observed at Wolf Lake, *Lake*, on June 1 (Carolyn Marsh). 3 observed at Cane Ridge, *Gibson*, on June 2 (Chuck Mills) and least 1 individual remained until June 4 (Tim Griffith). Single bird observed at Grant Street, *Lake*, on July 5 (Matt Kalwasinski).

Canvasback Single male reported from Wolf Lake, *Lake*, through the period by many observers.



Figure 1. Canvasback, Wolf Lake, Lake Co., June 27 2013. Photo by Matt Kalwasinski

Lesser Scaup 1 observed at Kankakee Sands, *Newton*, on June 7 (Jed Hertz). 2 individuals observed at Cane Ridge *Gibson*, by many observers remained until at least June 21. Single drake reported from SW Allen County on June 23 (Roger Rang).

Hooded Merganser Six, including 4 young observed at Patoka River NWR, *Gibson*, on June 1 (Lee Sterrenburg).

Ruddy Duck Four observed at Hitchcock Road Pond, *LaPorte*, on June 1 (Ken Brock). Two individuals observed at Cane Ridge, *Gibson*, on June 2 and at least one bird remained until June 18 (Chuck Mills). Single individual reported from Grant Street Wetland, *Lake*, on June 22 (Ken Brock).

Common Loon Single individual reported from lake in Vigo County on July 20 (Peter Scott).

Eared Grebe Single individual reported from Gibson County on June 21 and July 29 (Chuck Mills).

Double-crested Cormorant Unusually high numbers include a flock of 1200 observed at Miller Beach, *Lake*, on July 4 (Ken Brock).

Neotropical Cormorant 2 observed at Goose Pond, *Greene*, on July 30 (Amy Kearns) and 1 still present on July 31 (Ed Hopkins).

Least Bittern Single reported from Grant Street Wetland, *Lake*, on June 18 (Sam Plew). Least Bitterns were reported at Goose Pond, *Greene*, throughout the period. The high count came on June 30 when June were observed (Steve Lima). Least Bitterns were reported at Willow Slough, *Newton*, throughout the period. The high count came on July 6 when eight were observed, including one young (Jed Hertz). Two observed at Boyd's Slough, *Gibson*, on July 7 (Dan Collins). Two observed at Snakey Point, *Gibson*, on July 7 (Dan Collins) and heard on July 12 (Jeremy Ross).

American Bittern American Bitterns were reported from both Goose Pond, *Greene*, and Kankakee Sands, *Newton*, throughout the period. The Kankakee Sands high count of six came on June 15 (Jed Hertz). The Goose Pond high count of four occurred on June 3 (Lee Sterrenburg). Carolyn A. Marsh observed (1) at Wolf Lake on 31 July to provide the lakefront's first summer record in two years (Ken Brock).

Tricolored Heron Single individual observed at Goose Pond, *Greene*, on June 8 (David Rupp) and June 12 (Lee Sterrenburg).



Figure 2. Snowy Egret, Vigo Co., 23 June 2013. Photo by Jim Sullivan

Snowy Egret A single individual first observed at Wolf Lake, *Lake*, on June 1 (Carolyn Marsh) remained throughout the period. During the period of July 12 -July 24, a second bird joined it. Two individuals observed at Goose Pond, *Greene*, on June 2 (Lee Sterrenburg). Single individual observed from Vigo County on June 22 (Jim Sullivan).

Black-crowned Night heron Single individual first seen on June 15 spent most of summer at F. Wayne Children's Zoo, *Allen*, (Dave Messmen). Single bird observed at Eagle Creek, *Marion*, on July 21 (Don Williams).

Black Vulture Single bird observed along Patoka River, *Pike*, on July 28 (Peter Scott).

Swallow-tailed Kite Single individual observed from Tippecanoe County on June 1 (Marty Jones) and still present on June 6.

American White Pelican 1 observed at Franke Park, *Allen*, on June 1 (Dave Messmen) and still present on June 3. Two individuals observed at Eagle Creek Park, *Marion*, on June 3 (Bill Buskirk) and still present on June 4. One observed at Goose Pond, *Greene*, on July 10 (Amy Kearns). One observed at Lake Monroe, *Monroe*, on July 13 (Cathy Meyer).

Common Gallinule Common Gallinules were again present at all the normal locales. The high count of 12 for Grant St. Wetland, *Lake*, occurred on June 22 (Ken Brock). Nesting was confirmed when a juvenile was observed on July 25 (Matt Kalwasinski). The Goose Pond, *Greene*, high count of 8 occurred on June 2 (Lee Sterrenburg). The high count of five for Willow Slough, *Newton*, occurred on July 6 (Ken Brock). Gallinules were also observed at several other locations. Two observed at Pigeon River, *LaGrange*, on June 8 (Jim Haw). Nine observed at Chase Street, *Lake*, on July 5 (Matt Kalwasinski). Two observed at Wolf Lake, *Lake*, on July 30 (Matt Kalwasinski).

Sora One heard at Goose Pond, *Greene*, on June 2 (Robert Kissel).

Virginia Rail 13 including 10 chicks observed at Goose Pond, *Greene*, on June 12 (Lee Sterrenburg).

Sandhill Crane Two birds observed near Goose Pond, *Greene*, on June 1 (Brad Feaster). One bird observed at Goose Pond, *Greene*, on July 16 (Lee Sterrenburg).

Bonaparte's Gull Single individual reported from farm pond in St. Joseph County on July 30 (Steve Sass). Four observed at Miller Beach, *Lake*, on July 30 (Michael Topp).

Franklin's Gull Nine observed at Miller Beach, *Lake*, on July 29 (Michael Topp).

Laughing Gull Single individual reported from Mounds SRA, *Franklin*, on July 24 (Bill Buskirk).

Caspian Tern Single individual observed at Cane Ridge, *Gibson*, on June 3 (Vern Wilkins).

Least Tern Nesting occurred for the first time this year at Goose Pond, *Greene*. At least five individuals were present throughout the period

and nesting was confirmed on July 23 (Amy Kearns).

Common Tern Single individual observed at Goose Pond, *Greene*, on June 2 (Lee Sterrenburg). Two individuals observed at Eagle Creek Park, *Marion*, on June 4 (Don Gorney). Single bird observed at Goose Pond, *Greene*, on June 11 (Ed Hopkins).

Forster's Tern Single bird observed at Lake Gibson, *Gibson*, on July 12 (Amy Kearns).

Black Tern 4 individuals observed at Goose Pond, *Greene*, on June 2 (Lee Sterrenburg). Twenty observed at Cane Ridge, *Gibson*, on June 3 (Vern Wilkins). Single bird observed at Cane Ridge, *Gibson*, on June 11 (Ed Hopkins). One at Kankakee Sands, *Newton*, on June 1 (Jed Hertz).

American Golden-Plover Single individual reported from Graysville Hutonville Bottoms, *Sullivan*, on July 13 (Steve Lima).

Piping Plover Single juvenile observed at Lake St. Beach, *Lake*, on July 23 and July 27 (Ed Hopkins). On 21 July Casey Zillman found (4) at Miller Beach; Mark Roome independently identified these birds. For the season, seven birds were reported.

American Avocet 1 observed at Cane Ridge, *Gibson*, on June 18 (Chuck Mills). Single bird observed at Michigan City, *LaPorte*, on July 11 (Brendan Grube). Three birds reported from U.S. Steel, *Lake*, on July 19 (Ed Hopkins). Two individuals observed at Duke Energy Plant, *Gibson*, on July 24 (Chuck Mills). Six were observed at Miller Beach, *Lake*, on July 26 (Leland Shaum).

Willet Although almost two dozen Willets were reported on the lakefront this summer. Indeed, this summer's total is the lowest since nine were recorded back in 2008. As expected, all of this summer's aged birds were adults (July

juveniles have been reported on only three Occasions (Ken Brock).

Summer 2013 Willet Records

No.	Date	Location	Observer
1	5-Jul	Miller Beach	M. Topp
1	5-Jul	Hammond Marina	M. Topp
1	12-Jul	Miller Beach	M. Topp
2	14-Jul	Dune Acres	P. Starin
6	14-Jul	Indiana Dunes S.P.	C. Farrell
1	16-Jul	Indiana Dunes S.P.	B. Bumgardner
1	18-Jul	Miller Beach	J.K. Cassady
1	19-Jul	Indiana Dunes S.P.	P.B. Grube
1	23-Jul	Miller Beach	J.K. Cassady
1	24-Jul	Indiana Dunes S.P.	B. Bumgardner
4	30-Jul	Miller Beach	M. Topp

Black-necked Stilt Stilts were recorded throughout the period in four different locales with breeding evidence recorded at three of those. The high count of 11 individuals for Goose Pond, *Greene*, occurred on June 3 (Lee Sterrenburg). The high count for Gibson Lake, *Gibson*, occurred on June 21 when 75 including at least 20 chicks were observed (Chuck Mills). The high count for the Graysville Bottoms, *Sullivan*, occurred on July June when 14 including eight chicks were observed (Steve Lima). The high count for Clay County occurred on July 20 when four including two young were observed (Peter Scott). Other records include a single bird observed near Lebanon, *Boone*, on June 16 and June 17 (Cloyce Hedge) as well as three, including a chick observed in flooded field near Elnora, *Daviess*, on July 9 (Amy Kearns).

Greater Yellowlegs 1 observed at Goose Pond, *Greene*, on June 26 (Robert Kissel). Three observed in Sullivan County on July June (Steve Lima). One observed near Graysville, *Sullivan*, on July 8 (Steve Lima). Single individual reported from Graysville Hutonville Bottoms, *Sullivan*, on July 13(Steve Lima).

Lesser Yellowlegs Single bird reported near Goose Pond, *Greene*, on June 13 (Brad Feaster).

One individual reported from Goose Pond, *Greene*, on June 21(Lee Sterrenburg).

Ruddy Turnstone 1 observed at Hitchcock Road Pond, *LaPorte*, on June 1 (Ken Brock). Single individual observed at Duke Energy Plant, *Gibson*, on July 24 (Chuck Mills). A flock of (13) adults at Miller Beach on 31 July (John K. Cassady &KJB) elevated the season total to 17, which is the highest summer count since 2002 (Ken Brock).

Sanderling Single individual observed at Miller Beach, *Lake*, on July 12 (Matt Kalwasinski). Five reported from Miller Beach, *Lake*, on July 13 (Ken Brock).

Semipalmated Sandpiper 1 observed near Graysville, *Sullivan*, on July 8 (Steve Lima). Two observed at Miller Beach, *Lake*, on July 13 (Michael Topp). Single bird observed at Ellison Road, *Allen*, on July 13(Jim Haw).

Western Sandpiper Single individual observed at Anson Business Park, *Boone*, on July 31(Roger Hedge).

Pectoral Sandpiper 4 observed in Sullivan County on July June and July 8 (Steve Lima). Two individuals reported from Graysville Hutonville Bottoms, *Sullivan*, on July 13 (Steve Lima).

Upland Sandpiper Single individual observed at Kankakee Sands, *Newton*, on June 1 (Ken Brock). A single bird that was first reported at the Ft. Wayne airport remained until at least July 15 (Leland Shaum).

Whimbrel

Summer 2013 Whimbrel Records- Ken Brock

No.	Date	Location	Observer
1	16-Jul	Indiana Dunes S.P.	B. Bumgardner
1	19-Jul	Indiana Dunes S.P.	P.B. Grube
1	29-Jul	Miller Beach	M. Topp
1	31-Jul	Miller Beach	J.K. Cassady



Figure 3. Whimbrel, Dunes State Park July 19 2013, Porter Co. Photo by Pete Grube

Marbled Godwit Single bird observed at Miller Beach, *Lake*, on July 6 (Ken Brock) and six there July 18 (John Cassady).

Dunlin 1 observed at Hitchcock Road Pond, *LaPorte*, on June 1 (Ken Brock).

Stilt Sandpiper 1 observed in Sullivan County on July 6 (Steve Lima). Two observed near Graysville, *Sullivan*, on July 8 (Steve Lima). One observed at wetland in Lagrange County on July 9 (Sam Plew). The nine recorded this season constitute the largest summer count since 2000. The first arrivals consisted of (3) alternate adults at McCool Basin on 17 July (Penny Starin).

Short-billed Dowitcher Single bird observed at Cowles Bog, *Porter*, on June 30 (Brendan Grube).

Wilson's Snipe Snipe were reported at Goose Pond, *Greene*, throughout the period with the high count of two individuals occurring on June 21 and July 16 (Lee Sterrenburg). One observed near Graysville, *Sullivan*, on July 8 (Steve Lima). Two individuals observed at Eagle Creek Park, *Marion*, on June 4 (Don Gorney).

Franklin's Gull The lakefront's largest summer count ever recorded, was logged 29 July

when Michael Topp observed a flock of (9) adults at the Miller Beach impoundment (Ken Brock).

Common Nighthawk Weather on the summer season's final day (31 July) was dominated by a thick overcast, fog, and periodic drizzle. At 10:00AM, John K. Cassady and KJB noted (34).

Yellow-bellied Flycatcher A tardy migrant was singing in Indiana Dunes S.P. on 6 June (Brad Bumgardner).

Least Flycatcher Single individual reported from Eagle Creek Park, *Marion*, on June 18 (Don Gorney), plus two in Indiana Dunes.

Alder Flycatcher Single individual reported from Cass County June 17 (Landon Neumann).

Western Kingbird Western Kingbirds were again reported from the vicinity of the Evansville airport, *Vanderburgh*. They were first reported on July 2 (Dan Collins) and remained until at least July 15. The high count of four occurred on July June (Evan Speck) and July 7 (Lee Sterrenburg).

Loggerhead Shrike Single individual observed at Patoka NWR, *Gibson*, on June 10 (Jeremy Ross) and was still present on June 16. Nine including three juveniles reported from Davies County on June 18 (Lee Sterrenburg). Single bird observed on Highway 61, *Warrick*, on July 27 (Gary Bowman).

Blue-headed Vireo Single individual heard at Pigeon River FWA, *LaGrange*, on June 30 (Jim Haw).

Bell's Vireo Single individual observed from Allen County on June 1 (Jim Haw) and still present on June 18. Single individual observed at Eagle Marsh, *Allen*, on June 4 (Jim Haw) and still present on June 23. Single individual reported from ACRES' Herman Hammer Wald

Preserve, *Allen*, on June 13 (Jim Haw). Single individual reported from Arrowhead Prairie, *Allen*, on July 15 (Leland Shaum).

Philadelphia Vireo Single bird observed at Foster Park, *Allen*, on July 27 (Greg Majewski).

Lawrence's Warbler Single individual observed at Potato Creek SP, *St. Joseph*, on July 12 (Ben Thesling).

Chestnut-sided Warbler Single individual observed at Tri County FWA, *Allen*, on June 6 (Jim Haw). Single individual reported from Potato Creek SP, *St. Joseph*, on June 15 (Ken Brock). Three observed in rural Dearborn County on June 24 (Bob Decker). Single individual reported from Jackson Moraine Preserve, *Lake*, on July 13 (Ken Brock).

Black-throated Green Warbler Single individual observed in Morgan County on June 4 (Doug Johnstone). Single individual observed at Roush FWA, *Huntington*, on June 11 (Jim Haw). Four reported from Tower Ridge road, *Monroe*, on June 30 (Steven Lima).

Pine Warbler Single individual observed at Pigeon River, *LaGrange*, on June 8 (Jim Haw). Three birds recorded at Eagle Creek, *Marion*, on June 11 (Spike Selig) and still present on June 30 (Don Williams). Two observed at Pigeon River, *LaGrange*, on June 15 (Jim Haw). Single bird heard singing at Salamonie River SF, *Wabash*, on June 21 (Brad Jackson). Single bird observed at Versailles SP, *Ripley*, on June 24 (Bob Decker).

Connecticut Warbler Single individual heard in Evansville, *Vanderburgh*, on June 8 (Brian Taylor). Single individual observed at Kankakee FWA, *Starke*, on June 8 (Lynea Hinchman).

Canada Warbler Single individual observed at Spring Creek Nursery, *Cass*, on June 4 (Landon Neumann). Single individual observed at

Kankakee FWA, *Starke*, on June 8 (Lynea Hinchman).

Clay-colored Sparrow Single individual observed by many individuals in eastern Elkhart County through at least June 21.

White-throated Sparrow Single bird reported from Dunes SP, *Porter*, on June 24 (Brendan Grube).

Blue Grosbeak Single individual observed at Eagle Marsh, *Allen*, on June 2 and June 23 (Roger Rang). Single individual observed in SW Allen County on June 30 and July 28 (Roger Rang). Single individual reported from Fayette County on June 30 (Brad Jackson). Single bird observed in Rush county on July 5 (Brad Jackson). One was singing at Miller Beach again this year, *Lake* on July 4 (John Cassady).

Yellow-headed Blackbird Single male reported from Grant Street Wetland, *Lake*, on June 18 and June 19 (Sam Plew).

Western Meadowlark 2 individuals reported from Kankakee Sands, *Newton*, on June 15 (Jed Hertz). One individual reported from Kankakee Sands, *Newton*, on June 23 and July 06 (Jed Hertz). Single individual observed in western Lagrange County through June (Sam Plew).

Pine Siskin Single individual observed at Lincoln SP, *Spencer*, on June 1 and June 2 (David Ayer). Siskins reported from feeder in Monroe County until June 7 (Jim Hengeveld). Single individual observed at feeder in northern Vanderburgh County on June 9 (Dan Collins). Three individuals observed at large feeder in Warren, *Huntington*, through June 9 (Ron McElfresh). Single individual observed at Eagle Creek, *Marion*, on June 10 (Don Gorney). Single individual reported from Newton County on June 25 (Doug Gerbracht).

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