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Cover photo: One of 324 reported this spring (the average is 3), this Red-necked Grebe was caught enjoying a shad at Goose Pond, *Greene* 15 March 2014, Photo by Michael Brown. Data by Ken Brock

Back cover photo:
Neotropic Cormorant found by Steve Lima, Turtle Creek Reservoir, *Sullivan* 9 April 2014. Photo by Marty Jones

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A new Editor, notes on this winter's effects on avian populations and electronic media

John C. Kendall IAQ Editor, jeffro595@yahoo.com

I originally began writing an introduction to Spring Field notes during the spring season, as we had an open Editor position to fill. That introduction thus evolved into an article, as a volunteer arose to prepare the Field Notes and fill the spring Editorship. I would like to introduce our new Spring Editor of Field Notes, Bob Carper; a talented Illinois birder who moved from Illinois to southern Indiana. We are very glad to have Bob aboard and appreciate him preparing Spring Field Notes. We have a talented group of seasonal and special editors at IAQ and we greatly appreciate their time and effort! Thanks to each of our Editors!



Having lived in Central Illinois all his life, Bob took a job transfer to Central Indiana at the beginning of 2013. After years of being involved in astronomy he took an interest in birding about ten years ago when a Red-bellied Woodpecker kept calling while he was building a new observatory. For the last six years he has tried to make up for all those non-birding years by being in the field as much as possible and studying birds when not in the field. In Illinois he was an active member of Starved Rock Audubon, participating in several Christmas Counts and the Illinois equivalent of the Big May Day Bird Count. Last summer he started bushwhackingbirder.com, a birding blog, to share his passion for birding and to motivate people to reflect upon the different aspects of their birding. Along with his wife and daughter he currently lives in Franklin. And yes, he eBirds.

Blame the weather

Linking climatic and avian trends has long been a tenet of IAQ editors and for that matter, for those of virtually all birding journals. Weather is indeed something that we can easily sense, as we too have to face the effects on our lives. Let's face it; there is a fascination to seeing these patterns play out with a set of binoculars in hand, as opposed to a snow shovel.

Detailed in this spring's Field Notes, postings and social media reports included inland appearances of diving waterfowl. These were often in bizarre locations; from Mergansers in ditches to grounded Red-throated Loons and Red-necked Grebes in streams.

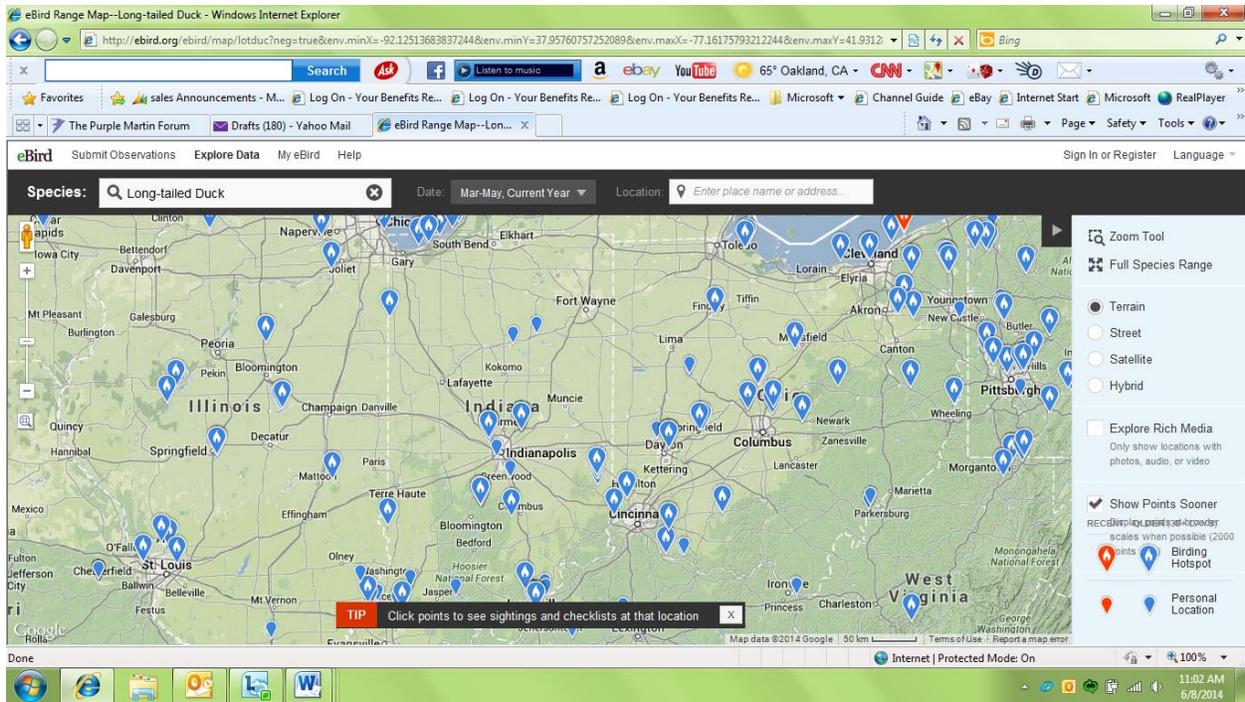
The first case in point is Long-tailed Ducks. eBird range maps below show the unusual increase in Long-tailed Ducks away from Lake Michigan that, along with the winter itself, continued well into spring. This is a species that winters in number to our north on unfrozen areas of the lake (and offshore Lake Michigan in former winters), but also winters on E and SE coasts. Some coastal birds presumably migrate roughly NW, making inland Indiana astride these migrants paths. Both Brock's Birds of Indiana and eBird data show a typical spring peak during mid-

March with few birds after early April. A common conclusion is that these birds were from the wintering Great Lakes population, fleeing the frozen lakes southward. However, based upon known migration dates, can we wholly rule out that some of the observed birds could have been coming from the east coast?

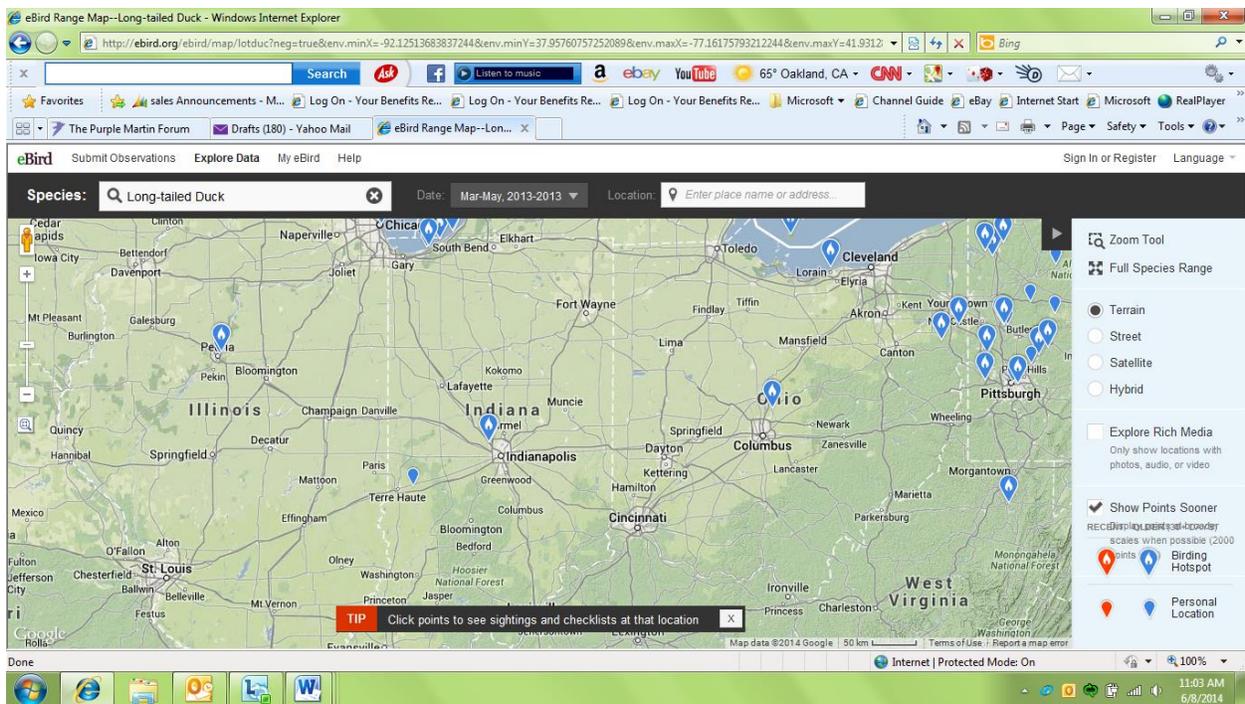
Below, eBird maps also highlight the unprecedented surge in reports of Red-necked Grebes this spring. This is another species that is 4 times more abundant on Lake Michigan than inland here. Red-necked Grebes primarily winter off the NE coast. There is also a faction that normally winter in northern Great Lakes. The center of their coastal wintering area is further north than Long-tailed Ducks, as is the center of their migratory path (over the Great Lakes to the coast). Record grebe numbers were found this spring. Great Lakes ice coverage peaked 6 March 2014 per NOAA. However, even in some of the southern Great Lake areas, ice had apparently frozen out birds a month earlier, evidenced by diver mortality events such as grounded Red-throated Loons and others found in our Lakefront counties at that time. Where did these southern Indiana grebes come from? The popular assumption is that these had to be these wintering Great Lakes birds, as was the thinking during past hard winters. Alternately, could some have been migrating from the coast and dropping out just south of the “ice line”? The normal mid-late March migratory peak fits with the timing of their arrival in S. Indiana. Using eBird and Brock data, their appearance did overlap the sparse, but regular appearance dates for spring migration here. Furthermore, eBird shows that birds were arriving at the same time at areas further south and east than the Indiana-Ohio band.



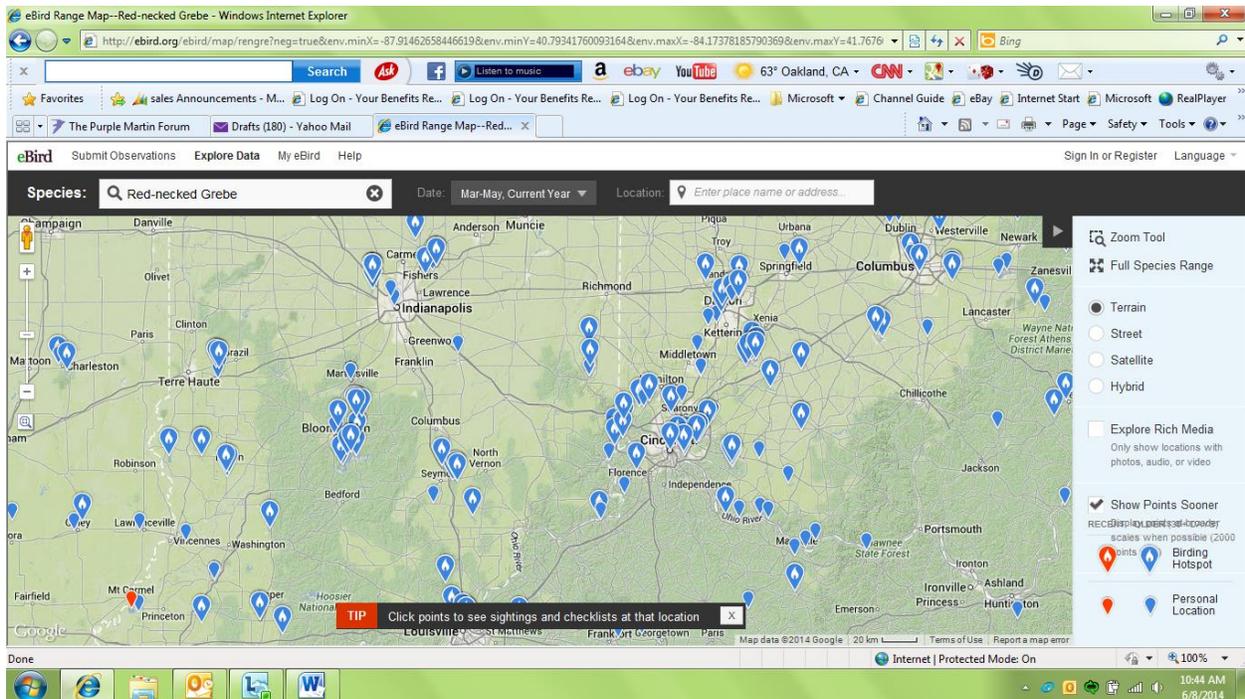
Long-tailed Duck, 29 Mar 2014, Michigan City Harbor, LaPort. Photo by John C. Kendall



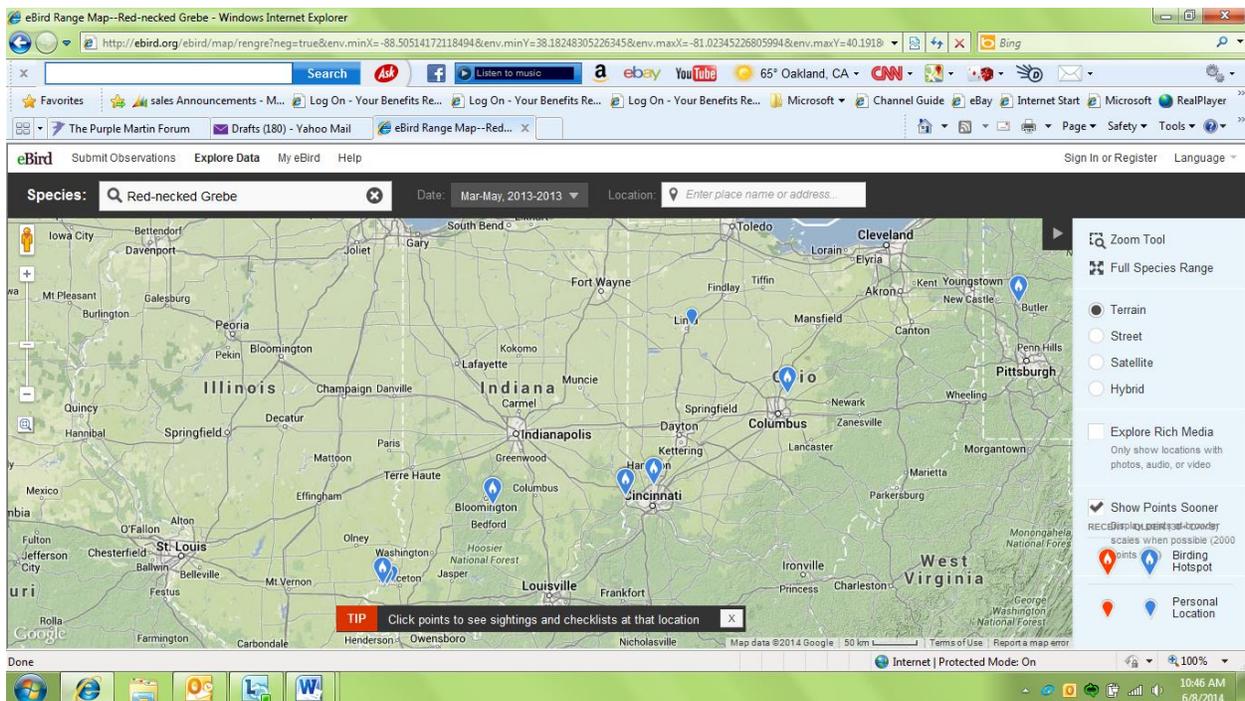
Spring 2014 Long-tailed Duck reports, following a similar pattern to other wintering divers, including Mergansers. Record numbers of this species were found well into May on southern Lake Michigan, where they haven't reached in winter in decades.



Spring 2013 Long-tailed Duck distribution, showing typical limited, spotty distribution.



Spring 2014 Red-necked Grebe distribution. Note the band south of Indianapolis and Columbus, OH. It would seem likely from reports that the “ice-line” was just north of these areas at the time. Individual locations also reveal the unusual use of rivers and ponds.



Spring 2013 Red-necked Grebe distribution showing few records the year before.

We hope to be able to use eBird more frequently in Field Notes as we adapt to providing you with a more valuable IAQ in this digital electronic information age.

Weather and climate do not explain all changes in status and distribution. One example: A single event-(the winter of 1978) was widely blamed for the loss of Northern Bobwhite populations. When the bird didn't recover, it took years for ornithologists to analyze what pressures might be attributed to the quail's long-term decline other than just a single bad winter, the farm bill or the increase of coyotes for that matter. But which factor was the most critical cause or was it the combination? Is it conceivable to think that the Bobwhite can be brought back to the point of where once again, virtually every Indiana farm has a winter covey?

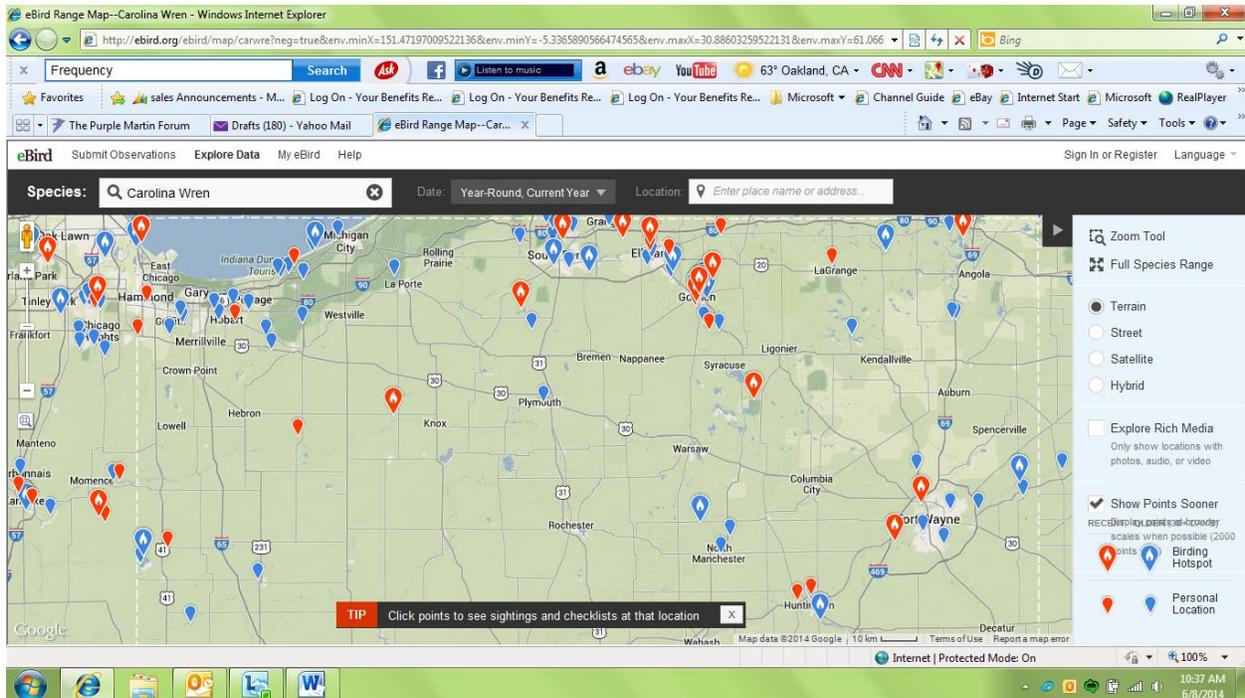


Northern Bobwhite covey, *Hamilton* 17 December 2010. Photo by Ryan Sanderson

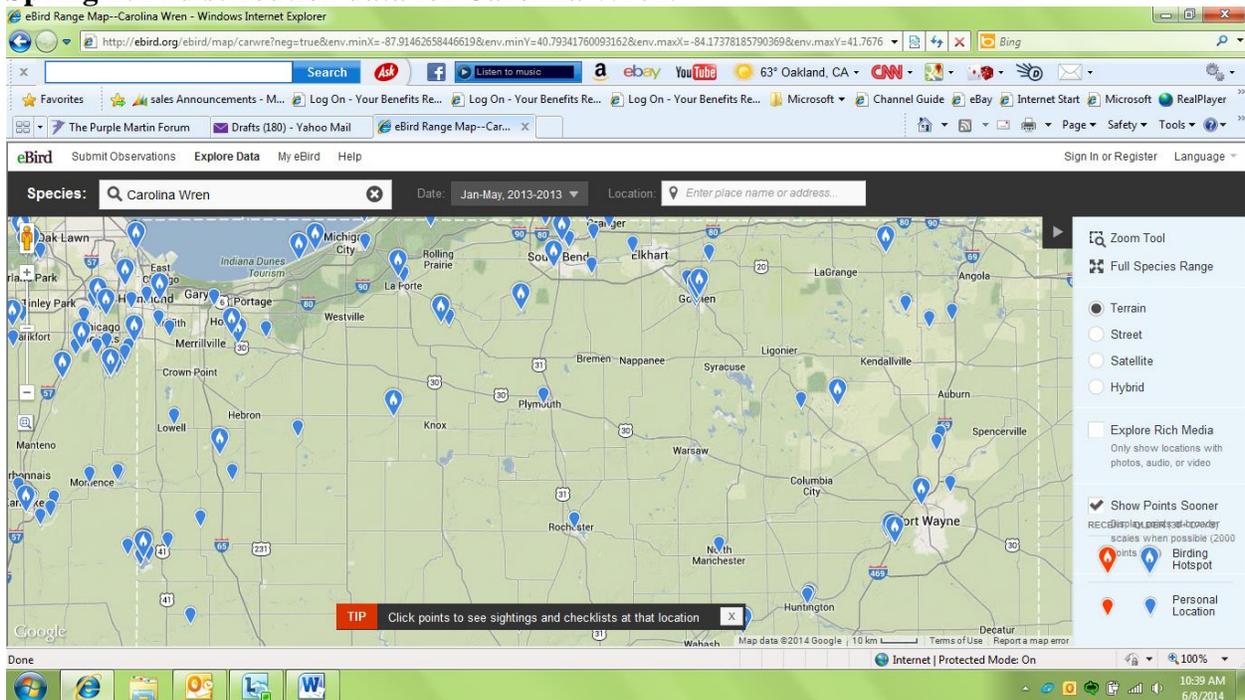


Northern Bobwhite 21 June 2014, Vermillion. Photo Ben Cvengros

Another hypothesis that I mentioned in the February IAQ issue (based on past hard winter data) was the prediction of Carolina Wren mortality. Yet, despite cases two or three decades ago documenting the retraction of this species after hard winters, the eBird data below shows that rumors of this wren's northern-range demise may have been widely exaggerated. Here, we have a situation whereby weather did not produce the expected range contraction. Could this bird now be immune to cold?



Spring 2014 distribution data for Carolina Wren.



Spring 2013 distribution data for Carolina Wren. There were as many or more reports and locales in 2014, despite the brutal winter. See also Winter Feeder Count data.

Since climate didn't produce the expected response of Carolina Wren mortality and range contraction didn't occur, perhaps there are other factors that have allowed this species to move northward. Another mega-trend that we don't mention very often (perhaps the proverbial elephant in the room) is the huge increase in bird-feeder operations that has simultaneously occurred. Could feeders provide the "something else" that has changed to allow this furtive wren both to move north in past decades and survive even this past winter?

Does data such as this change our list of which species are today considered "half-hardy"? Certainly the list of species that are able to use the ever-widening array of feeder opportunities is growing. But if we go beyond just a list of species and look at the number of feeders, we hardly have to look past our own yards these days to wonder what effects our feeders are having. It is clear that we can see Cooper's Hawks, House Sparrows, Starlings and Cowbirds taking full advantage. What is the relative effect on the status of our migratory species and others that do not use feeders yet compete for nesting cavities or are predated and parasitized by these species that do benefit? Are feeders "good"?

Beginning with the tea-kettle song of the Carolina Wren in Randy Pals's backyard (sub-zero, 24" of snow) and strange reports of Red-necked Grebes in ponds and streams in more southerly Indiana areas, spring 2014 was more like an extension of winter. It is important to thank our readers for providing their reports and data. The exciting thing is to wait and see what surprises ornithologists will provide as data collection, in-depth studies and conclusions are completed. What will we learn this time? Perhaps more importantly, what actions can we take to help conserve them?

Some notes and recommendations regarding electronic and social media:

As shown in the above cases, birding data can be used to easily see basic trends and evaluate important changes in species' abundance and distribution. However, your data isn't just about lists and listing. Conservation of habitat and other actions for threatened species depend heavily on your field visit data.

There are currently at least 4 Indiana social media birding pages, IN-bird postings, Twitter, and eBird. In addition, there are dozens of blogs and photo pages. Some people argue that there is now no need for journals of field notes with so much information available. However, a growing disadvantage of the electronic media today is that there are so many outlets for reporting bird sightings that compilers of IAQ Field Notes and other journals no longer can ensure a fairly complete summary of sightings or come close to an accurate data set regarding changes in the status of a given species.

One can defend a position whereby having complete summaries is possibly even more valuable today. What we have now is a hodge-podge of incomplete data and particularly in the social media case, no historic archival mechanism at all to retrieve and preserve sightings. It is recognized that not all birding today done is done with the intent of posting data to a website. It is also safe to say that we will never collect 100% of sightings data.

There certainly is value of accurate comparisons against historic trends. There are also perhaps more important reasons to post data to one archive-capable site. Just in terms of bird conservation actions, state endangered lists come to mind. The mass of citizen science data compiled and preserved in our journal summaries can be influential in changing these lists and

getting action in Indianapolis, and elsewhere, to protect troubled species before they are lost, and removing those who have recovered or perhaps didn't belong for one reason or another. IBRC also plays a role in using this data for such purposes. There are many birds that we know from journals such as *North American Birds* and *Field Notes* which are in trouble and are not on these very short lists. By compiling *Field Notes*, you probably know many of these species. There are many debatable candidates; From Rusty Blackbird to Ruffed Grouse and perhaps King Rail (of which so little is known) and aerial insectivores, we have learned that some species can decline quicker than our ability to add them to these lists and do something about it. With our pastime growing and so many birders afoot, we have the ability to use these efforts to benefit such species by reporting and compiling data.

Indiana DNR Endangered Birds	Indiana USFWS Species of Concern
Piping Plover	Black Tern (former nesting species)
Least Tern	Cerulean Warbler
	Common Tern
	Golden-winged Warbler
	Henslow's Sparrow
	Loggerhead Shrike

After speaking with compilers, the simple answer would be to have one central database to report your data. We certainly are not knocking social media and fully support it. It has and will have a strong role in expanding birding and making it enjoyable. But, if you want your sighting to "count", and contribute to the scientific record by inclusion in the databases and *Field Notes* to support conservation, our recommendation and best practice recommendation for now is to make sure that sightings are reported to both IN-bird and eBird. There is a link within an eBird submission reports that you can email to yourself, copy and paste into IN-bird that takes a few minutes or less rather than just providing a link to your eBird data on IN-Bird.

Good Birding,
John C. Kendall

Field Notes - Spring 2014 (Mar. - May.)

New Spring Field notes Editor, Bob Carper (bobngc2157@yahoo.com)

Spring weather was mostly a cold hangover from the powerful winter. Precipitation varied across the state, as has been typical in recent springs. Some areas in the north were relatively dry, while southern areas received more than their share of precipitation, some of which was late snow.

Perhaps the most interesting observations revolved birders finding diving waterfowl species in the S and SE part of the state in Late March-April. Several state and county spring records were set in terms of number of seasonal records and particularly, at locations away from Lake Michigan and in odd locations, such as ditches, streams and small ponds-any place that seemingly held any open water pockets.

Rarities included Black-bellied Whistling Duck, Eurasian Wigeon, Pacific Loon, Western Grebe, Eared Grebe, Neotropic Cormorant, Tricolored Heron, Gloss and White-faced Ibis, Swainson's Hawk, Curlew Sandpiper, White-winged Dove, Scissor-tailed Flycatcher and Snowy Owl.

Thanks to Ken Brock for extensive use of his Indiana Spring Report and Roger Hedge and Jim Haw for their spring sightings summaries. The very helpful tabular summaries were also provided by Ken.

Abbreviations:

CBC = Christmas Bird Count

FWA = Fish & Wildlife Area

NWR = National Wildlife Refuge

SP = State Park

SF = State Forest

SRA = State Recreation Area

Snow Goose

Don Gorney reported 10,000 at Goose Pond FWA, *Greene* on 1 March.

Barnacle Goose

One was photographed with Canada Geese in Eagle Creek Park, *Marion* on 6 March (Mark Welter).

As was the case for some of its goose cohorts, the bird was later observed to have been missing its right foot.

Black-bellied Whistling-Duck

One was found at Eagle Creek Park, *Marion* on 28 May (Bob Buskirk).



Figure 1. Black-bellied Whistling-Duck - Eagle Creek Park, 29 May 2014, Marion- Photo by Marty Jones

Eurasian Wigeon

John C. Kendall Found a male at Kankakee FWA, on 26 April. This is the third adult male reported in the last two years.

Species	Observed
WODU	1865
GADW	3764
AMWI	820
ABDU	276
MALL	28025
BWTE	8071
NOSH	5407
NOPI	33623
GWTE	6723
CANV	2400
REDH	9965
RNDU	18787
GRSC	798
LESC	8848

Northern Pintail

Heath D. Hamilton and Mike Sertle counted (23,698) at several Patoka River NWR, *Gibson and Pike* locations on 7 March. This total is Indiana's third highest count. The 33,623 season count is Indiana's highest ever spring total.

Canvasback

A count of (1205) at Patoka River NWR, *Gibson and Pike* on 7 March (Heath D. Hamilton & Mike Sertle) provided Indiana's largest single party count since 1949.

Redhead

The season total of 9965 is a record high for Indiana's spring season. The peak daily count was (1128) on Brookville Res, *Franklin and Union* on 8 March (William H. Buskirk).

Ring-necked Duck

A 7 March count of (5810) at Patoka River NWR, *Gibson and Pike* (Heath D. Hamilton & Mike Sertle) constituted the state's second largest single party count.

White-winged Scoter

One at Gibson Lake, *Gibson* on 10 May (Charles E. Mills & L.D. Harry), provided the first May record for the southern tier.

Species	Observed
HADU	0
SUSC	4
WWSC	617
BLSC	0
LTDU	1982
BUFF	2017
COGO	2728
HOME	902
COME	2033
RBME	5565
RUDU	2497

Long-tailed Duck

Winter ice on Lake Michigan forced large numbers of Long-tailed Duck southward and many lingered off the Indiana lakefront well into spring. A number of unusually large counts were made this spring. On 28 March Brendan J. Grube counted (189) birds during a lakewatch at the Bird Observation Platform, *Porter* and at the same location Brendan logged (428) on 6 April. The latter is Indiana's largest count since Russell E. Mumford counted (500) at Michigan City Harbor, *LaPorte* on 14 December 1957. For the season a phenomenal 1907 were logged, which is the largest spring count ever logged in the state. A near alternate-plumed female at Lake Gibson, *Gibson* on 23 April (Amy Kearns), provided the southern tier's second latest record.

Common Merganser

The pair lingered at Grant Street Wetland, *Lake* until at least 8 May (John K. Cassady et al.) provided the lakefront's second latest record. 76 on the Wabash and Mississinewa Rivers, *Huntington, Wabash, & Miami* 1 March. (Jim Haw, Marissa Windell). Other inland sightings occurred just prior or during this time downstate.

Red-throated Loon

It was another fine spring for this loon with 192 counted. The season's peak tally was recorded on

both 6 and 7 April when (31) were seen off the Bird Observation Platform, *Porter* (Brendan J. Grube).



Figure 2. Grounded Red-throated Loon being released By Brad Bumgardner, 10 February, Portage Lakefront Park, Porter. Photo by John C. Kendall

Pacific Loon

John C. Kendall found a basic-plumed bird on Big Chapman Lake, *Kosciusko* on 10 April, providing a first record for that county.

Eared Grebe

Tim Street reported (1) in *Morgan* on 9 March and Donald R. Whitehead et al., identified another with Horned Grebes at Lake Lemon, *Monroe* on 19 March.

Red-necked Grebe

Prior to March 2014 Indiana's maximum daily count of (3) had been recorded eight times. This year an unprecedented March Red-necked Grebe tsunami inundated the state. Actually the term "unprecedented" fails to capture the magnitude of this spring's flight. This year's 324 birds compared to the previous maximum spring total of 14.

Western Grebe

Peter E. Scott found (1) at the Chinook Mine, *Vigo* on 19 March, providing the first record for that county. This individual lingered for a month; it was last reported on 19 April (Peter E. Scott).



Figure 3. Western Grebe - Chinook Mine, 4 April, Vigo Photo by Marty Jones

American White Pelican

It was a record-breaking spring for this pelican. The (849) that Lee W. Sterrenburg counted at Goose Pond FWA, *Greene*, on 20 March constituted Indiana's second highest count (only nine below the state maximum). On 22 March Vern W. Wilkins conservatively estimated that (1000) were in Goose Pond FWA, *Greene* unit G10N to establish a new high count for the state. Amy Kearns estimated (1000) birds were at Goose Pond FWA, *Greene* on 9 April. Finally, on 12 April Jerry I. and Sam Downs recorded (1342) at Goose Pond FWA, *Greene* (1300 of these were in Main Pool West).

Neotropic Cormorant

On 6 April Steve Lima photographed (1) at Turtle Creek Reservoir, *Sullivan*. This is possibly Indiana's seventh record, depending on the ultimate disposition of the *Dearborn* report.

American Bittern

This season's total of 25 is Indiana's lowest spring count since 2001. The dominant reason for this decrease was a marked decline in the numbers reported at Goose Pond FWA, *Greene*.

Tricolored Heron

Mark Welter found one at Stillwater Refuge, *Monroe* on 1 May. Photos were posted on Facebook.



Figure 4. Tricolored Heron at Stillwater Marsh, 1 May, Monroe - Photo by Mark Welter

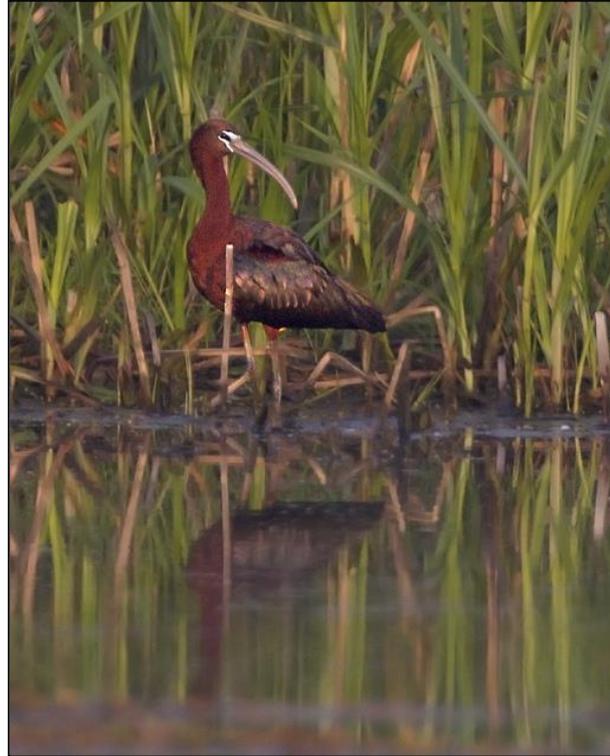


Figure 5. Glossy Ibis - Goose Pond, 24 May, Greene Photo by Marty Jones

Glossy Ibis

On 17 May Roger Hedge, Cloyce Hedge, and Michael Brattain found (1) on the west side of I-65, *Jasper*. Another Glossy was seen at Goose Pond FWA, *Greene* on 23 May (Lee W. Sterrenburg & Amy Kearns).

White-faced Ibis

Two record early birds (by two days) were at Goose Pond FWA, *Greene* on 20 April (Tom & Theresa Schwinghammer, and Lee Sterrenburg); these birds were photographed by Evan Speck on 21 April. Following an absence of five days, a single bird appeared in the same Goose Pond FWA, *Greene* unit on 26 April (Edward M. Hopkins). This handsome wader has now occurred in seven of the last nine spring migrations.

Mississippi Kite

A wandering bird flew over Eagle Creek Park, *Marion* on 11 May (Charlie E. Keller and Becky Lomax).

Swainson's Hawk

A beautiful light-morph adult was photographed at the Burn, *Montgomery* on 6 April (Greg Miller, Cheryl Harner, & Clint C. Murray). On 24 April an immature bird, apparently in molt, flew past the Bird Observation Platform, *Porter* (John K. Cassady & Brendan J. Grube).



Figure 6. Swainson's Hawk, The Burn, Montgomery 10 April 2014. Photo by Shari McCollough

Golden Eagle

There were scattered reports of 6 individuals, a normal pattern of mostly first year birds.

Merlin

The 52 Merlins reported this year marks the third consecutive spring in which the season total exceeded 50 birds. The spring's peak tally consisted of (5) birds that Brendan J. Grube counted on 12 April at the Bird Observation Platform, *Porter*.

King Rail

Following an eight-year hiatus this furtive species once again

appeared on the lakefront. Two records were logged in the Beverly Shores Great Marsh, *Porter* this spring. The first was heard calling in eastern reaches of Beverly Shores on 17 May (John K. Cassady) and the second was near the artesian well in w. Beverly Shores (Jeffrey J. McCoy). A pair, one seen, the other vocalizing nearby, Limberlost Swamp *Jay* 31 May (Jim Haw, Sandy Schacht).

Whooping Crane

While conducting a 16 April longshore flight watch at the Bird Observation Platform, *Porter* Brendan J. Grube observed (1) migrating westward with a flock of Sandhills.

Black-bellied Plover

On 15 May Don Gorney reported (44) at Goose Pond FWA, *Greene*. This tally is Indiana's second highest spring count and almost double the state's next highest inland record.

American Golden-Plover

The spring total was frightfully low, indeed the lowest since 1998. The season's largest tally was (150) the Amy Kearns reported at Gibson Lake, *Gibson* on 8 April.

Piping Plover

The most noteworthy report involved an inland un-banded bird at Gibson Lake, *Gibson* on 6 May (Chuck E. Mills).

Black-necked Stilt

One at Goose Pond FWA, *Greene* on 25 March (Lee W. Sterrenburg) tied Indiana's earliest arrival date, which was set back in 2012.

Willet

As shown in the below table a wave of migrants passed through the state in late April providing an unusually wide distribution across Indiana.

Marbled Godwit

The year's first birds, a flock of (16), appeared at Cane Ridge, *Gibson* on 22 April (Vern W. Wilkins)

& Evan Speck). Three days later Gary Langell observed a flock of (10) at Sillwater Marsh, *Monroe*.

Sanderling

The (37) birds that Chuck Mills and Amy Kearns saw at Gibson Lake, *Gibson*, on 15 May tied Indiana's third largest spring count.

Least Sandpiper

A count of (874) at Patoka River NWR, *Gibson and Pike* NWR on 15 May (Heath Hamilton, Brooke Burrows, and Amy Kearns) constitutes a new high count for Indiana.

Curlew Sandpiper

On the afternoon of 2 May Penny Starin logged the rarest shorebird ever recorded at McCool Basin, *Porter*. Unfortunately, the bird did not linger, as birders arriving within an hour were unable to find the bird. This is Indiana's sixth Curlew Sandpiper record and the second for the lakefront.

Long-billed Dowitcher

It was a record spring for this striking shorebird (see table). The prize report was (24) alternate or near alternate birds that Lee W. Sterrenburg reported at Goose Pond FWA, *Greene* on 28 April. This observation constitutes the state's second largest spring count.

Wilson's Snipe

Young Wilber and Marlin Schrock found a nest containing four eggs on their *Lagrange Co* farm. On 6 May Bruce Glick was taken to the nest and obtained photographs of the eggs. This is the fourth snipe nest reported in the state.

Iceland Gull

Indiana's 4th inland record was logged 8 April when Amy Kearns photographed a bleached first or second-cycle bird at Gibson Lake, *Gibson*. Additionally, the wintering adult at the Hammond Marine, *Lake* lingered until 5 May (Carolyn A. Marsh), providing the state's third latest record.

Great-black Backed Gull

On 27 May Amar Ayyash observed a banded, first-summer bird at Whiting Refinery Beach, *Lake*. Amar investigated and learned that the bird hatched on Appledore Island, Maine last summer and was photographed in Rochester, NY in September 2013. Small world.

Least Tern

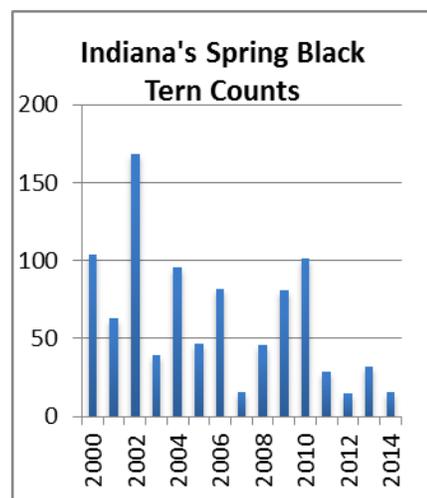
An out of normal range bird was seen at Eagle Creek Park, *Marion* on 13 May (Robert F. Buskirk).

Black Tern

This spring's unusually weak flight consisted of nine small reports of one to four birds. The graph below shows a distinct downward trend throughout the current century.

White-winged Dove

On 30 April (1) flew past the Bird Observation Platform, *Porter* during the longshore flight count (Brad Bumgardner, John C. Kendall, & Brendan J. Grube). This is the first lakefront White-winged Dove in two years. Surprisingly, a second bird flew past the same site, at very close range, on 21 May (Brendan J. Grube).



Snowy Owl

On 20 March Brendan J. Grube observed (1) that hitched a ride on eastward drifting pack ice off Dunes State Park, *Porter*. Another flew past the Bird Observation Platform, *Porter* on 28 March. Amazingly, for the second time in three years Roger Hedge's birdathon team observed a Snowy. This individual, discovered by Jamie Claus, was perched in a plowed field in Kankakee Sands unit E, *Newton* on 18 May (Mike Brattain, John K. Cassady, Lee Casebere, Cloyce Hedge, & Roger L. Hedge). This is Indiana's third May record.

Olive-sided Flycatcher

Hoosiers enjoyed the largest spring Olive-sided numbers ever recorded; the previous maximum spring total was on 19. The peak count was (4) birds logged by Chicago birder Robert Hughes at Willow Slough, *Newton* on 24 May.

Willow Flycatcher

A bird at Stillwater Marsh, *Monroe* that sang once on 3 May (Hengevelds et al.) tied Indiana's seventh earliest arrival date (along with five other records).

Eastern Kingbird

Dominated by Brendan J. Grube's fine counts of (305) on 12 May and (295) the following day at the following day at the Bird Observation Platform, *Porter* an excellent spring total was recorded this season.

Western Kingbird

The pair that nested at the Evansville Airport, *Vanderburgh* returned on 5 May (Evan Speck).

Scissor-tailed Flycatcher

One was found at TNC Kankakee Sands, *Newton* on 10 May (Aidan Rominger, Ryan Sanderson, & Ryan Hamilton). Kirk Roth and Ed Hopkins confirmed the sighting.

Northern Shrike

On 26 March Matt Beatty found (2), an adult and a young bird, at Cowles Bog, *Porter*.

Blue Jay

The season's peak flight at the Bird Observation Platform, *Porter* consisted of (7058) migrants that Brendan J. Grube logged on 8 May. This tally is Indiana's second largest count.

Fish Crow

Two record early birds were seen and heard in *Vanderburgh* on 10 March (Heath D. Hamilton). On 26 March Don Gorney saw (2) vocalizing birds fly over the north causeway at Eagle Creek Park, *Marion*, providing a county record.

Northern Rough-winged Swallow

One found in *Cass* on 22 March tied Indiana's fifth earliest date (Landon Neumann).

Bank Swallow

Three triple-digit counts, the largest of which was (400) in *Vermillion* on 17 May (Peter E. Scott), contributed to a new record spring total for the state.

Cliff Swallow

Don Gorney's 15 May count of (4625) at Goose Pond FWA, *Greene* exceeded the previous Indiana

maximum by almost a factor of seven. Remarkably, three days later Roger Hedge's birdathon team logged 4000+ at Willow Slough's J.C. Murphy Lake, *Newton*. Observers with Roger included: Mike Brattain, John K. Cassady, Lee Casebere, and Cloyce Hedge.

Sedge Wren

Last spring's total of two, was improved upon slightly this year, but numbers remain woefully low. Amy Kearns logged this year's peak daily count with (5) at Tern Bar Slough, *Gibson* on 1 May.

Gray-cheeked Thrush

This generally hard to find thrush appeared in unprecedented numbers throughout the state. Indeed, the 166 reported this spring is Indiana's highest total ever recorded. This extraordinary season total includes two spectacular Brendan J. Grube counts. Accompanying the 14 May warbler fall-out at Beverly Shores, *Porter* was (40) Gray-cheeked Thrushes (Brendan J. Grube). This total provided Indiana's second highest count, behind the 50 reported at Whiting Park, *Lake* on 13 May 1929. The following day Brendan logged another (20) Gray-cheeked Thrushes in the dunes west of Beverly Shores, *Porter*. On 19 April Don Gorney reported (1) at Conner Prairie, *Hamilton* which provided Indiana's third earliest record.

WARBLER

A spectacular migrant wave, seemingly consisting of every warbler in the United States, inundated Beverly Shores on 14 and 15 May. On the former day Brendan J. Grube tallied 31 species, included 96 Magnolias, 86 Redstarts, 75 Tennessees, 67 Chestnut-sideds, 27 Northern Waterthrush, 6 Mournings, 6 Golden-wingeds, and a Connecticut. In the presence of northerly winds many of these birds remained grounded the following day when Brendan counted 122 Magnolias, 93 Redstarts, 46 Tennessees, 34 Chestnut-sideds, and 8 Golden-wingeds in high Dunes west of Beverly Shores. Remarkably, four of Brendan J. Grube's warbler tallies tied or exceeded the highest daily count ever recorded in the state.

Magnolia Warbler

A new Indiana high count was set 15 May when Brendan J. Grube counted (122) in the Indiana Dunes.

Black-throated Green Warbler

A singing bird, seen at Eagle Slough, *Vanderburgh* 1 April (Tim E. Griffith, John and Lisa Schaust and Chris Newman), tied Indiana's fourth earliest arrival date.

Blackburnian Warbler

On 12 April Ryan Sanderson found an adult male in Indianapolis, *Marion* to establish a new early arrival date for Indiana.

Canada Warbler

An Indiana daily count record was set 21 May when Brendan J. Grube logged (31) birds. Twenty-eight of these were in Beverly Shores, *Porter* and (3) more were at the Bird Observation Platform, *Porter*.

Clay-colored Sparrow

It was a good spring for this sparrow; the 19 reported constitute Indiana's second highest spring total. This season's birds were unusually widespread. Although a majority came from the lakefront, there were also singing birds reported in *Allan*, *Boone*, *Hamilton*, and *St Joseph*.

Harris's Sparrow

Four were reported, including one at Greenwood, 6 May (Ryan Sanderson).



Figure 7. Harris's Sparrow Greenwood, Johnson, 6 May 2014. Photo by Ryan Sanderson



Figure 8. Smith's Longspur - The Burn. Photo by Clint Murray

Smith's Longspur

On 7 April Clint C. Murray counted (250) at the Burn, *Montgomery*. However, the season highlight was a count of (480) that Jeffrey J. McCoy made at Unit F of Kankakee Sands, *Newton* on 3 May, which was the state's second largest tally. These superb counts, along with numerous other smaller reports, combined to yield an excellent spring flight. For the season some 1359 birds were reported in the state.

Bobolink

James A. Haw observed a singing male in *Wabash* on 20 April. This is Indiana's eighth earliest record and is the state's earliest Bobolink since 1996. On 30 April Amy Kearns and Lee W. Sterrenburg counted (201) males in *Gibson*. This total included, "a flock of 70+ all singing simultaneously in an incredible cacophony of bird song." This is Indiana's second largest count for the spring season.

Rusty Blackbird

The (4000) that Brendan J. Grube counted at Grand Kankakee March, *Lake* on 15 April constitutes Indiana's second highest daily tally.

Western Meadowlark

There were several reports from *Cass, Benton, Newton and Montgomery*.

Yellow-headed Blackbird

For the second year a bird lingered at the Mt. Vernon, *Posey* feeder of Lowell and Jean Hess. This year's bird arrived on 13 March and was still present on 22 April. Surprisingly, two were reported during longshore flights at the Bird Observation Platform, *Porter*. On 16 Apr Brendan J. Grube observed (1) flying west with a mixed flock of blackbirds and on 24 April John K. Cassady and Brendan J. Grube observed a male flying eastward. On 13 May Kirk Roth observed (3) males and (2) female at Grant Street Wetland, *Lake*; this is Indiana's largest count in 17 years.

Pine Siskin

The two reported this season constitutes the lowest spring count since 2003.



RESULTS OF THE INDIANA 2013-2014 CHRISTMAS BIRD COUNT
Gary and Lisa Bowman, 2805 Prospect Ave., Vincennes, IN 47591

The 2013-2014 Indiana Christmas Bird Count was conducted from 14 December 2013 through 5 January 2014. We received or were able to obtain reports or partial reports of 51 counts this year. This is two more than last year. Two other planned counts were not held. We welcome the Gene Stratton-Porter and Warrick County counts that are new to our report this year.

The opening day of counts brought precipitation throughout the whole state with mainly snow but rain in the southern part of the state. Snow was heavy enough that some counts had to be postponed. The precipitation ended early in the day in the western counties with clearing from southwest to northeast. The following day produced pretty good weather which held until the next busy count day. Again by the weekend the weather caused serious problems with counts. Saturday the whole state was covered with in most cases all day rain. And in the southern part of the state in particular the rains were torrential record breaking rains that caused some more postponements. The following day, brought much better conditions although it was still somewhat rainy or at least misty in many areas. The rest of the period was not as bad although some counts did experience less than ideal conditions. Northeast LaPorte took the Cold Spot award with the only count to reach single digits at +9 degrees for the low and 18 degrees for the high. Patoka Lake's 60 degrees earned it the Hot Spot this year. Indiana Dune barely won out over several other worthy competitors for the most snow cover at seven inches. Early snows accounted for twenty-nine counts that had snow cover; up from twenty the last year and eleven the previous year. But that is still less than the 33 three years ago. Rain or snow on count day occurred on a good dozen counts.

We were able to obtain all of the data from most of the counts this year. The total of field observers of 903 is about exactly the same as last year. Hours spent by teams in the field also increased just slightly from last year to 1,910.57. Teams spent over a hundred less hours walking

at 740.54 but a hundred hours more driving at 1,160.73. There were also three hours boating, three hours by bike and three by ATV. As one would expect, the miles that teams covered increased. This year, teams covered 11,883.35 miles, which was nearly a 300 mile increase from last year but not too much different than two years ago. Miles totals were 656.90 walking, 11,406.20 driving, 3 by boat, 8.5 by bike, and 3 by ATV. The number of feeder watchers decreased by nearly a third to 127. Likewise, the number of hours feeder watching decreased by a third to a total of 241.90 hours. Hours and miles owling stayed about the same at 150.23 hours and 717.93 miles.

458,810 birds were identified on count days. This is down over 100,000 seen last year. Another 46,929 were identified as to family or group but not to species. A total of 147 species plus non-countable Whooping Cranes were identified on count day. In addition, Baltimore Oriole was a Count Week only bird. This is eleven species less than Indiana's all-time record set last year. The lower species total reflects the absence of unusual shorebird, warbler, and sparrow species we have had the last several years and the lack of any winter finch irruption, as well as, a few absences in scattered families throughout the list. Although non-countable, a total of 22 Whooping Cranes were reported on three counts. For the third straight year, at least one new species was added to the Indiana CBC list. This year's addition was the well seen and photographed **Spotted Towhee** on the Cass County count. Two other species not seen in as least the last ten years were Spotted Sandpiper, seen on only three previous Indiana CBCs, at Western Gibson, and the photographed Bobolink, seen only on one previous Indiana CBC, at Indiana Dunes. Other seldom seen Indiana CBC species included a Blue-winged Teal at Western Gibson, an American White Pelican at Dunes West, Ospreys on two counts, a Le Conte's Sparrow on the Goose Pond count where it is starting to become a regular, and a well documented and lingering Harris's Sparrow on the Evansville count. Rufous Hummingbirds are becoming more regular although still not common. There were singles at Indianapolis, McCormick's Creek, and Muscatatuck. The third state Baltimore Oriole in four years and the fourth ever showed up as a Count Week bird on the Fort Wayne count.

As always, this year's species numbers compared with last year are quite likely affected greatly by weather conditions both on count days and days preceding counts. Goose numbers except for Canada Geese markedly. White-fronted Goose numbers declined by half after continuing increases for the last several years. Trumpeter and Mute Swan numbers decreased while Tundra Swan numbers increased some after being even the year before. The 111 Trumpeter Swans seen was a large decrease in numbers from last year. Virtually all of the expected duck species' numbers were down again this year with the exception of Redhead, Common Goldeneye, and Common Merganser. In many cases, the decrease was very substantial. Again, this is very likely, at least for the most part, weather related. Wild Turkeys and Ring-necked Pheasants decreased some and Bobwhite even more so. Red-throated Loon numbers crashed 95% after a large rise last year. Common Loons numbers decreased over 80%. Pied-billed Grebes were down after an increase last year. Horned Grebes were up. Double-crested Cormorant numbers were down some 80%. Great Blue Herons were down slightly and again this year, no Black-crowned Night-Herons were reported. Black Vulture numbers decreased by a third for the second straight year after continuing increases in previous years. Turkey Vulture numbers declined by over half after last year's rebound in numbers. Bald Eagle numbers dropped this year by 10% after reaching a record high of 258 record set last year. The nine Golden Eagles reported were nearly twice the average for the last five previous years. Both accipiter and buteo numbers were for the most part level to up slightly except for Rough-legged Hawk which more than doubled. Falcon numbers were mixed. Virginia Rails made a showing of three. Coot

numbers dropped over half after a large increase last year. Sandhill Crane numbers also dropped by half. Shorebirds were about non-existent. Killdeer and Wilson's Snipe were the only regulars to show up at all and their numbers were way down. A rarely reported Spotted Sandpiper was the only other shorebird observed. Rare gulls were reported in normal numbers except for Thayer's and Great Black-backed being reported in higher numbers. The more common gulls were seen in lower numbers than normal. Eurasian Collared-Dove again continued increasing, this year reaching a total of 138 although they were seen on fewer counts. Owl numbers for the most part were slightly smaller with the exception of the six Snowy Owls, which is more than last year. Belted Kingfishers were down slightly after good increases for the previous two years. Woodpecker numbers were mixed to slightly higher with the exception of Yellow-bellied Sapsucker which continued its big rebound after its plummet of two years ago. Corvids were mixed with Blue Jays up and Crows down reversing the trend of last year. Chickadees, titmice, and White-breasted Nuthatches were all down slightly while Red-breasted Nuthatches were down by half after a three fold increase last year. Creepers were up by a half while Carolina Wrens were up slightly and Winter Wrens doubled. Only one Marsh Wren showed up this year. Kinglet numbers were way up with Ruby-crowned nearly doubling and Golden-crowned showing a ten fold increase after being way down last year. No unusual thrushes were reported again this year and the numbers of regular ones were mixed with Hermit Thrushes up considerably but Robins down by half. The Mimics again represented themselves well with all three being up. There were six count day Gray Catbirds, 473 Northern Mockingbirds, and fourteen Brown Thrashers. Starlings were down considerably for the second straight year. Pipit numbers were way down year for the second straight year and waxwing numbers were down by three-fourths after last year's strong rebound. Only two species of warblers were represented this year as compared with last year's five. There was a considerable increase of Yellow-rumped Warblers again. The other warbler species was Pine, with three being reported. Sparrow numbers were greatly mixed but for the most part up. Lapland Longspur and Snow Bunting numbers were both way up again after the decrease of two years ago. Both, in fact, showed over a four fold increase. Icterid numbers were mainly down although Eastern Meadowlark was up as was Brewer's Blackbird. Of note was that after two straight years of large increases of Rusty Blackbirds, their numbers plummeted. Finch numbers were all up to way down with Pine Siskens being virtually non-existent.

Goose Pond regained its spot as the count with the highest species total. Its total this year was 104 plus non-countable Whooping Cranes. This year it was the only count to reach or exceed the century mark. There were four counts which recorded between ninety and one hundred species. Oakland City finished with 96, Western Gibson with 95, Sullivan County with 94, followed by Ohio River with 92 besting its previous high count by eight species. Four counts totaled in the eighties. The count species average of 63.098 was a drop of nearly two from 64.94 the previous year. The median dropped this year to 63 from 64 the previous year and a drop below that of the year before that.

The state map shows the location of each count circle. As can be seen, there are still many areas of the state that are not covered by any counts.

We were again this year happy to receive a number of great pictures of great and rare birds. We continue to encourage submission of pictures in jpeg format of any birds as well as of birders and activities during Christmas counts. A big thank you is in order to all those who shared their pictures this year. Please, keep this in mind for the 2014-2015 count.

The COUNT CIRCLES section is where you will find information on the species total and total bird numbers seen on each count as well as any birds seen count week only, any documentations and other information the count compiler brought to our attention such as species high or low counts or new species to their count and a mention of the name of the compiler and the names of participants in the count except when the compiler requested that we not publish participant names or when we were unable to obtain them. This is also the section in which we report any exotics. Even though not countable, compilers should report them so that we can include them in the article for archival purposes.

The data table shows species information by count as well as participant numbers, miles covered, time spent, and weather conditions encountered. The table now includes in the species list, species seen this year as well as species not seen this year but seen in the last nine or ten years. It also includes the non-countable Whooping Crane. Data for this non-countable species is marked in “red”. In a few cases, when we were unable to obtain data from the compilers, “ns” is marked for “not submitted” or in obvious cases left blank.

Thanks to the compilers who submitted their reports and to all of the participants for their efforts in making this compilation possible. Thanks also to all of the observers who submitted their documentations and photos of their unusual birds and other. The report forms, downloadable on the Indiana Audubon web site, show which species need to be fully documented or briefly detailed explaining how the identification was determined. If in doubt whether a bird needs to be documented or detailed or not, please, always do it. It makes evaluation much easier and is important to be archived for future reference. Thanks also to National Audubon Society’s state editor, John Cassady, for his collaboration and assistance in acquiring some of the detail reports and documentations.

Count Circles

1) Adams County (INAC): Species: 41 Individuals: 4,705 Compiler: Terri Gorney **Observers:** Curt Burnette, Will DeSmet, Alexandra Forsythe, Terri Gorney, Bill Hubbard, Jim Jeffrey, Rose Jeffrey, Sarah McKillip, Dorothy Moser, Earlene Moser, Jerry Moser, Rose Moser, Jerry Parker, Larry Parker, Robert Williams

2) Big Oaks NWR (INBO):

Species: 49 plus Mallard, Green-winged Teal, Black Vulture, Sharp-shinned Hawk, Cooper’s Hawk, Horned Lark, Red-breasted Nuthatch, and Brown-headed Cowbird seen count week **Individuals: 1,747** Brewer’s Blackbird was documented **Compiler:** Joe Robb **Observers:** Stephanie Bishir, Kevin Carlson, Todd Gerardot, Chuck Hansen, Dave Jones, Lisa Jones, Kim Kirchner, David McCarty, Diane McCarty, Ian McCarty, Joe Robb, Walt Seeds, Ali Slusher, Gary Stegner, George Terlinden, Ben Walker, Alex Wardwell, Paul Wharton

3) Brown County State Park (BCSP):

Species: 34 Individuals: 514 Compiler: Jim Eagleman **Observers:** A. Beaver and two sons, Jeff Belth, Sandy Belth, Jim Eagleman, Don Glass, Jim Hengeveld, Susan Hengeveld, Mike Kelley, A. Maxwell, J. Manis, I. Miller, L. Pantzer, Jeff Riegel, Gary ?, 7 Brown County Fitness Challenge participants

4) Cass County (INCC):

Species: 76 plus count week Canvasback, Wood Duck, and Common Grackle. Spotted Towhee documented and photographed **Compiler:** Landon Neumann **Observers:** Bud Dodrill, Steve Doud, Wes Homya, Andrea Neumann, Landon Neumann, Sasha Neumann, Rick Read, Jacob Schheilder, Joe Scheilder, Lee Scheilder, Haley Samuelson, Peter Scott, Susan Ulrich

5) Eagle Creek Valley (INEC):

Species: 70 **Individuals:** 8,767 **Compiler:** Kevin Carlsen **Observers:** not submitted

6) Elkhart County (INEH):

Species: 78 **Individuals:** 18,719 **Compiler:** Ronda DeCaire **Observers:** Gregg Beitler, Trice Berkley, Gary Chupp, Jonathon Chupp, Krista Daniels, John Davis, Ronda DeCaire, Glen Dyksen, Judy Ferrell, Larry Ford, Bruce Glick, Robert Guth, Gary Keister, Craig Kirkwood, Evie Kirkwood, Merlin Lehman, Brent Mann, Burne Miller, Gary Miller, Judy Miller, Marcus Miller, Neal Miller, Scott Namestnik, Don Presser, Sarah Sass, Steve Sass, Leland Shaum, Thaddeus Shaum, Gail Shetler, Lori Twining, Devon Yoder, Enos Yoder, Leon Yoder, Myron Yoder
Guided Bird Walk: Nicole Bauman, Elma Chapman, Lindsay Grossman, Carle Gull, Gayle Gerber Koontz, Rachel Koontz, Chloe Lawrence, Sue Stuckman, Alicia Swords
Feeder Counters: Jim Bare, Alden Beasley, Ruth Ann Berger, Steve Berger, Don Bontrager, Robyn Buenger, Carol Caviness, Lisa Deak, David DeCaire, Carrie Edds, Marilyn Horvath, Jim Keck, Betty Kegerreis, Judy Miller, Vern Miller, Carole Mitchell, Irv Prat, Marlene Pratt, Mary Rasp, Linda Renaud, Doris Rody, Susan Rowe, Pat Watson, Emma Wynn

7) Evansville (INEV):

Species: 77 **Individuals:** 13,291 Harris's Sparrow detailed and Rufous Hummingbird documented. Photos submitted of Eurasian Collared Dove and Rufous Hummingbird
Compiler: Brian Taylor **Observers:** Carolyn Barron, Ron Giles, Sharon Giles, Tim Griffith, Delores Heeger, Steve Heeger, Nancy Hitch, Ted Hitch, Al Langen, Chris Langen, Philip Lax, Jessica McCauley, John Meredig, Judy Moore, Chris Newman, Marica Onnybecker, Chris Pace, Carol Pettys, Vivian Ruff, Sharon Sorenson, Brian Taylor

8) Farmland (Farm):

Species: 29 **Individuals:** 503 **Compiler:** Stephen Howell **Observers:** Nina Howell, Stephen Howell

9) Fort Wayne (INFW):

Species: 46 plus count week Merlin and Baltimore Oriole **Individuals:** 5,867 Merlin was detailed and the count week Baltimore Oriole was photographed. The total of 46 species was the count's lowest since 1981. American Robins produced the count's highest record while Song Sparrow produced it's lowest record. **Compiler:** Jim Haw **Observers:** Jim Haw, Frannie Headings, Ted Heemstra, Maggie Hornbostel, Louise Larson, dave Messman, Liza Olson, Valerie Pelz, Cynthia Powers, Ed Powers, Casey Ryan, Don Ryan, Steve Sarratore, Sandy Schacht, Ryan Smith, Stephanie Wagner, Ann Walton, Bob Walton

10) Gene Stratton-Porter (INSP):

Species: 52 **Individuals:** 1,223 Chipping sparrow detailed. **Compiler:** Dave Fox **Observers:** Marilyn Benedict, Becky Chatham-Heidenreich, Tiffany Conrad, Ken Engh, Dave Fox, Tracy Fox, Ted Hemingway, Tedra Hemingway, Deb Stuart, Doug Stuart

11) Goose Pond (INGP):

Species 104 plus 18 non-countable Whooping Cranes **Individuals: 16,416** Ross's Goose, Merlin, Golden Eagle, Brown Thrasher, Le Conte's Sparrow and Brewer's Blackbird were documented or detailed. Photos submitted of Merlin and Le Conte's Sparrow. **Compiler:** Lee Sterrenburg **Observers:** Don Allen, Bob Ball, Bob Barber, Lou Anne Barriger, Jonathan Bauer, Steve Bell, Jeff Belth, Sandy Belth, Jay Bolden, Gary Bowman, Lisa Bowman, Jim Brown, Bob Carper, Mike Clay, Bob Dodd, Scott Enochs, Scott Evans, Julia Ferguson, Steve Gilstrap, Don Gorney, Tommy Grav, Tim Griffith, Roger Hedge, Jim Hengeveld, Susan Hengeveld, Amy Hodson, Bill Holladay, Amy Kearns, June Kearns, Bob Kissel, Gary Langell, Janet Martin, Kathy McClain, Jim Mitchell, Barbara Olson, Larry Peavler, Eric Ripma, David Rupp, John Schaust, Greg Simon, Lee Sterrenburg, Travis Stoelting, Joan ten Hoor, Paul Warton, Mark Welter, Don Whitehead **Feeder Watchers:** Marilyn Flanders

12) Hamilton County (INHC):

Species: 62 Individuals: 7,336 Compiler: Amanda Smith **Observers:** Ken Badger, Bert Badger, Blatchley, Gordon Chastin, Bob Clark, Allie Cunningham, Brian Cunningham, June Delong, Beth Eikenberry, Lynn Eikenberry, Scott Enochs, Don Gorney, John Guggemos, Jo Ingraham, Nick Keihl, Becky Lomax-Sumner, Dale Martin, Kathryn Mascaro, Jim McGinity, Ken McGinity, Polly Nicely, Al Patterson, Laura Patterson, Victoria Rogers, Amanda Smith, Keith Starling, John Sumner, Janet Tuten, Richard Weisler, Jeanie Weisler, Debby Wright, Eryn Wycoff, Kevin Wycoff

13) Hancock County (HanC):

Species: 21 plus Yellow-bellied Sapsucker, Brown Creeper, Carolina Wren, and House Finch seen count week **Individuals: 149 Compiler:** Gail McNierney **Observers:** Gail McNierney

14) Hanover-Madison (INHM):

Species: 43 Individuals: 6,519 Compiler: Dick Davis **Observers:** Jack Bird, Stephanie Bird, Kevin Carlson, Paul Carmony, Dick Davis, Matt Demaree, Kim Kirchner, Bill Poindexter, Annie Walker with any others not submitted

15) Indiana Dunes National Lakeshore (INID):

Species: 79 Individuals: 8,049 Photo of Bobolink submitted **Compiler:** Brad Bumgardner **Observers:** Rob Albrecht-Mallinger, Bobbie Asher, Brad Bumgardner, John Cassidy, Tim Cole, Tom Edwards, Kimberly Ehn, Carol Fialkowski, Conrad Fialkowski, Bummer Gacsko, Brendon Grube, Matt Kalwasinski, John Kendall, Richard Knutson, Patrick Krueger, Jeff McCoy, Don Mohar, Peg Mohar, Scott Namestnick, Randy Pals, Chuck Roth, Sarah Sass, Steve Sass, Penny Starin, Ken Wysocki, Jim Zervos **Feeder Watchers:** William Daunis, Christie Gerlach

16) Indiana Dunes West (INDW):

Species: 59 Individuals: 4,705 Compiler: Christine Gerlach **Observers:** not submitted

17) Indianapolis Northeast (ININ):

Species: 76 Individuals: 11,061 Rufous Hummingbird was documented and photographed. **Compiler:** John Schaust **Observers:** Adam Barnes, Linda Bishop, Mike Bishop, Lee Casabere, Cliff Chapman, Gordon Chastain, Brian Cunningham, Scott Enochs, Cary Floyd, Dave Fox, Tracy Fox, Don Gorney, Jeanette Holland, Becky Lomax-Sumner, Andrew Mertz, Mike Molnar, Eric Ripma, Rob Ripma, Aidan Rominger, Marc Rupenthal, John Schaust, Lisa Schaust, Karl

Selm, Anne Sharp, Marilyn Smith, Dave Strickland, Susie Strickland, Kevin Strunk, Tom Swinford, Doug Vine

18) Jamestown (INJT):

Species: 44 plus Bald Eagle seen count week **Individuals: 2,409** **Compiler:** Roger Hedge
Observers: Michael Brittain, Frank Dumwright, Cloyce Hedge, Roger Hedge, Barbara Homoya, Mike Homoya, Wes Homoya

19) Johnson County (INJC):

Species: 63 **Individuals: 5,201** **Compiler:** Mike Clay **Observers:** Jay Bolden, Megan Bowman, Bob Carper, Mike Clay, Ann Deutch, Tom Hougham, Art Howard, Chuck Lunsford, Karen Lunsford, Holly Settles, Karl Werner, Don Whitehead

20) Knox County (INKC):

Species: 75 plus Sandhill Cranes and Yellow-bellied Sapsucker seen count week **Individuals: 16,719** One new species for the count was Northern Shrike which was detailed. More than a dozen species count highs were recorded **Compiler:** Gary Bowman **Observers:** Gary Bowman, Lisa Bowman, Adam Cronk, Tom Cronk, Dave Deem, Stacy Dobson, Mark Crowley, Rene LaMontagna, Kathy McClain, Kenny Neighbors, Jane Nowaskie, Steve Nowaskie, Betty Schuur, Dave Schuur, Julie St John, David Staver, Lee Sterrenburg, Becky Turner, Larry Wilcox, Linda Wilcox

21) Lafayette (INLA):

Species: 67 **Individuals: 11,947** **Compiler:** Ed Hopkins **Observers:** not submitted

22) Lake Monroe (INLM):

Species: 85 **Individuals: 8,576** **Compiler:** Jim and Susan Hengeveld **Observers:** Don Allen, Wendy Anderson, Robert Barber, Carolyn Begley, Jeffrey Belth, Sandy Belth, Ben Brabson, Judith Brennan, Jim Brown, Jiri Dadok, Bob Dodd, Jerry Downs, Sam Downs, Steve Gilstrap, Jim Goodson, Tommy Grav, Jess Gwinn, Jim Hengeveld, Susan Hengeveld, Bill Holladay, Fred Hubbard, Bill Jones, Amanda Kelly, Bob Kissel, Dan Leach, Nancy Lightfoot, Nancy Martin, Kathy McClain, Jim Mitchell, Jen Richardson, Jeff Riegel, Bryce Robeson, David Rupp, Trey Scott, Greg Simon, Lee Sterrenburg, Rebecca Stoops, Alex Tanford

23) Mary Gray Sanctuary (INMG):

Species: 47 **Individuals: 1,393** Eurasian Collared-Dove was documented **Compiler: Carl Wilms** **Observers:** Bill Buskirk, Sam Fitton, Terri Fitton, Micheal Ford, Joanne Guttman, Dawn Slack, Ryan Slack, Amy Wilms, Carl Wilms

24) McCormick's Creek State Park (INMC):

Species: 65 **Individuals: 5,082** Rufous Hummingbird documented and photographed and Merlin detailed **Compiler:** Sandy Belth **Observers:** Bob Ball, Bob Barber, Ingrid Beery, Jeff Belth, Sandy Belth, Jerry Downs, Milt DuCharme, Steve Dunbar, John Eakin, Maureen Forrest, Jess Gwinn, Donald Hall, Bill Holiday, Gary Horton, Joni James, Cindy Kallet, Bob Kissel, Gary Langell, Nancy Martin, David Meyer, Pat Newforth, Joe Phillips, Anne Roberts, David Rupp, Eve Schultes-Ridge, Joan ten hoor, Dan Weber, Tom Weber, Don Whitehead, Becky Wood

25) Michaela Farm/Oldenburger (INMO):

Species: 62 plus count week Sharp-shinned Hawk **Individuals:** 6,265 **Compiler:** Wayne Wauligman **Observers:** Richard Cartwright, Kathy Cooley, Krn Cooley, Ted Cooley, Chris Fox, Tracy Fox, Ronald Green, Chuck Hautman, Dot Hautman, Bill Herrmann, Pam Herrmann, Bill Hull, Elliot Hull, Ned Keller, Katherine Kubilek, Kathy McDonald, Mike Minium, Tim Peters, Bart Pfautz, Bart Pfautz Jr., Cathie Pfarr, Sr Ann Marie Quinn OSF, Mary Robertson, Mike Robertson, Paul Selkirk, Gary Stegner, Sr Claire Whalen OSF, Brian Wulker

26) Muncie (INMU):

Species: 47 **Individuals:** 2,539 **Compiler:** Robert Williams **Observers:** Sasha Auer, Kevin Barnes, Debbie Brown, Malachi Brown, Chris Daniel, Willy De Smet, Sandy Ho, Taiping Ho, Martha Hunt, Jim Jeffery, Rose Jeffery, Charlie Mason, Sarah McKillip, Gavin Meyer, Luke Nelson, Abe Starost, Barb Stedman, Robert Williams

27) Muscatatuck National Wildlife Refuge (INMT):

Species: 65 plus count week Rufous Hummingbird **Individuals:** 5,210 **Compiler:** Donna Stanley **Observers:** Erich Baumgardner, Robert Barber, David Carr, Mike Clay, David Crouch, Sally Crouch, Becky Dorman, Gary Dorman, Gary Dorman, Sr., Nancy Dorman, Don Gorney, Jessica Helmbold, Larry McIntosh, Jerry Lippert, Gary Stegner, Donna Wagner, Steve Wagner

28) Newport (Nwpt):

Species: 72 **Individuals:** 16,011 Details and photos of Snowy Owl and Golden Eagle **Compiler:** Alan Bruner **Observers:** Alan Bruner, Phil Cox, Joe Faust, Marty Jones, Peter Scott, Patsy Steffen, Ed Timm, Ron Weiss

29) Northeast LaPorte County (INNL):

Species: 49 **Individuals:** 3,828 **Compiler:** Dennis Richardson **Observers:** Jan Baumer, John Brugos, Louise Cummings, Rose Deutcher, Cindy Fontaine, Gordon Forbes, Dick Glassman, Jake Harmon, Steve Laue, Carol Lode, Don Lode, Lloyd Lombard, Pennie Lombard, Virginia Martin, Elizabeth McCloskey, Dennis Richardson, Judy Richardson, Jim Simon, Frances Sipocz-Richardson, Catherine Snearly, Carolyn Warren

30) Oakland City (INOC):

Species: 96 **Individuals:** 11,555 Barn Owl and Loggerhead Shrike were documented. Details of Greated White-fronted Goose, Merlin, and Virginia Rail **Compiler:** Heath Hamilton **Observers:** David Ayer, Amber Ball, Micheal Brown, Ben Fritz, Tim Griffith, Susan Haislip, Bill Johnson, Carla Lemar, Jim Lodato, Bill McCoy, Charles Mills, Jeremy Ross, Marietta Smith, Evan Speck, Lee Sterrenburg, Richard Vernier, Sue Vernier, Vicki Whitaker

31) Ohio River (INOR):

Species: 92 **Individuals:** 23,702 Osprey, Surf Scoter, and Tundra Swan photographs were submitted **Compiler:** Paul Wharton **Observers:** Joe Bens, Rodney Crice, Tom Czubek, Mark Gilsdorf, Darlene Graham, Joe Kappa, Rick Lisi, Lee McNeeley, Ned Keller, Brainerd Palmer-Ball, Gary Stegner, Jack Stenger, Paul Wharton, Brian Wulker, Gayle Wulker

32) Patoka Lake (INPL):

Species: 67 **Individuals:** 3,104 **Compiler:** John Castrale **Observers:** David Ayer, John Castrale, Howard Detweller, Todd Eubank, Jim Hengeveld, Susan Hengeveld, David Howell, Dan Leach, Dana Reckelhoff

33) Pigeon River Fish and Wildlife (INPR):

Species: 53 plus Northern Shrike, Harris's Sparrow, and White-crowned Sparrow seen count week
Individuals: 4,786 details received of Harris's Sparrow, Northern Shrike, and White-winged Scoter. **Compiler:** Mark Weldon **Observers:** Dave Fox, Kami Fox, Jim Haw, Dave Messman, Lisa Silva, Joe Smith, Gary Tieben, Louise Weber, Mark Weldon, John Winebrenner

34) Pokagon State Park (INPK):

Species: 65 plus count week Northern Shrike **Individuals:** 11,048 Cackling Goose, Virginia Rail, and Northern Shrike were detailed **Compiler:** Fred Wooley **Observers:** Brad Bumgardner, Alexandra Forsythe, Terri Gorney, Frannie Headings, Eric Helrich, Mary Helfrich, Marjorie Hershman, Brett Hess, Lauren Loffer, Jacob Lothamer, Lance Lothamer, Holly Meyers, Kevin Miller, Louise Miller, Cynthia Powers, Ed Powers, Sandy Schacht, John Schaust, Laurie Sellers, Brad Stevens, John Winebrenner, Fred Wooley, Perry Yoder, Galen Yordy, Fred Zilch

35) Posey County INPC):

Species: 66 plus **Individuals:** 75,815 **Compiler:** Brian Taylor **Observers:** Carolyn Barron, Pat Burden, Larry Caldwell, Drew Cissna, Roselyn Dickson, Mike Flake, LD Harry, Al Langen, Chris Langen, Nick Langen, John Meredig, Carolyn Pettys, Vivian Ruff, Sharon Sorenson, Brian Taylor, MaryAnn Watson

36) Putnam County (PutC):

Species: 46 plus count week Snowy Owl **Individuals:** 2,197 The Snowy Owl was photographed and the Black Vulture was detailed. **Compiler:** Jerome Rud **Observers:** Alleen Beals, Adair Bock, Sue Bock, Dean Finley, Betty Graffis, Tom Graffis, Clint Maddox, Dana Maddox, Whitney Morrill, Emily Poor, Jim Poor, Alan Stanley, Donna Stanley, Don Williams

37) Richmond (INRI):

Species: 55 **Individuals:** 4,069 **Compiler:** Bill Buskirk and Jim Seaney **Observers:** Bill Buskirk, Marie Nicholson, Jim Seaney, Ron Williams

38) South Bend (INSB):

Species: 63 **Individuals:** 12,391 **Compiler:** Victor Riemenschneider **Observers:** **Participants:** Field observers: Alice Bentley, John Bentley, Mike Bourdon, Dick Fessenden, Louise Fessenden, Robert Fessenden, John Fleming, Laura Fuderer, Heidi Gray, Charles Hooks, Marcie Inman, Justin Kintzele, Craig Kirkwood, Evelyn Kirkwood, Michael Klingerman, Bob Leliaert, Linda Leliaert, John Lisek, Laura Makielski, Kathy Maloney, Brian Miller, Lindsay Namestnik, Scott Namestnik, Marge Riemenschneider, Vic Riemenschneider, Lindsey Sas, Sarah Sass, Steve Sass, James Spier, Joan Tweedell, Ken Tweedell, Casey Zillman

39) Southwest Dubois County (INSD):

Species: 52 **Individuals:** 818 **Compiler:** Theresia Schwinghammer **Observers:** Theresia Schwinghammer, Tommy Schwinghammer

40) Spring Mill State Park (INSM):

Species: 82 **Individuals:** 8,282 Black Vulture and Eurasian Collared-Dove are all regular on the count. **Compiler:** John Castrale **Observers:** Bob Ball, Bob Barber, Andrea Castrale, John Castrale, Howard Detweiler, Steven Gilstrap, Jess Gwinn, Amy Kearns, Noah Kearns, Dan Leach, Cathy Meyer, Bruce Miller

41) Sullivan County (INSU):

Species: 94 Individuals: 8,785 Detailed were Cackling Goose, Virginia Rail, Marsh Wren, Merlin, Least Sandpiper, and Northern Shrike. Pictures of Merlin and Northern Shrike were submitted. **Compiler:** Michael Brown **Observers:** Adam Betuel, Michael Brown, Mike Clarke, Joe Dickson, Andrew Hoffman, Marty Jones, Steve Lima, Kathy McClain, Michael Sacopulos, Peter Scott, Lee Sterrenburg

42) Terre Haute (INTH):

Species: 85 plus count week Peregrine Falcon and Eurasian Collared-Doves. **Individuals: 22,160** **Compiler:** Peter Scott **Observers:** Rob Arndt, David Bakken, George Bakken, Laura Bakken, Ann Black, Bruce Black, Dick Bonness, Jane Chestnut, Susie Dewey, Mary Beth Eberwein, Mike Geringer, Andrew Hoffman, Marty Jones, Steven Lima, Carissa Lovett, Ellen Lunsford, Andy Prothero, Denise Prothero, Divya Ramesh, Alexander Sacopulos, Joy Sacopulos, Mike Sacopulos, Peter Scott, Katie Spicer, Jim Sullivan, Henry Tamar, Margaret Tamar

43) Tippecanoe (INTI):

Species: 59 Individuals: 10,788 **Compiler:** David Hicks **Observers:** Margit Codispoti, Al Crist, Beth Deimling, Steve Doud, David Hicks, Deborah Hustin, Casey Jones, Arlene Kindy, Cliff Kindy, Amy Miller, Greg Miller, Stanley Moore, Don Musselman, Lila O'Connell, Jennifer Saxinger, Jim Townsend

44) Topeka (INTO):

Species: 72 Individuals: 2,592 **Compiler:** Leland Shaum **Observers:** Joe Bontrager, Myron Bontrager, Edward Borkholder, Luella Borkholder, Cary Chupp, Jacob Hochstetler, Marvin Hochstetler, Gary Keister, Mark Lambright, Jon Lehman, John Lersch, Benjamin Miller, Christy Miller, Derek Miller, John Allen Miller, Larry Miller, Leroy Miller, Perry Miller, Sam Plew, Matthew Raber, Floyd Schmucker, Lavon Schmucker, Verlin Schrock, David L. Schwartz, Leland Shaum, Thaddaeus Shaum, Kenneth Shrock, Timothy Shrock, Elmer Wingerd, Enos Yoder, Leon Yoder, Mahlon Yoder, Perry Yoder, Ray Yoder, Wilbur Yoder

45) Tri-County Rochester (INTC):

Species: 24 Individuals: 453 **Compiler:** Michael Stephan **Observers:** Larry Beeson, Tana Beeson, Sylvia Bieghler, Gloria Buzzard, Scott Buzzard, Lisa Eiser, Jeffrey Klinefelter, Michael Stephan, Wyatt Stephan

46) Turkey Run State Park (INTR):

Species: 60 Individuals: 5,048 **Compiler:** Alan Bruner **Observers:** Alan Bruner, Steve Lima, Peter Scott, Patsy Steffen

47) Warrick County (INWC):

Species: 78 Individuals: 8,597 **Compiler:** Chris Pace **Observers:** Jim Campbell, Mary Jo Campbell, Margie Griffith, Tim Griffith, Philip Lax, Bob Meier, Jesse Meier, John Meredig, Mel Lodato, Chris Pace, Sarah Pace, Bart Wilson

48) Wells County (WELS):

Species: 35 Individuals: 3,690 **Compiler:** Ruth Oswalt **Observers:** Bill Fuller, Kathy Fuller, Carolyn Graham, Gayle Gibson, Jerry Moser, Rose Moser, Ruth Oswalt, Jerry Parker, Larry Parker, Mick Ulmer, Bob Williams

49) Western Gibson County (INWG):

Species: 95 plus two non-countable Whooping Cranes **Individuals:** 21,005 Blue-winged Teal and Spotted Sandpiper were documented. **Compiler:** Dan Collins **Observers:** David Ayer, Steve Beard, Neal Bogan, Gary Bowman, Lisa Bowman, Dan Collins, Adam Cronk, Tom Cronk, Ben Fritz, Steve Gifford, Susan Haislip, Heath Hamilton, LD Harry, Kathy McClain, Bob Meier, Jesse Meier, Mrs. Meier, John Pike, Steve Rose, Bob Shelby, Marcia Shelby, Dawn Slack, Ryan Slack, Marietta Smith, Lee Sterrenburg, Richard Vernier, Sue Vernier, Vicky Whitaker

50) Whitewater State Park (INWH):

Species: 80 **Individuals:** 12,990 **Compiler:** Bill Buskirk and Jim Seaney **Observers:** Elliott Baldwin, Emma Baldwin, Karne Baldwin, Debra Bowles, Bill Buskirk, Deb Chargares, Jim Chargares, Bob Corrington, Janelle Duncan Sam Fitton, Bill Keck, Bob Holmes, Jan Holmes, Anne Hooke, Cindy Hurley, Steve Kolbe, Rebecah Palmer, Gail Reynolds, David Russell, Jill Russell, Jim Seaney, Martin Sluk, Kathleen Tiller, Tom Tiller, Fim Tolford, Wendy Tori, Ron Williams, Amy Wilms, Carl Wilms, Bill Wilson

51) Willow Sough-Iroquois Preserve (INWS):

Species: 59 **Individuals:** 5,320 **Compiler:** Ed Hopkins **Observers:** not submitted

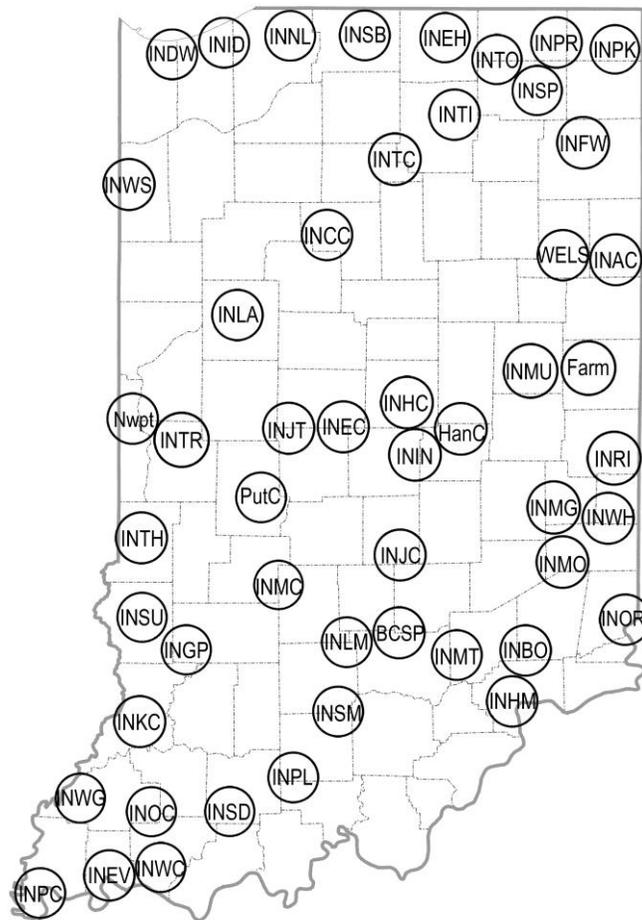


Figure 1. 2013-2014 Indiana CBC Map



Figure 2. Spotted Towhee, Cass County CBC, 19 December 2013. Photo by Eric Ripma



Figure 4. LeConte's Sparrow, GoosePond CBC, December 2013. Photo by Steve Bell



Figure 3. Baltimore Oriole, Fort Wayne CBC, seen count week December 2013. Photo by Carole Smith



Figure 5. Rufous Hummingbird, Indianapolis CBC, 14 December 2013. Photo by Aiden Rominger



Figure 6. Golden Eagle, Newport CBC, 28 December 2013. Photo by Marty Jones



Figure 7. Snowy Owl, Putnam County CBC, 28 December 2013. Photo by Lynne Tweedle



Figure 8. Bobolink, Indiana Dunes CBC, 14 December 2013. Photo by John Kendall



Figure 9. Thayer's Gull, Indiana Dunes CBC, 14 December 2013. Photo by John Cassady



Figure 10. Lesser Black-backed Gull, Indiana Dunes CBC, 14 December 2013. Photo by John Cassady



**Figure 11. Merlin, Sullivan CBC, 1 January 2014.
Photo by Mike Clarke**



**Figure 12. Surf Scoters, Ohio River CBC, 15
December 2013. Photo by Brian Wolker**

Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	INAC	INBO	BCSP	INCC	INEC	INEH	INEV	Farm	INFW	INSP	INGP	INHC	HanC	INHM	INID	INDW	ININ	INJT	INJC	INKC
Gr. White-fronted Goose	0	0	0	0	0	0	0	0	0	0	461	10	0	0	0	0	0	0	0	681
Snow Goose	0	0	0	0	0	0	0	0	0	0	73	1	0	0	0	0	0	0	0	250
Ross's Goose	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Cackling Goose	0	0	0	0	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0
Canada Goose	2656	0	0	2727	1538	3840	966	0	881	237	744	2003	13	178	2020	1095	1333	444	401	5135
Mute Swan	0	0	0	8	0	193	0	0	0	23	0	0	0	0	0	0	18	0	0	0
Trumpeter Swan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0
Tundra Swan	0	0	0	0	18	1	0	0	0	1	8	0	0	0	0	0	0	0	0	0
Wood Duck	0	0	0	CW	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2
Gadwall	0	0	0	9	2	12	0	0	0	0	887	0	0	0	4	0	6	0	0	28
American Wigeon	0	0	0	0	0	0	1	0	0	0	2	1	0	0	0	0	2	0	3	6
American Black Duck	0	0	0	3	15	7	3	0	0	0	18	4	0	0	0	0	2	0	0	1
Mallard	192	0	0	551	681	1897	446	0	193	20	687	1644	0	93	442	255	1176	59	98	702
Blue-winged Teal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Shoveler	0	0	0	0	0	0	2	0	0	0	130	0	0	0	0	0	0	0	0	0
Northern Pintail	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	5
Green-winged Teal	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	15
Canvasback	0	0	0	CW	0	0	0	0	0	0	11	0	0	0	1	0	4	0	0	0
Redhead	0	0	0	0	0	7	0	0	0	0	5	0	0	0	101	3	2	0	0	0
Ring-necked Duck	0	0	0	0	0	3	0	0	0	0	130	0	0	0	0	0	2	0	0	30
Greater Scaup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	22	0	0	0	0
Lesser Scaup	0	0	0	0	0	4	0	0	0	0	3	0	0	0	46	12	3	0	8	0
Harlequin Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Surf Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
White-winged Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	0	0
Black Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Long-tailed Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
Bufflehead	0	0	0	1	0	40	0	0	0	2	0	0	0	0	16	16	1	0	2	4
Common Goldeneye	0	0	0	13	68	301	0	0	0	0	2	3	0	0	49	52	7	0	0	0
Hooded Merganser	0	0	0	0	17	47	0	0	0	1	1	0	0	0	13	1	12	0	0	15
Common Merganser	0	0	0	0	22	20	0	0	0	0	0	0	0	0	126	40	31	0	0	0
Red-breasted Merganser	0	0	0	1	12	0	0	0	0	0	0	0	0	0	893	390	6	0	0	0
Ruddy Duck	0	0	0	0	5	1	0	0	0	0	2	0	0	0	0	0	26	0	2	0
Ring-necked Pheasant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ruffed Grouse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wild Turkey	0	15	19	3	0	88	161	0	30	15	67	0	0	21	1	0	0	0	13	9
Northern Bobwhite	0	30	0	0	5	0	5	0	0	0	11	0	0	0	0	0	0	0	0	9
Red-throated Loon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0
Pacific Loon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Loon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0
Pied-billed Grebe	0	0	0	0	4	1	4	0	0	1	3	2	0	0	2	0	5	0	8	9
Horned Grebe	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0
Red-necked Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eared Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Western Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Double-crested Cormorant	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
American White Pelican	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
American Bittern	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Great Blue Heron	12	1	0	17	11	8	24	0	6	2	48	11	0	1	1	2	39	2	4	18
Great Egret	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blk-crowned Night-Heron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black Vulture	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0
Turkey Vulture	0	0	34	10	1	0	0	0	0	0	1	0	0	4	0	0	0	0	0	0
Osprey	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bald Eagle	4	1	0	8	1	10	2	0	0	0	12	0	0	0	1	0	2	CW	4	6
Northern Harrier	1	6	0	2	0	0	0	0	0	0	49	4	0	0	0	0	1	2	1	6
Sharp-shinned Hawk	1	0	0	2	1	5	0	0	0	0	1	0	0	0	0	1	0	0	0	4
Cooper's Hawk	3	0	0	6	9	17	9	1	8	1	8	6	0	0	2	1	7	2	1	4
Northern Goshawk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red-shouldered Hawk	0	2	0	4	7	0	15	0	2	1	15	1	0	0	11	0	3	0	4	2
Red-tailed Hawk	13	14	0	24	8	69	30	0	25	8	35	25	1	10	14	29	17	13	17	37
Rough-legged hawk	1	1	0	6	0	11	3	0	0	0	22	0	0	0	3	1	0	1	0	0
Golden Eagle	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
American Kestrel	23	4	0	15	7	13	26	7	20	6	28	13	2	6	1	2	4	14	9	38
Merlin	0	0	0	0	0	0	0	0	CW	0	1	0	0	0	0	0	0	0	0	0
Peregrine Falcon	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Prairie Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
King Rail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Virginia Rail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sora	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Coot	0	0	0	0	0	38	45	0	0	0	1	6	0	0	0	1	3100	0	3	13
Sandhill Crane	0	0	0	0	0	2	0	0	0	0	256	0	0	23	0	0	17	0	0	0
Whooping Crane											18									
Killdeer	0	1	0	1	0	0	16	0	0	0	1	0	0	0	0	0	4	0	2	0
Spotted Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greater Yellowlegs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ruddy Turnstone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanderling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Least Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purple Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dunlin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wilson's Snipe	0	0	0	0	0	6	4	0	0	0	2	0	0	0	0	0	0	1	1	0
American Woodcock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baird's Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black-legged Kittiwake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bonaparte's Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laughing Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ring-billed Gull	14	0	0	77	31	1924	1120	0	4	1	5	32	0	0	255	141				

Count Name	INAC	INBO	BCSP	INCC	INEC	INEH	INEV	Farm	INFW	INSP	INGP	INHC	HanC	INHM	INID	INDW	ININ	INJT	INJC	INKC
Unidentified Groups																				
Goose Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scaup Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Duck Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Merganser Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Swan Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accipter Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Buteo Sp	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Eagle Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
small Falcon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
large Falcon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gull Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	17	0	18	0	0
Owl Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shorebird Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Woodpecker Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flycatcher Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrike Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Warbler Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sparrow Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	30	0	0
Blackbird Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	300
Total Unidentified Ind.	0	0	1	0	1	47	0	49	0	301										

Count Name	INAC	INBO	BCSP	INCC	INEC	INEH	INEV	Farm	INFW	INSP	INGP	INHC	HanC	INHM	INID	INDW	ININ	INJT	INJC	INKC
Date of Count	1/1	12/14	12/15	12/19	12/15	1/4	12/14	1/4	12/21	12/21	12/18	12/28	12/28	12/28	12/14	12/27	12/14	12/28	12/15	12/29
Start Time (a.m.)	6:00	8:43	8:30	6:23	6:00	6:30	5:30	8:00	7:00	8:00	6:40	7:30	8:00	8:00	7:00	6:00	7:00	6:10	6:00	5:00
End Time (p.m.)	5:50	5:30	4:00	5:35	7:00	5:30	4:00	5:30	5:00	6:00	5:00	4:25	6:00	5:15	5:00	4:00	7:30	6:30	4:00	6:00
Observer Data																				
No. Observers in Field	15	19	23	15	40	42	20	2	16	10	45	36	10	10	26	21	28	7	12	21
No. Field Parties	7	4	4	11	13	15	11	1	6	3	16	12	4	4	12	13	14	3	6	8
Field Hours on Foot	1	2.5	2	20.65	19	34	11.5	4.5	9.75	4	64.07	29.5	3.25	3.25	37	31.45	35.5	5	4	11.75
Field Hours by Car	25.85	22.14	4	22.87	21	54.25	26.3	3.5	34.25	8	30.82	12.97	1.5	9.25	33	13	16	12.5	30	44.17
Field Hours by Boat	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3.3
Total Field Hours	26.85	24.64	6	43.5	40	91.25	37.8	8	44	12	95.89	39.47	5.5	12.5	70	44.45	51.5	17.5	34	59.22
Field Miles on Foot	1.1	3.55	1	19.8	15	38.88	12.5	1.5	8	4	43.6	23.45	2	1.75	30.5	23.8	33.5	4.5	1	9.5
Field Miles by Car	303.7	119.4	21	240.60	189	491	352	54	355	88	334.7	236.3	9	106	418	95.3	219	213	124	496.5
Field Miles by Boat	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Field Miles	304.8	123	22	260.40	204	532.9	364.5	55.5	363	92	310.2	253.2	11	107.8	448.5	119.1	252.5	217.5	125	509
Observers at Feeders	0	0	2	5	1	27	14	4	7	2	1	0	0	0	2	0	7	0	1	4
Hours at Feeders	0	0	4	5.25	2	49.25	20	12.5	21	1.5	0.75	0	0	0	11	0	5.75	0	0.5	4.2
Hours Owling	35.5	2.5	0	3.35	0	2.5	1	0	1.75	0	6.066	1	0	0	3.5	0.5	2.5	2.25	2	6.75
Miles Owling	4.5	0	0	33.00	0	0.625	0	0	15	0	59	0.5	0	0	22	2.5	11	0	0	82.1
Weather/Count Day																				
High Temperature F	23	39	25	39	28	32	39	33	53	37	40	52	32	52	30	43	33	49	27	44
Low Temperature F	20	33	18	35	18	19	17	22	34	33	21	34	5	30	25	20	29	36	17	22
Snow Cover (inches)	ns	2-4	4	5	3	3 to 4	1-3	4	0	0	0	ns	0	0	7	0-9	3	0	4	0
Precipitation (inches)	ns	0.74	0	0	0	0	0	0	1	0.96	0	0	0	0	7	0	0.2	0	0	0.1
Cloud Cover a.m.	ns	100	100	50%		Clear	cloudy	pt cldy	100	100	70-90%	0	0	cloudy	100	clear	100	clear	cloudy	100
Cloud Cover p.m.	ns	100	50	100%		Mt Cldy	cloudy	pt cldy	100	100	100%	0	0	cloudy	100	clear	100	clear	cloudy	98
Wind direction (from)	ns	W	south	ssw	0-15	SSW	NW	SSW	variable	ENE	S	S	S	SW	E	NW	NE	S-SW	W	SW-W
Wind Speed (mph)	ns	4-10	var.	13	E	11mph	5-15	14-22	3-7	3	0-9	6-16	10	0-5	10	1-8	7-14	7-10	12-18	0-25
Standing Water open	ns	5	2	60%	open	0%	frozen	frozen	10	80	5	ns	ns	open	frozen	pt froze	pt open	10	frozen	95
Moving Water open	ns	30	0	40%	open	20%	pt open	pt froze	10	20	50	ns	ns	open	open	pt froze	pt froze	90	pt froze	100

Species	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
	INLA	INLM	INMG	INMC	INMO	INMU	INMT	Nwpt	INNL	INOC	INOR	INPL	INPR	INPK	INPC	PuTC	INRI
Gr. White-fronted Goose	0	0	0	0	0	0	9	64	0	38	0	0	0	0	443	0	0
Snow Goose	0	0	0	0	3	0	0	0	102	0	0	0	0	0	1004	0	0
Ross's Goose	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Cackling Goose	12	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
Canada Goose	2003	341	47	209	1447	318	969	13451	648	600	2084	29	1250	4650	130	347	500
Mute Swan	0	0	0	0	0	0	0	0	0	13	0	0	21	114	0	0	0
Trumpeter Swan	0	0	0	0	0	0	0	92	0	0	0	0	0	0	0	0	0
Tundra Swan	0	0	0	0	0	0	70	5	0	0	5	0	0	0	0	0	0
Wood Duck	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
Gadwall	0	38	0	0	18	0	10	10	0	226	119	16	6	3	0	51	1
American Wigeon	0	1	0	0	0	0	0	0	0	10	3	0	0	0	0	0	0
American Black Duck	2	0	0	0	2	0	10	20	1	4	57	0	0	0	0	0	3
Mallard	814	279	0	4	109	168	836	358	34	737	1063	85	187	821	28	38	72
Blue-winged Teal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Shoveler	15	17	0	0	0	24	22	0	0	30	81	0	0	0	0	0	0
Northern Pintail	0	1	0	0	8	0	0	0	0	1	3	0	0	0	0	0	0
Green-winged Teal	0	14	0	0	0	0	0	6	0	11	0	0	0	0	0	0	0
Canvasback	0	0	0	0	0	1	0	7	4	1	6	0	1	5	0	0	0
Redhead	0	37	0	0	0	0	0	50	0	13	32	0	1	14	0	0	0
Ring-necked Duck	0	2	0	0	0	0	2	1	5	281	129	0	0	0	0	0	0
Greater Scaup	0	0	0	0	0	0	0	1	0	0	5	0	0	0	0	0	0
Lesser Scaup	0	0	0	0	0	0	0	4	0	18	6	0	0	0	0	0	0
Harlequin Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Surf Scoter	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
White-winged Scoter	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Black Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Long-tailed Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bufflehead	0	23	0	0	0	0	0	7	1	27	5	0	6	0	0	0	1
Common Goldeneye	0	13	0	3	8	1	0	101	1	11	0	3	18	30	0	0	1
Hooded Merganser	2	294	1	0	38	5	3	10	0	5	145	54	2	7	0	0	31
Common Merganser	0	23	0	0	2	0	0	20	0	0	4	0	1	0	0	0	2
Red-breasted Merganser	1	21	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Ruddy Duck	1	30	0	0	0	0	0	4	4	0	4	1	0	3	0	0	3
Ring-necked Pheasant	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0
Ruffed Grouse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wild Turkey	0	33	5	7	4	0	0	13	8	41	152	0	1	72	52	0	0
Northern Bobwhite	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
Red-throated Loon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pacific Loon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Loon	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pied-billed Grebe	0	27	0	3	0	0	0	2	3	17	51	0	6	2	0	0	1
Horned Grebe	0	17	0	0	0	0	0	0	1	7	7	0	1	0	0	0	0
Red-necked Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eared Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Western Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Double-crested Cormorant	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
American White Pelican	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Bittern	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Great Blue Heron	136	24	2	5	8	7	0	6	0	26	58	12	3	2	16	0	8
Great Egret	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blk-crowned Night-Heron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black Vulture	0	3	5	2	12	0	3	0	0	32	17	0	0	0	10	1	35
Turkey Vulture	0	29	0	76	4	0	1	1	0	5	9	128	0	2	15	21	0
Osprey	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Bald Eagle	8	19	2	3	3	1	5	39	2	2	16	13	0	3	5	2	1
Northern Harrier	8	0	0	2	1	0	1	2	0	57	4	0	0	3	16	0	0
Sharp-shinned Hawk	2	0	2	2	CW	0	0	1	3	1	1	0	0	0	2	1	0
Cooper's Hawk	4	6	0	4	4	1	3	3	1	6	11	1	4	6	5	0	1
Northern Goshawk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red-shouldered Hawk	4	13	0	15	7	0	6	4	3	9	2	8	1	0	4	5	2
Red-tailed Hawk	24	44	4	48	35	5	17	22	14	50	70	17	47	53	33	19	8
Rough-legged hawk	3	1	0	2	0	0	1	3	2	13	0	0	8	3	1	0	0
Golden Eagle	0	1	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0
American Kestrel	15	12	16	12	23	6	15	13	0	28	39	13	9	29	31	8	5
Merlin	1	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0
Peregrine Falcon	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Prairie Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
King Rail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Virginia Rail	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Sora	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Coot	14	52	0	0	0	118	0	5	256	8	111	248	5	588	0	0	2
Sandhill Crane	0	0	0	0	0	0	1300	0	36	22	8	0	25	0	0	0	0
Whooping Crane								2									
Killdeer	8	16	0	0	3	CW	0	0	0	0	3	4	0	0	10	0	0
Spotted Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greater Yellowlegs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ruddy Turnstone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanderling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Least Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purple Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dunlin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wilson's Snipe	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Woodcock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baird's Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black-legged Kittiwake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bonaparte's Gull	0	45	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0
Little Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laughing Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ring-billed Gull	8	980	0	0	4	25	1	111	11	27	319	198	13	3	2	0	1100
California Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring Gull	0	3	0	0	0	0	0	2	2	0	0	0	4	0	0	0	3
Thayer's Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iceland Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lesser Black-backed Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glaucous Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gr Black-backed Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pomarine Jaeger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rock Pigeon	174	21	27	168	207	79	94	7	125	133	537	9	91	82	1046	35	124
Eurasian Collared-Dove	0	0	1	0	0	0	0	0	0	34	0	0	0	0	0	0	0
Mourning Dove	469	373	108	172	252	105	209	142	36	216	284	34	210	61	240	63	158
Monk Parakeet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Count Name	INLA	INLM	INMG	INMC	INMO	INMU	INMT	Nwpt	INNLL	INOC	INOR	INPL	INPR	INPK	INPC	PutC	INRI
Unidentified Groups																	
Goose Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scaup Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Duck Sp	0	0	0	0	0	0	0	0	0	0	200	0	0	0	0	0	0
Merganser Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Swan Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Loon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accipter Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buteo Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eagle Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
small Falcon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
large Falcon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gull Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Owl Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shorebird Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Woodpecker Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flycatcher Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrike Sp	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Warbler Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sparrow Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0
Blackbird Sp	0	0	0	0	0	0	0	13	0	200	0	0	0	0	46500	0	0
Total Unidentified Ind.	0	14	0	0	0	0	0	0	46500	13	0						
Count Name	INLA	INLM	INMG	INMC	INMO	INMU	INMT	Nwpt	INNLL	INOC	INOR	INPL	INPR	INPK	INPC	PutC	INRI
Date of Count	12/14	12/14	12/28	1/4	12/28	12/14	1/1	12/28	12/16	12/28	12/15	12/20	12/22	12/28	12/28	1/4	12/14
Start Time (a.m.)	5:15	4:00	7:00	6:30	6:30	7:45	5:00	6:00	7:00	4:30	6:00	7:45	7:45	8:00	5:00	8:00	7:15
End Time (p.m.)	5:15	5:30	6:00	4:30	5:00	12:45	6:00	6:00	4:15	5:30	6:30	5:00	4:30	5:00	5:00	12:00	5:00
Observer Data																	
No. Observers in Field	14	38	9	26	26	18	17	8	15	18	17	9	10	27	17	14	3
No. Field Parties	11	11	2	7	7	6	6	3	5	6	7	5	4	10	6	5	2
Field Hours on Foot	25.92	49	4	20	13.75	7.05	13	10	4.25	13.25	26	16.5	4.5	17	3	0	5.5
Field Hours by Car	29.72	45	5	17.5	17	8.03	21	13	24.5	36.95	27.25	18.75	24.29	32.7	31	17.5	11.75
Field Hours by Boat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Field Hours	55.64	94	9	37.5	30.75	15.08	34	23	28.75	49.2	53.25	35.25	28.75	49.7	34	17.5	17.25
Field Miles on Foot	23.8	39.45	4.5	25	13.5	6.97	17	4	4.75	9.45	25.25	17	3	18.2	3	0	3.25
Field Miles by Car	234	352.6	49	166	269	77	95	150	283	321	488	240	323	420.4	232.5	186.8	198
Field Miles by Boat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Field Miles	257.8	392.1	53.5	191	282.5	83.97	112	154	287.8	159	513.3	257	326	238.6	235.5	186.8	201.3
Observers at Feeders	3	1	1	8	1	2	0	0	6	0	0	0	2	1	0	0	1
Hours at Feeders	16.2	3	7	15.5	ns	2	0	0	6	0	0	0	0.5	7	0	0	4
Hours Owling	2.5	17.58	2	1.5	1.5	1.5	2	2.5	0.1	6	1	4	0	2.5	2	0	0
Miles Owling	14.5	104.9	10	5.5	17	1	8	6	0.05	82	5	30	0	15.5	20	0	0
Weather/Count Day																	
High Temperature F	32	37	36	36	51	33	48	52	18	53	28	60	38	50	48	33	31
Low Temperature F	27	32	33	19	34	23	26	34	9	28	26	53	35	35	32	18	26
Snow Cover (inches)	2-6.5	5	0	4-6"	0	4	0	0	5	0	0	0	0	2	0	6	4-5
Precipitation (inches)	snow	0.8	0	0	0	4	0	0	0	0	0	0	0	0	0	0	rain
Cloud Cover a.m.	cloudy	100	0	pt cldy	40	100	0	0	pt cldy	0	heavy	100	100	clear	clear	50%	cloudy
Cloud Cover p.m.	cloudy	100	20	cloudy	100	100	50	10	cloudy	75%	heavy	100	100	clear	clear	cloudy	cloudy
Wind direction (from)	N	E	S	SSW	SE	SE	sw	SW	SW	NNW	SSW	SW	SW	ns	calm	South	SE
Wind Speed (mph)	9-13	5 to 8	5	10-15	10	10	0-30	0-5	calm	7	2 to 12	15-20	6-15	ns	0-10	15	2-7
Standing Water open	frozen	65	0	frozen	75	pt open	0	50	1	75	30	open	5	10%	pt froze	1	pt froze
Moving Water open	pt open	80	20	pt froz	100	pt froz	25	100	50	100	100	open	100	80%	open	1	open

Species	38	39	40	41	42	43	44	45	46	47	48	49	50	51	No. Birds	No. Cts.	Max. No.
	INSB	INSD	INSM	INSU	INTH	INTI	INTO	INTC	INTR	INWC	WELS	INWG	INWH	INWS			
Gr. White-fronted Goose	0	0	0	816	1	0	0	0	0	0	0	221	0	0	2744	10	816
Snow Goose	0	0	0	0	1	0	1	0	0	0	0	328	0	0	1763	9	1004
Ross's Goose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1
Cackling Goose	0	0	0	1	3	0	0	0	0	0	0	0	0	1	28	8	12
Canada Goose	1667	115	218	534	6856	4202	2204	197	1770	1354	109	1438	520	899	77317	48	13451
Mute Swan	12	0	0	0	0	382	36	0	0	0	0	0	5	0	825	11	382
Trumpeter Swan	0	0	0	0	11	0	0	0	0	0	0	0	0	0	111	3	92
Tundra Swan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	7	70
Wood Duck	0	0	0	1	0	0	0	0	0	0	0	0	0	0	11	7	3
Gadwall	5	2	34	455	85	1	0	0	0	11	0	10	9	0	2058	27	887
American Wigeon	0	0	0	3	0	0	0	0	0	1	0	3	4	0	40	13	10
American Black Duck	2	0	0	9	12	0	1	0	0	0	0	14	41	0	232	23	57
Mallard	799	38	146	509	514	2050	258	0	20	247	0	3231	2100	15	24696	44	3231
Blue-winged Teal	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
Northern Shoveler	0	23	2	75	9	0	0	0	0	12	0	1	13	0	456	15	130
Northern Pintail	0	0	0	6	4	0	0	0	0	0	0	1	0	0	34	13	8
Green-winged Teal	0	0	0	8	0	0	0	0	0	0	0	2	3	0	56	8	15
Canvasback	0	0	3	17	0	0	0	0	0	1	0	28	1	0	91	15	28
Redhead	0	0	2	4	0	4	0	0	0	0	0	12	7	0	294	16	101
Ring-necked Duck	0	2	8	5	41	11	0	0	0	0	0	0	0	0	652	15	281
Greater Scaup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	4	22
Lesser Scaup	0	0	3	0	1	12	2	0	0	0	0	6	4	0	128	14	46
Harlequin Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Surf Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	2
White-winged Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	3	5
Black Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Long-tailed Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2
Bufflehead	27	0	0	28	0	9	1	0	0	1	0	67	24	0	309	22	67
Common Goldeneye	8	0	12	72	2	65	2	0	0	1	0	60	16	2	925	29	301
Hooded Merganser	70	3	4	196	11	24	2	0	0	3	0	88	10	0	1115	31	294
Common Merganser	6	0	0	0	0	0	0	0	0	0	0	11	1	0	310	15	126
Red-breasted Merganser	0	0	0	6	0	0	0	0	0	0	0	5	0	0	1341	10	893
Ruddy Duck	0	0	2	1	2	16	0	0	0	0	0	0	2	0	105	17	30
Ring-necked Pheasant	0	0	0	0	0	0	1	0	0	0	0	0	0	15	19	4	15
Ruffed Grouse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wild Turkey	89	13	9	50	28	0	5	0	0	26	0	58	15	15	1138	33	161
Northern Bobwhite	0	0	17	0	0	0	0	0	0	10	0	1	0	12	103	10	30
Red-throated Loon	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	2	6
Pacific Loon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Loon	0	0	0	0	0	0	0	0	0	0	0	0	2	0	26	6	15
Pied-billed Grebe	4	0	0	108	6	6	0	0	0	21	0	33	43	0	373	27	108
Horned Grebe	0	1	0	95	1	0	0	0	0	0	0	0	1	0	137	13	95
Red-necked Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eared Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Western Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Double-crested Cormorant	0	0	0	6	0	0	0	0	0	0	0	6	0	0	20	6	6
American White Pelican	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
American Bittern	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Great Blue Heron	10	3	9	48	31	3	7	1	3	7	0	29	6	3	680	44	136
Great Egret	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blk-crowned Night-Heron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black Vulture	0	0	53	0	0	0	0	0	0	0	0	0	4	0	187	13	53
Turkey Vulture	0	3	61	0	1	1	0	0	0	102	0	0	1	0	510	22	128
Osprey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1
Bald Eagle	0	3	8	8	3	3	1	0	4	4	1	14	7	1	232	39	39
Northern Harrier	0	4	10	13	9	1	3	0	0	57	1	28	1	12	313	31	57
Sharp-shinned Hawk	3	0	5	3	1	4	0	0	2	17	0	2	2	1	52	25	5
Cooper's Hawk	9	0	5	3	4	5	7	0	1	1	2	10	4	2	200	44	17
Northern Goshawk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red-shouldered Hawk	5	0	7	7	22	1	1	0	2	9	0	1	1	0	211	37	22
Red-tailed Hawk	36	15	46	37	22	23	94	5	25	34	8	47	16	15	1322	49	94
Rough-legged hawk	1	0	8	8	2	0	25	0	21	15	0	1	0	24	191	28	25
Golden Eagle	0	0	1	0	0	0	0	0	0	2	0	1	0	0	9	7	2
American Kestrel	2	7	26	36	17	8	52	1	9	13	8	32	10	3	736	49	52
Merlin	0	0	0	2	0	0	0	0	0	1	0	0	0	0	9	6	2
Peregrine Falcon	0	0	0	0	CW	0	0	0	0	0	0	2	0	0	5	4	2
Prairie Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
King Rail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Virginia Rail	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	3	1
Sora	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
American Coot	23	0	0	450	9	1499	5	0	0	6	0	34	337	1	6978	28	3100
Sandhill Crane	8	0	0	1	30	0	13	0	0	3	0	1	2000	0	3745	16	2000
Whooping Crane												2			nc	nc	nc
Killdeer	0	0	0	0	0	0	1	0	0	3	0	2	3	0	78	16	16
Spotted Sandpiper	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
Greater Yellowlegs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ruddy Turnstone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanderling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Least Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Purple Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dunlin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wilson's Snipe	0	0	0	0	0	0	0	0	0	1	0	0	0	0	20	9	6
American Woodcock	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baird's Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black-legged Kittiwake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bonaparte's Gull	0	0	0	135	0	0	0	0	0	0	0	0	42	0	237	4	135
Little Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laughing Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ring-billed Gull	297	13	24	1817	400	31	3	0	2	60	0	950	475	0	10520	39	1924
California Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Herring Gull	6	0	0	10	1	3	1	0	0	0	0	3	3	0	444	15	351
Thayer's Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	4
Iceland Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Lesser Black-backed Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Glaucous Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gr Black-backed Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	5
Pomarine Jaeger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rock Pigeon	519	100	165	67	339	44	929	0	89	70	219	231	32	6	9708	46	1179
Eurasian Collared-Dove	0	0	9	7	CW	0	0	0	0	0	0	10	0	44	138	9	44
Mourning Dove	366	95	618	368	546	52	644	2	204	47	195	381	291	202	11921	51	725
Monk Parakeet	0	0	0														

Count Name	INSB	INSD	INSM	INSU	INTH	INTI	INTO	INTC	INTR	INWC	WELS	INWG	INWH	INWS	No Birds	Cts	Max #	
Unidentified Groups																		
Goose Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scaup Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Duck Sp	1	0	0	0	0	0	0	0	0	0	0	0	0	0	201	2	200	
Merganser Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Swan Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Loon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Accipter Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
Buteo Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	
Eagle Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
small Falcon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
large Falcon Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gull Sp	2	0	0	0	0	0	0	0	0	0	0	0	0	0	38	4	18	
Owl Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Shorebird Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Woodpecker Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Flycatcher Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Shrike Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
Warbler Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sparrow Sp	13	0	0	0	0	0	0	0	0	0	0	0	0	0	86	4	30	
Blackbird Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47013	4	46500	
Total Unidentified Ind.	3	0	46929	9	46500													
Count Name	INSB	INSD	INSM	INSU	INTH	INTI	INTO	INTC	INTR	INWC	WELS	INWG	INWH	INWS				
Date of Count	12/21	12/17	12/15	1/1	12/15	12/28	12/23	1/4	1/4	1/4	12/16	12/15	12/15	1/2	Date of Count			
Start Time (a.m.)	8:00	5:00	8:00	6:00	6:30	7:30	7:00	8:00	5:30	6:45	8:08	5:00	7:00	4:15	Start Time (a.m.)			
End Time (p.m.)	5:00	3:30	5:45	6:00	6:00	5:30	4:00	11:00	5:30	2:45	5:08	5:00	1:00	5:15	End Time (p.m.)			
Observer Data															Observer Data			
No. Observers in Field	29	2	12	11	26	16	35	6	4	12	5	26	15	9	No. Observers in Field			
No. Field Parties	12	1	5	7	12	6	9	2	2	5	3	9	6	5	No. Field Parties			
Field Hours on Foot	34.2	0	19	9	23	8.75	17	2.5	6.5	13	1	19	11.5	10.95	Field Hours on Foot			
Field Hours by Car	40.45	10.5	23.5	34	48	27.25	31.75	0	12	26	15	42	17.5	26.47	Field Hours by Car			
Field Hours by Boat/Bike	0	0	0	0	0	0	3	0	0	0	0	0	0	0	Hours by Boat/Bike			
Total Field Hours	74.65	10.5	42.5	0	71	36	0	2.5	18.5	39	16	57.75	29	37.42	Total Field Hours			
Field Miles on Foot	26	0	15.25	7.2	16	7.5	51.75	2.5	4.5	0	0	10.75	12.5	5.9	Field Miles on Foot			
Field Miles by Car	467.6	120	269	338	310	271.1	16.75	0	184	0	164	308.2	199	207.8	Field Miles by Car			
Field Miles by Boat	0	0	0	0	0	0	8.5	0	0	0	0	0	0	0	Miles by Boat/ Bike			
Total Field Miles	493.6	120	284.3	245.2	326	278.6	428.8	2.5	188.5	0	164	319	211.5	213.7	Total Field Miles			
Observers at Feeders	3	0	2	0	1	0	0	9	2	5	2	0	0	0	Observers at Feeders			
Hours at Feeders	5	0	5	0	7	0	0	0.5	3	9	13.5	0	0	0	Hours at Feeders			
Hours Owling	3	2	4	2.5	3	0	2.75	0	3	2	0	6	1	3.13	Hours Owling			
Miles Owling	14	20	36	19	10	0	8.5	0	8.1	5	0	33	0	14.7	Miles Owling			
Weather/Count Day															Weather/Count Day			
High Temperature F	37	34	26	43	23	46	32	32	35	34	21	30	38	20	High Temperature F			
Low Temperature F	32	26	22	28	20	41	16	14	22	23	14	26	27	16	Low Temperature F			
Snow Cover (inches)	0	>1	3	0	4	ns	<1	7	5	0	4	1-6	3	2-4	Snow Cover (inches)			
Precipitation (inches)	0.57	>1	0	0	0	0	trace	0	0	0	0	0	0	0	Precipitation (inches)			
Cloud Cover a.m.	100	100	100	0	75	ns	100	clear	60	Clear	0	90	cloudy	cloudy	Cloud Cover a.m.			
Cloud Cover p.m.	100	100	100	100	75	ns	100	cloudy	20	Clear	0	50	cloudy	cloudy	Cloud Cover p.m.			
Wind direction (from)	ENE	NW	W	South	West	SW	SW	SW	S	South	ns	west	SW	N	Wind direction (from)			
Wind Speed (mph)	8	12	10-15	5-10	12	7-8	5-15	9	10-25	10-20	ns	0-20	3-12	9-24	Wind Speed (mph)			
Standing Water open	20	100	m open	100	20	m froze	5	frozen	1	50	ns	10	pt	froze	frozen	Standing Water open		
Moving Water open	90	100	open	50	80	m open	65	pt open	30	open	ns	85	open	pt open	Moving Water open			

INDIANA WINTER BIRD FEEDER COUNT – 2013-2014

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The statewide feeder count sponsored by the Indiana Audubon Society was continued for the thirteenth year during the winter of 2013-2014. 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 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 2013-2014 was much colder and snowier than normal according to the Indiana State Climate Office. Average temperatures were below average in all months: November (-3.2 degrees), December (-1.9 degrees), January (-6.9 degrees), and February (-8.7 degrees). Total precipitation was about usual, but the amount of snow reached record levels in some areas. During the count periods, snow cover was mostly absent during November with amounts up to 1.5" in northern Indiana. Lake effect snows with accumulations up to 6" were present in northern Indiana during December, but only a few stations reported as much as 2" in central and southern regions. During January and February, from 2-24" were reported in northern Indiana with 2-10" noted in central regions, and lesser amounts in the south.

Participation in the Winter Bird Feeder Count for 2013-2014 was slightly above the previous year's count, which was the lowest in the history of this survey (Table 1). Most counts came from northern and central 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 Marion. 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 Dark-eyed Junco and Northern Cardinal most prevalent (Table 2). Several species (Dark-eyed Junco, Northern Cardinal, European Starling, Blue Jay, White-throated Sparrow, Fox Sparrow, Eastern Towhee, Pileated Woodpecker, Brown Creeper) were reported at record high levels. All irruptive “winter finches” (Pine Siskin, Purple Finch, Common Redpoll, Red-breasted Nuthatch) experienced a down year in 2013-2014.

Other species occurring with a relative frequency of <3% were Red-tailed Hawk, American Kestrel, Canada Goose, Mallard, Barred Owl, Killdeer, Rock Pigeon, Eastern Phoebe, Horned Lark, Golden-crowned Kinglet, Cedar Waxwing, Yellow-rumped Warbler, Pine Siskin, and Rusty Blackbird. Rare and unusual species are seldom documented by participants.

As in past years, nearly 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. Red-headed Woodpecker, White-breasted Nuthatch, and Black-capped Chickadee were found in greater numbers in northern Indiana. House Sparrow, Pileated Woodpecker, Brown Creeper, and Field Sparrow were most frequently encountered in the central part of the state.

Eight species showed significant differences in frequency among the four time periods surveyed (Table 4). Differences were mostly due to higher values in late winter, although Chipping Sparrows were most commonly found during November and Mourning Doves were encountered during January and December.

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 2013-2014 Indiana Winter Bird Feeder Count.

North - Allen: Fox Island County Park, Jim Haw, Ed & Cynthia Powers, Marty & Don Ryan, Mark & Kim Weldon, Phil Wixom; **Elkhart:** Elma Chapman; **Jasper:** Barb Lucas; **Lagrange:** Benjamin Miller; **Lake:** Matt Kalwasinski; **LaPorte:** Dennis & Frances Richardson; **Porter:** Indiana Dunes State Park, Beverly Overmeyer; **Saint Joseph:** John & Alice Bentley, Brian Miller, Lindsay & Scott Namestuiik, Marge & Vic Riemenschneider; **Steuben:** Pokagon State Park, Fred Wooley; **Whitley:** Stan Needham.

Central - *Adams*: Larry Parker; *Boone*: Roger Hedge; *Delaware*: Jean Ulman; *Fountain*: Harmon & Sally Weeks; *Grant*: Joy Sellers; *Hancock*: James Matthews, Gail McNierney; *Marion*: Lou Anne Barriger, Gordon Chastain, Becky Lomax-Sumner; *Morgan*: Cindy Breedlove, Robert Gregory, Douglas Johnstone; *Tippecanoe*: Russell Allison, Delano Arvin, Lynne Lesley; *Warren*: Susan Ulrich; *Wayne*: Bill Buskirk.

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

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

	Year	13-14	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		49	47	50	66	63	69	80	88	67	74	83	86	101	109	147	133	108	88	109	71	94
North		19	21	18	30	26	20	24	26	21	22	24	23	32	35	43	33	51	30	39	19	40
Central		18	15	20	24	24	29	39	47	32	37	44	42	38	50	58	43	41	41	49	37	44
South		12	11	12	12	13	13	17	15	14	15	15	21	31	24	46	57	16	17	21	15	10
Counties with counts		29	29	31	33	34	36	42	41	36	36	41	41	41	46	49	43	38	33	36	34	34
North		10	9	8	11	12	10	11	9	11	11	11	10	11	14	12	9	12	9	9	7	10
Central		11	11	13	14	13	17	19	22	16	14	19	18	17	18	20	18	18	16	18	19	17
South		8	9	10	8	9	9	12	10	9	11	11	13	13	14	17	16	8	8	9	8	7
No. survey periods		189	184	192	253	237	243	296	316	265	271	312	319	371	408	547	473	402	331	409	263	341
No. bird species		57	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		43	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		16.3	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	Year	Average number / feeder					Percent of counts				
		13-14	12-13	11-12	10-11	09-10	13-14	12-13	11-12	10-11	09-10
		<i>Number of surveys</i>	189	184	192	253	237	189	184	192	253
House Sparrow		16.8	16.9	14.9	16.4	14.3	71	72	68	77	63
Dark-eyed Junco		12.8	8.4	7.4	10.3	9.0	97	93	94	97	91
American Goldfinch		11.9	10.4	11.4	13.9	11.7	93	89	91	94	92
Northern Cardinal		10.2	9.6	9.7	9.9	9.0	97	98	98	98	94
Mourning Dove		8.3	6.7	5.6	8.5	6.7	86	84	83	86	88
House Finch		7.3	6.8	6.6	7.9	6.4	84	86	84	85	76
European Starling		5.3	3.2	3.7	4.9	2.4	50	48	43	45	32
Blue Jay		3.8	3.3	2.9	3.4	2.7	80	80	80	85	78
American Tree Sparrow		3.4	2.3	2.4	4.5	3.5	46	45	36	56	42
Tufted Titmouse		2.5	2.6	3.0	2.6	3.4	83	80	89	89	86
Downy Woodpecker		2.4	2.8	2.8	2.5	2.5	93	96	95	96	97
Carolina Chickadee		2.1	2.1	2.7	1.7	2.3	65	57	64	60	57
White-breasted Nuthatch		1.9	2.2	2.3	1.8	2.6	91	95	92	91	89
White-throated Sparrow		1.9	0.9	1.0	1.0	0.9	39	26	30	36	32
Red-bellied Woodpecker		1.6	1.7	1.5	1.3	1.4	87	91	84	81	81
Song Sparrow		0.9	0.6	0.8	0.9	0.5	51	39	43	50	31
American Robin		0.9	0.7	0.8	0.9	0.2	16	23	14	19	9
Black-capped Chickadee		0.8	1.1	0.8	1.2	1.1	31	39	33	37	38
Carolina Wren		0.7	0.7	0.6	0.8	0.7	44	43	46	50	43
Brown-headed Cowbird		0.7	0.6	0.7	2.3	0.6	9	11	8	16	12
American Crow		0.6	0.5	0.4	0.6	0.9	19	16	13	18	18
Hairy Woodpecker		0.6	0.8	0.6	0.8	1.0	37	54	41	47	53
Wild Turkey		0.5	1.0	1.2	0.9	0.7	3	2	3	4	6
Fox Sparrow		0.5	0.2	0.1	0.4	0.2	21	13	6	14	12
Eastern Towhee		0.4	0.2	0.3	0.3	<0.1	20	11	13	17	6
Red-winged Blackbird		0.4	0.4	0.6	0.7	0.7	10	10	12	16	8
Northern Flicker		0.4	0.4	0.3	0.4	0.4	24	28	24	23	17
White-crowned Sparrow		0.4	0.5	0.4	0.7	0.2	16	15	14	21	8
Cooper's Hawk		0.3	0.3	0.3	0.3	0.2	31	27	24	28	24
Pileated Woodpecker		0.3	0.3	0.2	0.2	0.2	19	15	15	13	15
Eastern Bluebird		0.2	0.2	0.4	0.3	0.6	8	9	15	11	14
Brown Creeper		0.2	0.1	0.1	0.2	0.1	17	12	12	14	13
Purple Finch		0.2	0.5	0.7	1.0	0.9	11	20	22	21	15
Red-headed Woodpecker		0.2	0.3	<0.1	0.1	0.2	8	15	4	9	7
Common Grackle		0.1	0.3	0.3	0.4	0.4	8	9	9	9	7
Northern Mockingbird		0.1	0.1	<0.1	<0.1	<0.1	7	10	5	4	7
Field Sparrow		<0.1	<0.1	<0.1	<0.1	<0.1	5	3	2	2	3
Sharp-shinned Hawk		<0.1	<0.1	<0.1	<0.1	<0.1	7	4	6	5	4
Yellow-bellied Sapsucker		<0.1	<0.1	<0.1	<0.1	<0.1	7	7	6	6	5
Hermit Thrush		<0.1	<0.1	<0.1	0.0	0.0	4	1	<1	0	0
Chipping Sparrow		<0.1	<0.1	<0.1	<0.1	<0.1	4	<1	3	2	<1
Red-breasted Nuthatch		<0.1	0.6	<0.1	0.1	<0.1	4	40	2	11	5
Red-shouldered Hawk		<0.1	0.0	<0.1	<0.1	0.0	4	0	3	2	0

Table 3. Regional abundance of birds frequenting feeders in Indiana during the winter of 2013-2014.

Region <i>Number of surveys</i>	Average number/ feeder			Percent of counts			Test ^a
	North	Central	South	North	Central	South	
	74	67	48	74	67	48	
Species							
House Sparrow	10.6	19.2	23.0	66	90	54	***
Dark-eyed Junco	12.5	10.3	16.5	99	97	94	NS
American Goldfinch	9.3	11.0	17.2	93	91	94	NS
Northern Cardinal	6.6	10.3	15.6	96	97	100	NS
Mourning Dove	5.8	7.8	12.7	86	84	90	NS
House Finch	7.1	8.5	5.9	81	94	75	*
European Starling	2.1	3.4	12.8	35	64	54	**
Blue Jay	3.1	3.3	5.6	88	69	83	*
American Tree Sparrow	3.6	4.2	2.0	50	42	46	NS
Tufted Titmouse	2.1	2.1	3.6	81	72	100	***
Downy Woodpecker	1.9	2.7	2.6	91	91	98	NS
Carolina Chickadee	0.4	2.9	3.7	15	96	100	***
White-breasted Nuthatch	1.9	1.9	1.7	99	87	85	*
White-throated Sparrow	0.6	2.3	3.3	18	43	65	***
Red-bellied Woodpecker	1.2	1.6	2.0	86	81	96	NS
Song Sparrow	0.3	1.3	1.5	23	66	75	***
American Robin	0.4	0.9	1.8	9	19	23	NS
Black-capped Chickadee	2.0	0.0	0.0	78	0	0	***
Carolina Wren	0.2	0.9	1.2	20	54	69	***
Brown-headed Cowbird	0.5	1.3	0.1	9	12	4	NS
American Crow	0.2	0.4	1.3	9	22	29	*
Hairy Woodpecker	0.4	0.7	0.6	35	37	40	NS
Wild Turkey	0.2	0.0	1.7	4	0	6	NS
Fox Sparrow	<0.1	0.6	1.0	8	24	38	***
Eastern Towhee	<0.1	0.3	1.3	4	19	46	***
Red-winged Blackbird	0.4	0.2	0.8	9	12	8	NS
Northern Flicker	0.2	0.5	0.6	15	30	29	NS
White-crowned Sparrow	0.2	0.7	0.1	15	22	10	NS
Cooper's Hawk	0.3	0.4	0.3	28	39	23	NS
Pileated Woodpecker	<0.1	0.6	0.3	3	33	23	***
Eastern Bluebird	0.2	<0.1	0.4	12	3	10	NS
Brown Creeper	0.2	0.4	<0.1	18	25	4	*
Purple Finch	<0.1	0.2	0.4	7	9	21	*
Red-headed Woodpecker	0.4	<0.1	0.1	15	1	8	*
Common Grackle	0.1	0.2	0.1	8	12	4	NS
Northern Mockingbird	0.0	<0.1	0.4	0	1	27	***
Field Sparrow	<0.1	0.2	<0.1	1	10	2	*
Sharp-shinned Hawk	<0.1	<0.1	0.1	3	9	10	NS
Yellow-bellied Sapsucker	<0.1	0.1	<0.1	3	10	8	NS
Hermit Thrush	<0.1	0.0	0.2	1	0	13	***
Chipping Sparrow	<0.1	<0.1	<0.1	5	3	2	NS
Red-breasted Nuthatch	<0.1	<0.1	<0.1	4	6	2	NS
Red-shouldered Hawk	<0.1	0.0	<0.1	4	0	8	NS
Total species	14.5	17.0	18.0				

^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 2013-2014.

Month <i>Number of surveys</i>	Average number / feeder				Percent of counts				Test ^a
	Nov.	Dec.	Jan.	Feb.	Nov.	Dec.	Jan.	Feb.	
	47	47	47	48	47	47	47	48	
Species									
House Sparrow	17.4	20.0	16.2	13.6	70	72	72	71	NS
Dark-eyed Junco	7.6	12.9	19.2	11.3	91	98	100	98	NS
American Goldfinch	11.5	11.6	13.2	11.4	94	91	94	92	NS
Northern Cardinal	5.1	9.0	13.1	13.5	94	96	100	100	NS
Mourning Dove	6.4	8.0	11.2	7.6	72	91	94	88	*
House Finch	5.4	7.8	9.6	6.3	81	79	89	88	NS
European Starling	7.0	2.2	7.7	4.2	21	38	72	69	***
Blue Jay	2.6	3.8	5.1	3.7	68	77	91	83	*
American Tree Sparrow	0.6	1.7	6.2	5.3	26	32	68	58	***
Tufted Titmouse	2.4	2.6	2.5	2.4	81	83	83	83	NS
Downy Woodpecker	2.1	2.3	2.6	2.5	94	94	91	92	NS
Carolina Chickadee	1.9	2.1	2.2	2.4	64	62	68	67	NS
White-breasted Nuthatch	1.8	1.9	1.9	1.9	94	91	91	88	NS
White-throated Sparrow	1.2	1.9	2.5	1.8	34	40	47	33	NS
Red-bellied Woodpecker	1.1	1.4	1.9	1.8	74	89	91	92	*
Song Sparrow	0.5	0.8	1.5	1.0	40	51	64	50	NS
American Robin	1.0	0.2	1.9	0.7	15	11	21	19	NS
Black-capped Chickadee	0.8	0.6	0.9	0.8	32	28	32	31	NS
Carolina Wren	0.6	0.6	0.9	0.7	45	36	60	38	NS
Brown-headed Cowbird	0.7	0.1	<0.1	1.8	6	9	6	15	NS
American Crow	0.2	0.6	0.9	0.6	9	15	28	25	NS
Hairy Woodpecker	0.3	0.5	0.8	0.6	23	30	51	44	*
Wild Turkey	0.4	0.0	0.7	1.0	4	0	4	4	NS
Fox Sparrow	0.3	0.4	0.8	0.4	17	15	32	21	NS
Eastern Towhee	0.2	0.4	0.8	0.4	11	21	28	21	NS
Red-winged Blackbird	0.2	<0.1	<0.1	1.4	4	2	2	31	***
Northern Flicker	0.3	0.3	0.6	0.4	19	19	36	21	NS
White-crowned Sparrow	0.2	0.3	0.5	0.5	9	15	23	19	NS
Cooper's Hawk	0.2	0.3	0.4	0.4	21	32	38	31	NS
Pileated Woodpecker	0.2	0.3	0.3	0.4	13	19	21	21	NS
Eastern Bluebird	0.2	0.1	0.2	0.3	11	4	6	13	NS
Brown Creeper	0.2	0.2	0.2	0.2	19	17	13	19	NS
Purple Finch	0.3	0.1	0.3	0.2	17	9	11	8	NS
Red-headed Woodpecker	0.1	0.1	0.1	0.3	4	4	9	17	NS
Common Grackle	0.1	<0.1	<0.1	0.3	9	4	4	17	NS
Northern Mockingbird	0.1	<0.1	0.2	0.1	11	4	11	4	NS
Field Sparrow	<0.1	<0.1	<0.1	<0.1	4	6	4	4	NS
Sharp-shinned Hawk	0.1	<0.1	<0.1	<0.1	13	2	9	4	NS
Yellow-bellied Sapsucker	0.1	<0.1	0.1	0.0	13	4	11	0	NS
Hermit Thrush	<0.1	<0.1	<0.1	<0.1	6	2	4	2	NS
Chipping Sparrow	0.2	<0.1	0.0	0.0	13	2	0	0	**
Red-breasted Nuthatch	<0.1	<0.1	<0.1	<0.1	2	6	6	2	NS
Red-shouldered Hawk	<0.1	<0.1	<0.1	<0.1	4	4	2	4	NS
Total species	14.7	15.1	18.0	17.1					

^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%).

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