

## SPECIES ACCOUNTS: Introduction

*“Bird records are like fine wine—they get better with age.”*

Henry C. West, *ca.* 1981

The 409 avian species accepted by the Indiana Bird Records Committee as having occurred in Indiana are discussed in this section. Species names and phylogenetic arrangement follow the 44th supplement of the *American Ornithologists' Union Checklist* (2003). Seasons are defined as in *North American Birds*:

Spring—March through May

Summer—June and July

Fall—August through November

Winter—December through February.

### The Records

Records from a multitude of sources were assembled into a computer database, which provided the foundation of this work. The effective cut-off date for records is 28 February 2006; however, March 2006 reports of the small geese (Ross's and Cackling) are included. At the cut-off date the database contained some 615,000 records.

**Definition:** A record, as employed in this work, refers to a particular avian species observed by a single party on a specified date. The single party restriction was implemented to allow the comparison of records; it does, however, eliminate most information from Christmas Bird Count and May Count tabulations.

Records rejected by the Indiana Bird Records Committee were excluded from the database and the author vetted all other entries.

Lingering birds constitute a single record even though they may remain for an extended period of time. However, within the database lingering birds were entered once for each ten-day interval they remained; this provided a more complete distribution pattern. The Common Crane, for example, was discovered 30 October 1999 and remained until 13 November. Thus, Indiana has a single Common Crane record, but three entries appear on the migration histogram: 30 October, 5 November, and 13 November.

Rare birds that return to the same location in subsequent years are considered new records. The LaPorte County Western Kingbirds, for example, attempted nesting at the Kingsbury site on seven different years; thus, they provide seven records.

The literature contains numerous reports that are undated or partially dated (e.g., late September or spring 1879). These records were generally excluded from the database as they cannot be used for temporal analysis.

**Source of the records:** Records, especially of rare or unusual birds, were extracted from the literature dealing with Indiana's avifauna. Dominant among these sources were: *American Birds* (and its permutations), A.W. Butler's 1890 and 1898 *The Birds of Indiana*, the *Indiana Audubon Quarterly*, *The Birds of Indiana* by R.E. Mumford and C.E. Keller, and both editions of *Indiana Birds and their Haunts* (C.E. Keller, S.A. Keller and T.C. Keller).

Extensive data also came from the personal notes of many observers. Without doubt the single most important among these was the huge file assembled by Professor R.E. Mumford (referred to as the Mumford files in the narrative). Over many decades Dr. Mumford accumulated extensive data, which were recorded on 5x7 cards and stored in the ten drawers of a steel cabinet. Professor Mumford graciously shared this invaluable information with the author. Dr. J.A. Haw also kindly allowed the author to add his daily field lists (covering more than thirty years) into the database. W.H. Buskirk provided access to the extensive personal notes of H.C. West, which are permanently stored at Earlham College. The Indiana Department of Natural Resources has a database of selected Indiana birds that was compiled by C.E. Keller; Dr. J.S. Castrale made this information available. The U.S. Banding Laboratory also shared data on birds banded in the state (see below). Brainard Palmer-Ball, Jr. generously provided the personal records of Lene Rauth, a long-time southern Indiana birder. Ross Brittain and Jess Gwinn both supplied owl banding records. J.P. Lewis of Big Oaks National Wildlife Refuge also kindly shared census data. Many additional records were collected from Ned Keller's Cincinnati Bird web site. The database also includes records extracted from the personal field notes of the following individuals: S.R. Bagby, Judith Hansen, J.K. Cassady, and J.J. McCoy. A hearty thanks to all. A most prolific source of records was the web-based Indiana listserve "IN-BIRD," which was developed by P.W. Kelly in 1998. It provided an unprecedented and expansive source of observations from throughout the state.

Records from the following individuals were incorporated into the database: Kenn P. Able, Tom Alexander, Russell E. Allison, Alan Anderson, Don Andrews, Sue E. Arnold, D.Z. Arvin, Kyle Arvin, J.J. Audubon, David Ayer, Renee Baade, Susan R. Bagby, Ellie Baker, Larry Balch, Amy Baldwin, Terry Ballenger, W.B. Barnes, Lou Anne Barriger, Karl Bartel, Tom & Colleen Becker, Paul Bennett, Laurence C. Binford, Kyle Bixler, Joy Bower, Gary & Lisa Bowman, D.H. Boyd, C.F. Brandler, Mike Brattain, Ross Brittain, Geo. Brennan, C. Bretsch, Ken Brock, Vickii Brock, Michael R. Brown, Alan W. Bruner, Dorthy Buck, Brad Bumgardner, Irving W. Burr, Ken Burton, Bob F. Buskirk, William Buskirk, Amos Butler, Byron Butler, Ted Cable, Neill Cade, Al Campbell, Jim H. Campbell, David Capp, Arline Carter, Larry Carter, J.T. Caruso, Neil Case, Lee Casebere, John Cassady, John Castrale, Ted Chandik, Jon Chapman, G.L. Chastain, Josh Christian, Dave Cimprich, Cincinnati Bird Club, Mike Clark, Charlie Clark, Mike Clay, H.K. Coale, Hal Cohen, James Cole, Milt Cole, Gene Coleman, James B. Cope, Tim Coslet, Jeff Curtis, Noel Cutright, Helen E. Dancy, W. Marvin Davis, Ruthven Deane, Neal Dickover, David Dister, Barb Dodge, Gary Dorman, Steve Doud, Jerry Downs, David Dugas, Jon Dunn, J. Barny Dunning, DNR staff, D. Easterla, C.W.G. Eifrig, Todd Elliott, Ruth Erickson, Brad Etter, Scott R. Evans, B.W. Evermann, John Favinger, John Felton, Clyde Fields, R.J. Fleetwood, E.R. Ford, Steve Getty, Boyd Gill, Steve Glass, Donna Gonzalez, Don Gorney, Darlena Graham, Jim Granlund, Alex Greene, Robert S. Gregory, Ray Grow, Brendan J. Grube, Peter B. Grube, Nancy Gruse, Jess Gwinn, Frannie Headings, Judith Hansen, James A. Haw, Cloyce L. Hedge, Roger L. Hedge, Ted Heemstra, Darel Heitkamp, J&S Hengeveld, Karen Henman, Irene Herlocker, Jed

Hertz, Geoff E. Hill, Lynea S. Hinchman, Angela M. Hoffman, Michael Hooker, Ed Hopkins, Steve Housefield, Bob Huguenard, Robert D. Hughes, Cathie Hutcheson, IN Brd of Health, Virgil Inman, Brad Jackson, Scott Jackson, Greg Jancich, Bud Johnson, Richard Johnson, Denny Jones, Doug Johnstone, Randy Jones, M.P. Kahl, Dan Kaiser, Fred Kase, Charles Keller, Geoff Keller, Ned Keller, Tim Keller, Seth Keller, Phil & Joanne Kelly, Jay Kendall, John Kendall, C.M. Kirkpatrick, Bob Kissel, Jim Kittinger, Dick Knutson, Helen Land, Jim Landing, Tom Langschied, Dan Leach, Midge Lechner, Tony Leukering, Paul Lehman, Jason P. Lewis, Steve Lima, Becky Lomax, John Louis, Will Madden, Dave Mandell, Tim Manolis, Walter Marcisz, Carolyn Marsh, Jeff McCoy, Cathy Meyer, Jeff S. Moore, Whitney Morrill, Sigrid Metzinger, Helen Michalik, Kip Miller, Chuck E. Mills, Steve Mlodinow, Bill Moats, Eugene Muench, Russ Mumford, Bill Murphy, Clint C Murray, National Lakeshore Staff, J.F. New, Val Nolan, Ted Nork, John O'Brien, Greg Osland, Sue Owens, Diane Packett, Brainard Palmer-Ball, Randy J. Pals, Steve Pancol, Larry Parker, Sebastian Patti, Larry Peavler, Steve Pelikan, Tom Pericak, J.P. Perkins, S.E. Perkins, J.D. Phillips, Rich Phillips, Emma Pitcher, F. Pitelka, Dick S. Plank, Bud Polk, Mike Polomchak, Dave Powell, Ed Powers, Robert Pringle, George Pyle, Roger P. Rang, Lene Rauth, Refuge Personnel, Ron Rayl, Rick Read, Scott Rea, Dave Reichlinger, Robert Ridgway, Marge & Vic Riemenschneider, Jeff Riegel, Virginia Reuter-skiold, Phil Robertson, Hank Rooney, Sandy Schacht, T. Schwinghammer, Peter E. Scott, Si Segal, Diana Seger, Jeff Sells, Wes Serafin, Craig Seward, Craig Shillinglaw, Andy Sigler, P.D. Skaar, Jerry Skinner, H.M. Smith, Jerry Smith, Marietta Smith, Roy Smith, Sharon Sorenson, S. Bend Aud. Soc., Jim Spier, Bobbie Squires, Tom Stankus, Penny Starin, Al Starling, Greg Steffen, Jay Stenger, Lee W. Sterrenburg, Stockbridge Aud. Soc., Nathalee Stocks, H.L. Stoddard, Dan Stoltzfus, Dave Styer, Merrill Sweet, Michael Topp, John Tucker, Joan Tweedell, Tammy Turner, Bob Tweit, John Ulmer, Susan H. Ulrich, Joy Underborn, Joe Van Riet, F. VanHuffle, Peg Walch, Terry Walsh, L.H. Walkinshaw, Chris C. Warren, J. Dan Webster, H. Micky Weeks, Weiss Permit, Mark A. Weldon, Henry C. West, Tom Westfall, Paul Wharton, John White, Don Whitehead, Clayton Wiggins, Don Williams, Georgeanne Wilcox, A.F. Wilson, Marisa Windell, John Winebrenner, S.W. Witmer, Chris L. Wood, F.M. Woodruff, H.F. Wright, Kevin Wyckoff, John Wyatt, and Jim Zervos. The author is indebted to all contributors.

#### U.S. Banding Laboratory Records

The Bird Banding Laboratory in Laurel, Maryland provided more than 162,000 Indiana banding records. Unfortunately, a number of formatting aspects rendered much of this data of little value in this study. These difficulties were as follows:

1. Locations- Banding data have locations given in latitude and longitude. Steve Brown of the Indiana Geological Survey kindly used the Survey's GIS system to convert these coordinates into county locations. It appears, however, that numerous errors were made either in recording initial latitude and longitude values, or in subsequent transformations as 23,274 (14.5 percent) of the records plotted entirely outside Indiana. Thus, it is uncertain that any of the location coordinates actually fall within the correct county. By comparing H.C. West's personal notes with his banding records it was possible to correct locations for some of his data (e.g., his records that plotted in Rush County were actually banded in Fayette County etc.).

2. Dates- To conserve computer memory banding records were coded; in the format employed banding dates are presented in 5-day increments. As exact dates were not available banding dates were entered into the database on days that are multiples of five (5, 10, 15,...). This created a problem in determining maximum counts, as it was never clear that the number of individuals banded were all captured on a single day. For example, 17 Loggerhead Shrikes were reported as banded in Perry County during the first five days of May 1989. As these birds might have been taken over several days this record could not be used as a maximum count.
3. Observers- The only link between the bander and the record was the permit number, which was included as part of the record forwarded by the Banding Lab. Obtaining a list of permit owners required a separate request and was apparently done by long-hand as the Banding Lab was unable to accommodate my request for owners of all Indiana permits. Additionally, in many cases sub-banders used the permits of master-banders without any indication of who actually conducted the banding. Thus, there was considerable uncertainty about who actually generated individual banding records.
4. Accuracy- It was also discovered that many identification errors had crept into the data. Some were easily detected, e.g., Indiana banding records for Clapper Rail, Red-cockaded Woodpecker, Red-breasted Sapsucker, Say's Phoebe, and Western Wood-Pewee. Others were more subtle, such as ten Winter Wrens banded in Tipton County in July. Most of these errors likely occurred when banders inadvertently marked the wrong species.