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POLYDACTYLY IN A COMMON NIGHTHAWK

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A spirit specimen of a Common Nighthawk (*Chordeiles minor*; University of Kansas Museum of Natural History No. 81192) from Niobrara County, Wyoming, is the first species of Caprimulgidae reported to have two halluces on each foot. Abnormalities of

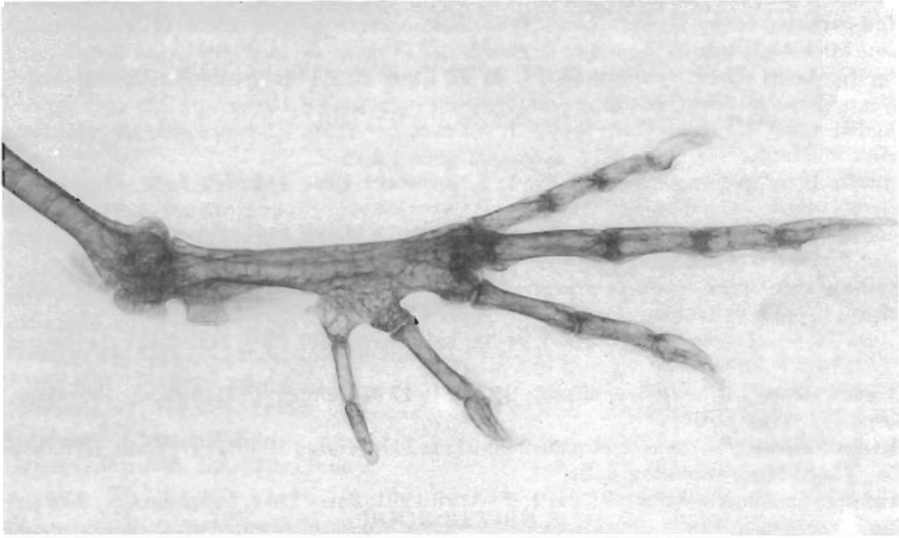


FIGURE 1. *Chordeiles minor* (KU 81192) with accessory metatarsal I and a complete double hallux. X 2.6

the legs and feet have been reported in various species of birds including a Common Snipe (*Gallinago gallinago*) with a forked claw on both halluces (Fogarty, 1969), and a Long-billed Curlew (*Numenius americanus*) with supernumerary phalanges of the left hallux (Forsythe, 1972). The nighthawk in question has an accessory metatarsal I and complete double halluces on both feet (Fig. 1).

Acknowledgements. Dr. W. Elder donated the nighthawk to this museum. I thank M. A. Jenkinson for bringing the specimen to my attention, J. T. Collins for x-raying the specimen, J. Simmons for preparing the print, and Drs. R. M. Mengel, S. L. Olson, and T. Webber for comments on the manuscript.

LITERATURE CITED

- Fogarty, M. J. 1969. Extra toes on the halluces of a Common Snipe. *Auk* 86(1):132.
Forsythe, D. M. 1972. Long-billed Curlew with supernumerary hallux. *Auk* 89(2):457.
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1991 REPORT OF THE KANSAS BIRD RECORDS COMMITTEE

This report summarizes records received and evaluated through 31 December 1991. Record submissions were assigned a sequential number in the order in which they were received with the year (of receipt) as a prefix. Not all submissions that received numbers were circulated. Birds are listed under two categories: Records Accepted and Records Rejected.

Forty-eight submissions were received by the committee and 31 were circulated for evaluation. One remains under review and has not received a final decision. The KBRC record number follows the scientific name, with the number of individuals seen, date(s) of observation, locality, observer(s) documenting the record, and supporting physical evidence, if any. Rejected records have the observer(s) names omitted and a brief explanation for rejection.

Records Accepted

Red-throated Loon (*Gavia stellata*); 91-05; 1; 30-31 October 1990; Scott Lake, Scott Co.; Tom and Sara Shane; photographs.

Red-throated Loon (*Gavia stellata*); 90-06; 1; 18 November 1990; Clinton Lake, Douglas Co.; Mick McHugh.

Pacific Loon (*Gavia pacifica*); 90-04; 1; 27 October 1990; Wyandotte County Lake, Wyandotte Co.; Lloyd Moore.

Pacific Loon (*Gavia pacifica*); 90-07; 1; 8 December 1990; Clinton Lake, Douglas Co.; Mick McHugh.

Pacific Loon (*Gavia pacifica*); 91-37; 1; 5 November 1991; Hillsdale Lake, Miami Co.; Chris Hobbs.

Red-necked Grebe (*Podiceps grisegena*); 91-19; 1; 13 March 1991; Perry Lake, Jefferson Co.; Richard Rucker.

Red-necked Grebe (*Podiceps grisegena*); 91-36; 1; 9 November 1991; Hillsdale Lake, Miami Co.; Chris Hobbs.

Clark's Grebe (*Aechmophorus clarkii*); 91-35; 1; 13 November 1991; Hillsdale Lake, Miami Co.; Chris Hobbs.

Clark's Grebe (*Aechmophorus clarkii*); 91-41; 1; 17 November 1991; Cheney Reservoir, Reno Co.; Pete Janzen.

Brown Pelican (*Pelecanus occidentalis*); 90-01; 1; 3 November 1990; Perry Lake, Jefferson Co.; Lloyd Moore; photographs.

Anhinga (*Anhinga anhinga*); 91-21; 1; 28 April 1991; Perry Lake, Jefferson Co.; Richard Rucker.

Curlew Sandpiper (*Calidris ferruginea*); 91-28; 1; 4 August 1991; Quivira National Wildlife Refuge, Stafford Co.; Mick McHugh.

Ruff (*Philomachus pugnax*); 91-09; 1; 5 May 1991; Quivira National Wildlife Refuge, Stafford Co.; Steve Crawford.

Red Phalarope (*Phalaropus fulicaria*); 91-33; 1; 14 September 1991; Quivira National Wildlife Refuge, Stafford Co.; Lloyd Moore.

Little Gull (*Larus minutus*); 91-38; 1; 17 November 1991; Paola Sewage Ponds, Miami Co.; Mick McHugh; video tape.

California Gull (*Larus californicus*); 91-31; 1; 16 August 1991; Elkhart Sewage Ponds, Morton Co.; Mick McHugh and Mark Corder; photographs.

California Gull (*Larus californicus*); 91-32; 4; 31 August 1991; Lake McKinney, Kearney Co.; Lloyd Moore.

Black-legged Kittiwake (*Rissa tridactyla*); 91-08; 1; 4 May 1991; Cheyenne Bottoms Wildlife Area, Barton Co.; Craig Faanes.

White-throated Swift (*Aeronautes saxatalis*); 90-03; 1; 24 November 1990; Junction City, Geary Co.; Lloyd Moore.

Anna's Hummingbird (*Calypte anna*); 91-24; 1; 21 September-23 November 1990; Oxford, Sumner Co.; Donald Vannoy and Gerald Wiens; photographs.

Rufous Hummingbird (*Selasphorus rufus*); 90-02; 1; 8 November 1990; Roeland Park, Johnson Co.; Lloyd Moore; photographs.

Hooded Warbler (*Wilsonia citrina*); 91-04; 1; 14 April 1991; Garden City, Finney Co.; Sara and Tom Shane; photographs.

Baird's Sparrow (*Ammodramus bairdii*); 91-20; 1; 13 April 1991; near Perry Lake, Jefferson Co.; Richard Rucker.

Golden-crowned Sparrow (*Zonotrichia atricapilla*); 91-03; 1; 1-7 January 1989; Scott Lake Park, Scott Co.; Tom and Sara Shane; photographs.

Records Rejected

Yellow-billed Loon (*Gavia adamsii*); 91-25; 1; 17 November 1990; Winfield City Lake, Cowley Co. Insufficient details; details failed to eliminate Common Loon.

Gray Hawk (*Buteo nitidus*); 91-01; 1; 15-16 April 1990; Milford Lake, Geary Co. Identification unquestioned; bird of questionable origin.

Mew Gull (*Larus canus*); 91-40; 1; 7 December 1991; John Redmond Reservoir, Coffey Co. Insufficient details; details failed to eliminate similar species.

Western Screech-Owl (*Otus kennicottii*); 91-15; 2; 9 April 1991; Along the Cimarron River, Morton Co. Identification questionable; insufficient details to eliminate Eastern Screech-Owl.

Ash-throated Flycatcher (*Myiarchus cinerascens*); 90-05; 1; 30 September 1990; Miami Co. Identification questionable; insufficient details to eliminate similar species.

Lesser Goldfinch (*Carduelis psaltria*); 91-10; 1; 2 April-15 May 1991; Garden City, Finney Co.; photographs. Identification questionable; insufficient details to eliminate American Goldfinch.

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Position #3: Marvin D. Schwilling	October 1990-October 1993
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Position #6: Galen L. Pittman, Secretary	October 1992-October 1995
Position #7: Roger L. Boyd	October 1992-October 1995
Alternate #2: David E. Seibel	October 1992-October 1995
Submitted 1 March 1992	
Galen L. Pittman, KBRC Secretary	

BOOK REVIEW

Cheyenne Bottoms, Wetland in Jeopardy. John L. Zimmerman. University Press of Kansas, Lawrence, Kansas. 197 pages, illustrated (39 drawings, 15 color photographs). \$19.95 (paperback). 1990.

Rising from relative anonymity, Cheyenne Bottoms is now recognized as an internationally important stopover point for migratory shorebirds. In the 1980s, with a shrinking water supply and a scarcity of funds for management, concern for the future of Cheyenne Bottoms became acute. In 1985, the Kansas Legislature directed the Kansas Biological Survey to study the area. The resulting 1987 report, Cheyenne Bottoms. An Ecological Assessment detailed the ecology and hydrology of the marsh and discussed management options. John Zimmerman's book, Cheyenne Bottoms, Wetland in Jeopardy, draws upon the 1987 technical report and a wide variety of other sources to bring together for a general audience a comprehensive picture of Cheyenne Bottoms. A professional ornithologist whose familiarity with Cheyenne Bottoms spans over thirty years, Zimmerman brings a personal touch to the story of this vast wetland.

The book begins with an inspirational foreword by Jan Garton, who originally spearheaded the campaign to save Cheyenne Bottoms. Following are nine chapters. The individual chapters — an Insuperable Obstacle, the Basin, Water, the Marsh, Ecological Communities, Shorebird Patterns of Passage, the Problem, the Importance, Reprieve and Hope — are an entertaining blend of natural history, wetland biology, and human ecology. The text is well-written. Descriptive language and a lively, anecdotal

style engage the reader's attention throughout. A recurring theme is that of water. Lying in the rainshadow of the Rocky Mountains, Cheyenne Bottoms faces a perpetual water shortage. Annual rainfall averages only 25 inches whereas the water lost through evaporation from open pools is on the order of 60 inches per year. Given this imbalance, substantial water inputs are required to maintain open water in the five major pools. Prior to its development by the state into a managed wetland, Cheyenne Bottoms was dry an estimated three out of every five years. In the 1950s, the construction of a diversion canal from the Arkansas and Walnut rivers enabled the Bottoms to become a permanent wetland. However, as irrigated agriculture became big business, less and less water was available to divert. Once again, Cheyenne Bottoms faces the prospect of drying up in drought years. Zimmerman likens the problem of a limited Plains water supply to a "tragedy of the commons" whereby a common resource is squandered by unrestricted access of individual users.

One of the core chapters is "the Marsh," in which the intricacies of nutrient cycles, food chains, and the major plant and animal players are introduced. Zimmerman explains how the energy that propels intercontinental flights of shorebirds is derived from the "muck of the marsh" in the form of tiny bloodworms (midge larvae). Prolific consumers of dead organic matter, bloodworms reach tremendous numbers in the mud and shallow waters at Cheyenne Bottoms, and are a primary food for other marsh dwellers.

Appropriately, considerable attention focuses on shorebirds; waterfowl, on the other hand, are scarcely mentioned. Countless thousands of shorebirds visit Cheyenne Bottoms during spring and fall migrations. With its strategic mid-continent location, Cheyenne Bottoms is for many species a critical inland feeding stop on the route between arctic breeding grounds and coastal feeding areas to the south. The intercontinental migration paths of major species, including "semiannual" and "loop" visitors, are discussed. Here, I feel a map showing migration routes would have been a welcome aid.

The last three chapters emphasize the role of humans in changes at Cheyenne Bottoms. Not surprisingly, most of these changes have not been for the better and the tone is sobering. The canal, dike, and pool system, installed to move and store water more efficiently, suffers from design and maintenance problems. Irrigation continues to threaten water supplies. Global warming, discussed in some detail, portends further warming and drying in the Plains states, and promises to exacerbate current water problems. Yet, the author points out that there is a growing awareness of these and other problems and with it, reason for hope. The final chapter concludes by reminding us of our personal role in local and global environmental events; that the problems of water shortage at Cheyenne Bottoms are a reflection of wider societal values and choices: "Maintaining this wetland demands substantial, sacrificial changes in the warp and woof of the very fabric of our life-styles, wherever we might live."

The book is delightfully illustrated. Strategically placed throughout the book, Marty Capron's evocative pen and ink drawings complement the text, bringing to life the images and moods of the marsh. A series of high-quality color photographs of representative waterbirds and wildlife are included together in a center section.

Contained in appendices are lists of the vascular plants and vertebrate animals of Cheyenne Bottoms. These lists will prove useful to many readers; however, the book is not intended to serve as a field guide.

A couple of key topics were missing from the book. Given the theme of wetland in jeopardy, a discussion of one of the major threats to Cheyenne Bottoms, the invasion of cattails, would have been appropriate. A second topic not included is the phenomenon of seiches: the strong winds at Cheyenne Bottoms frequently move tremendous amounts of water from upwind to downwind ends of the pools. With an effect similar to tides, seiching exposes food-rich mudflats to the probing bills of shorebirds that would otherwise be prevented from foraging by excessive standing water.

In summary, this is a fine book that is sure to have broad appeal. Whether you are a Cheyenne Bottoms devotee, an occasional visitor, or strictly an armchair explorer, I urge you to obtain a copy and read it.

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