

Black-bellied Whistling-Duck
1 Nov 1993
Big M., Butler Co., IA
shot by Rodney Steere fide J. Dinsmore
ISU spec #2612, IBL 65:82

Record Number: 94-AA
Classification: A-S

DOCUMENTATION

Jim Dinsmore, 4024 Arkansas Dr., Ames 50010 [19 Aug 1994]
--includes letter and article

SPEMIMEN

ISU #2612, male

REFERENCES

Field Reports: none
Records Committee: IBL 65:82

VOTE: 7 A-S

A-S, I agree with Dinsmore.

A-S, The identity of the bird is not in question. This species has been expanding its range in recent years and other states have been accepting records. Dinsmore's argument about population size, and therefore the odds of a wild bird vs. a captive bird, is convincing. I will vote to accept as a wild bird and request re-review of the 24 October 1993 specimen. We should probably also look at the other old records.

A-S, The identification is not in question. Although the number of extralimital records is not great and this species is said to be kept in captivity (we have no good data for Iowa), considerable evidence argues in favor of vagrancy over escapes: (1) The Texas population is expanding in both number and range (see maps in Oberholzer and in Schneider, Tacha, and Lobpries); (2) All records (except on with domestic waterfowl in January in Missouri) are from May to November, which fits a migratory species.; (3) The number of records has expanded in the 1970s and 1980s (My data for the 1990s may be incomplete.); and (4) all of the Iowa records are from "wild" situations and the birds were not marked or banded. Dinsmore has a misconception about the meaning of the category A-E; at least in my opinion, it means that we don't know where the bird came from.

A-S, because of vagrancy pattern and migratory status of this species.

A-S, I agree with Jim Dinsmore's comments. These birds are certainly wild birds. I would place all Iowa records in this category so far (4 records).

[One vote was changed from A-E to A-S at the meeting of 14 Aug 1994 and the original vote crossed out. The information in the comment was also crossed out, but was presented at the meeting, and is copied here because it might have relevance for future evaluation of this species./THK]

A-E [Francis Moore], I have been in contact with several waterfowl breeders in Iowa and Nebraska and have found that Black-bellied Whistling-Ducks are kept in captivity and one person with whom I talked said he knew of himself and at least one other person in Iowa and one in Nebraska that breeds this particular species. He also informed me that a lot of breeders are getting their breeding stock from breeders in Illinois, Indiana, and Kentucky. While I was talking with him on the phone he said that he was watching one of his three pairs of Black-bellied Whistling-Ducks running uncaged in his back yard. I visited him on the evening of August 10 [1994] and saw that he had six BBBWD's and about 15 Fulvous Whistling-Ducks in his aviary along with many other exotic breeds. All BBWD's were in the enclosure at that time but he said that from time to time they are out of the aviary and running loose. Last year a White-faced Whistling-Duck was found in Black Hawk Park in northern Cedar Falls. The man I visited said that the bird had come from his aviary and did not return. Jim Dinsmore presents a very good argument relating to acceptance of this and several older records but I think I have uncovered a compelling reason for the records to stay on the conservative side on this species and keep it as A-E until we are more sure of the origin of these and Fulvous Whistling-Duck records. (I was also informed that Fulvous Whistling-Ducks are even more common in breeders collection.)

REVOTE (at meeting of 14 Aug 1994): 7 A-S



Black-bellied Whistlin P-0456
Blue Lake, Monona Co., IA
24 Oct 1993 Terry J. Hulsebus

93-21

Black-bellied Whistlin P-0457
Big M., Butler Co., IA
1 Nov 1993 T. H. Kent

94-AA

Black-bellied Whistlin P-0456
Blue Lake, Monona Co., IA
24 Oct 1993 Terry J. Hulsebus

93-21

Black-bellied Whistlin P-0457
Big M., Butler Co., IA
1 Nov 1993 T. H. Kent

94-AA

94-AA

DOCUMENTATION FORM

Species Black-bellied Whistling Duck How many? one

Location? Big Marsh

Type of habitat? freshwater marsh

When? date(s): 1 November 1993 Time: .

Who? your name and address

Jim Dinsmore, 4024 Arkansas Drive, Ames

bird was shot by Rodney Steere, RR1, Greene, Iowa

Now specimen at Iowa State University where I stuffed it.

Others before and after you ?

Describe the bird(s) including only what you observed.

Bird was with a flock of coots when shot

Duck-slightly smaller than medium size (bigger than a teal, smaller than a Mallard)

Legs very long, reddish pink, extend well beyond end of tail.

Bill reddish orange with some yellow markings as well.

Cheeks and upper part of neck light gray, white on chin, dark brown/black stripe down top of head onto neck.

Rest of neck extending down onto breast and also on back of neck extending onto upper back a reddish black color.

Abrupt color change to black on mid belly and continuing on underside to base of tail, some white stripes near base of tail.

White patches on upper wing apparent but not obvious on the stuffed bird.

Similar species and how eliminated: Nothing it could be confused with

Did any one disagree or have reservations about identification? No

Viewing conditions: lighting, distance (how measured), and optical equipment: In hand

Previous experience with this species and similar ones: Have another specimen taken last fall to provide direct comparison.


References and persons consulted before writing description:

Have looked at several field guides but identification is obvious

How long before field notes made? I just looked at the bird across the hall in my lab a few minutes ago.

27 July 1994

To: Thomas H. Kent, Secretary
I.O.U. Records Committee

From: Jim Dinsmore 

RE: Black-bellied Whistling Duck records

Since the Records Committee is meeting in mid August, I thought that you might like the following information about the two Black-bellied Whistling Ducks (BBWD) shot in Iowa last fall. Both are now specimens at Iowa State University.

ISU #2611 Shot at Blue Lake in Monona County on 24 October 1993 by Terry Hulsebus of Denison, Iowa. Female with heavy fat deposits.

ISU #2612 Shot at Big Marsh on 1 November 1993 by Rodney Steere of Greene, Iowa. Male with no fat deposits, crop full of corn.

I note that the Records Committee classified the first bird in the category A-E. As a former member of the committee, I would like to make a case for classification of both of these birds as wild birds.

The category A-E, as I understand it, is for birds found in Iowa that reasonably can be considered to have originated from a captive population. This an appropriate category for many records we have had in past years such as birds that are unlikely to wander to Iowa (e.g., any parrot) or birds that can be attributed to a captive population (e.g., the banded Laughing Gull at Lake Manawa a few years ago). More puzzling are birds that could come from a captive population but that also could come from a wild source. The BBWD is a prime example of such a species. It is held in captivity at zoos and by some waterfowl fanciers, but it also has a well-established wild population in Texas that is expanding its range. In addition, it is a species that is known to wander. I note that it has been reported from Minnesota, Illinois, Missouri, Colorado, Nebraska, and Kansas in recent years. There was also a report of a flock in Pennsylvania last summer and the report of a minor invasion in the northeast in 1993 (see attached article from Pennsylvania Birds). Such a situation forces the Records Committee to evaluate the evidence and decide how to categorize reports of this

species in Iowa. I am aware of at least four reports from Iowa (two in 1993, one on 29 May 1987, and one in May 1977). Besides the specimens at Iowa State, the 1977 bird was photographed so the identification of the species is not the question as it is with most reports to the Records Committee. I would argue that at least for the two 1993 reports, there is no evidence pointing to a captive origin of those birds and there are several lines of evidence that point to a wild origin. These are as follows:

1. Both birds were shot in flight in wild situations at two different locations.
2. There was no indication that either bird was unusually tame as one might expect for a captive bird.
3. Neither bird was banded nor was there any evidence of the bird having been banded in the past.
4. Both birds were in good plumage and showed no evidence of excessive wear to the wing or tail feathers or nails as might be expected in a captive bird.
5. There are numerous other records of this species in other nearby states, and the population in Texas shows a recent increase in numbers.
6. There surely are more wild birds in Texas than there are captive birds in North America. It follows that there is a much greater likelihood that a wild bird would wander north to Iowa than that a captive bird, without any bands or feather wear, would escape from captivity and be shot in Iowa. Add to this the likelihood of having birds shot in two separate places in Iowa in a one-week period.

In short, I think that it stretches the imagination to assign these birds to an escaped source. I think that the above evidence points instead to a wild source for these birds. I hope that the above information and thoughts are useful for the committee in their deliberations.

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Although the diets of neonate and adult *S. jarrovi* are similar, the differences in diet may reflect the prey items in that portion of the habitat occupied by, or available to, a specific age class during its activity period or may represent prey items most easily caught and swallowed. Simon (1975) reported that all *S. jarrovi* maintain territories within a larger home range with adults defending territories against adults of the same sex and all juveniles. When space is available, juveniles defend territories against all other juveniles (Simon, 1975). Although some territories overlapped spatially, they were temporally distinct because adult activity occurred in early morning while juvenile activity occurred near noon (Simon and Middendorf, 1976). This may have exposed neonatal and adult lizards to different prey selections. Also, perch site was found to correlate with size; very small *S. jarrovi* tended to perch near the ground while larger lizards had higher locations (Simon and Middendorf, 1976). This could have denied neonates access to potential prey that occurred above ground level. Finally, the small gapes of neonatal lizards limits the size of prey and may have been the most important factor in establishing differences between neonatal and adult diets.

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BREEDING DISTRIBUTION OF BLACK-BELLIED WHISTLING DUCKS IN TEXAS

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Black-bellied whistling ducks (*Dendrocygna autumnalis*) (BBWD) historically nested in the neotropics northward through Mexico (Delacour, 1963) to extreme south Texas along the Lower Rio Grande Valley (Bolen and Rylander, 1983). By the early 1960s, the breeding range expanded north in the United States to areas near Corpus Christi, Texas (see references in Bolen and Rylander, 1983). Cain and Arnold (1974) reported the species breeding in Brazos County, Texas, east of Austin. Bellrose (1980) indicated the northern breeding range of the species to be

"southern coastal Texas," with the majority of individuals breeding in the vicinity of Lake Corpus Christi. Because the current breeding distribution of black-bellied whistling ducks in the United States has not been clearly delineated recently, we undertook this study using data obtained through incidental observations made by Texas Parks and Wildlife Department (TPWD) personnel and volunteers and by the Texas Breeding Bird Atlas Project (Atlas). Because black-bellied whistling ducks breed in their first year (Bellrose, 1980), have nearly an equal spring

94-AA

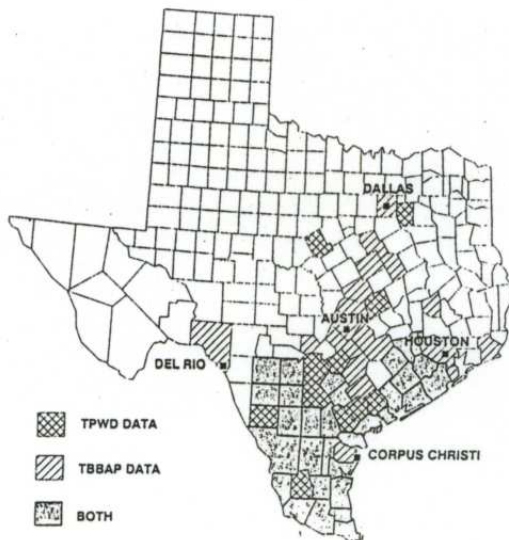


FIG. 1—Texas counties with ≥ 1 observation of black-bellied whistling ducks. Data were collected by Texas and Wildlife Department (TPWD) personnel between Mar.–Sep. 1984–1989 and by the Texas Breeding Bird Atlas Project (Atlas) between February and August from 1987 to 1990.

sex ratio (Bolen, 1967, 1970), and are generally found north of the LRGV only during the breeding season (Mar.–Sep.) (Delacour, 1963; Bellrose, 1980), we assumed all individuals observed from March to September were breeding birds.

TPWD data were collected between July and September from 1984 to 1989. Observers simply recorded numbers and locations of black-bellied whistling ducks as they incidentally encountered them throughout Texas. Observations were summarized by county, and counties with ≥ 1 sighting of the species between March and September were included in the breeding distribution.

Atlas data used in this study were collected between February and August from 1987 to 1992, using survey techniques similar to those used for atlas projects in other states (Laughlin and Kibbe, 1985; Robbins, 1990). Survey units were 7.5-minute U.S. Geological Survey quadrangles. Each quadrangle was $\frac{1}{4}$ of a Latilong (1° block of latitude and longitude), and was about 80 km² depending on location. Quadrangles were blocked in groups of 4, and at least 1 quadrangle from each block was searched during the atlas project.

Volunteers searched quadrangles to document location, and recorded species as either observed, possibly breeding, probably breeding, or con-

firmed breeding; number of birds observed was not recorded. We used counties containing quadrangles with ≥ 1 possibly, probably, or confirmed breeding sighting as locations representing breeding distribution of the black-bellied whistling duck. In instances where quadrangles included > 1 county, the county with the most area in the quadrangle was used.

TPWD data included 473 incidental observations of 22,450 black-bellied whistling ducks in 43 counties during the period from 1984 to 1989. The Atlas project recorded 314 sightings (58 possibly, 180 probably, and 76 confirmed breeding) of the species in 65 counties from 1987 to 1992. Only four counties (Fayette, Galveston, Kendall, and Walker) had possibly breeding sightings without any probably breeding, confirmed breeding, or TPWD sightings.

TPWD and Atlas data showed generally similar distributions of black-bellied whistling duck in Texas (Fig. 1). Because Atlas data collection methods were standardized and represented nearly a complete survey of all accessible areas in Texas, the larger range shown by Atlas data is probably more representative than the range shown by TPWD data. These data show that the breeding distribution has expanded beyond the Lake Corpus Christi area, and now encompasses nearly all counties south of a line from Del Rio to Austin to Houston and some counties between Austin and Dallas-Fort Worth.

In addition to the data presented here, black-bellied whistling ducks have been confirmed as breeding in east Texas in Anderson and Hopkins counties (C. D. Frentress, Texas Parks and Wildlife Dept., pers. comm.) and in Burleson County (K. A. Arnold, Texas A&M Univ., pers. comm.). Nests and broods of the species also have been documented in isolated areas of southwestern Louisiana on Lacassine National Wildlife Refuge since 1989 (S. R. Emmons, U.S. Fish and Wildlife Service, pers. comm.), and in Evangeline and Acadia parishes in 1991 and 1992, respectively (J. L. Moore, U.S. Fish and Wildlife Service, pers. comm.).

Based on metabolic rates, mean May temperatures, and energy requirements for reproduction, Cain (1973) determined that the northern extent of the breeding distribution of the black-bellied whistling duck is limited by low spring temperatures that restrict energy available for reproduction, and estimated Dallas as the extreme northern limit of the potential breeding

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distribution. However, delayed nest initiation may ease the energy demand at northern latitudes, thus allowing successful reproduction (Cain, 1973). Bolen et al. (1964) speculated that the black-bellied whistling duck's limited northern range expansion from the Lower Rio Grande Valley to the Lake Corpus Christi area may have been influenced by the creation of freshwater lakes and reservoirs. Data from this study show substantial additional range expansion that may or may not be related to the creation of freshwater impoundments, but which are still south of the Dallas area.

We thank the Texas Parks and Wildlife Department personnel and volunteers who provided incidental observation reports, and R. L. Bingham for assisting data analysis. We gratefully acknowledge the Texas Breeding Bird Atlas Project at Texas A&M University, and thank K. A. Arnold and K. L. Benson for access to their data. K. A. Arnold, S. L. Beasom, F. S. Guthery, and an anonymous reviewer provided helpful comments on earlier drafts of the manuscript.

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LABORATORY HYBRIDIZATION OF *STATOR BEALI* AND *S. LIMBATUS*, WITH NEW HOST RECORDS FOR *S. LIMBATUS* AND *MIMOSESTES AMICUS* (COLEOPTERA: BRUCHIDAE)

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Stator is a New World bruchid genus distributed in both North and South America, with several species in the United States. *Stator beali* Johnson and *S. limbatus* (Horn) are closely related species which overlap in distribution in the southwestern United States (Johnson and Kingsolver, 1976). Larvae of *S. beali* feed in seeds of only one host, *Chloroleucon ebano* (= *Pithecellobium flexicaule*) in southern Texas and northeastern Mexico. *Stator limbatus* is a generalist feeding in the seeds of more than 50 host plants from southwestern United States to northern

South America (Johnson and Kingsolver, 1976; Johnson et al., 1991).

We reared seed beetles in the laboratory from field collected seeds of *C. ebano*, *Acacia greggii*, *Parkinsonia aculeata*, *P. macra*, and *P. texana* from Rio Grande Valley, southern Texas, and northern Mexico. *Acacia greggii* was also collected north of Phoenix, Arizona. *Chloroleucon ebano* does not grow naturally in the western United States, but seeds from cultivated plants were collected at the Phoenix Zoo, Phoenix, Arizona. Reported here are results from laboratory hybridization exper-