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### A NESTING COLONY OF BLACK TERNS IN KANSAS

BY DAVID F. PARMELEE

Tordoff (1956) called attention to the fact that, although the Black Tern (*Chlidonias niger*) summered regularly in north-central Kansas, there was "no positive breeding record" of the species for the state. Johnston (1960) stated that it was a regular summer resident in western as well as central Kansas but that there were no breeding records. Johnston and Klaas (1961) reported collecting an adult male and an adult female, possibly a pair, in Douglas County on June 27, 1961. Both birds evidently were in post-breeding condition, based on plumage, color of soft parts, and presence of brood patches, and it was concluded that they had bred somewhere close by. Thus, it would seem probable that the terns breed across northern Kansas, although there is no direct evidence that they do.

At Cheyenne Bottoms, Barton County, in central Kansas, the species nested in considerable numbers in 1961. The colony was in flooded marsh well out from the road dykes in Pool 3. An accurate count of the breeding pairs was not made, but there were at least a dozen pairs in the area investigated. To judge by the number of flying birds over the area there must have been many more terns in the whole of Cheyenne Bottoms. The birds had colonized in scattered groups spread out over many acres of marsh. The location of this colony, as we later learned, was also known to Larry Nossaman of Great Bend, Kansas.

On June 18, Homer Stephens, J. R. Zuvanich and I found several fresh nests, two of which contained one egg each. Robert Boles and Thomas Eddy, some distance away, also found a fresh nest and egg, almost certainly of this species. The nests were constructed of dry rushes placed carefully on floating green rushes in water knee deep; the eggs were several inches above the water. The arrangement proved satisfactory, for the water level in Pool 3 fluctuated much during the following weeks and the nests moved up and down with the water. Nests of other species, notably of the Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*), were completely inundated and destroyed.

On July 1, members of the ornithology class at Kansas State Teachers College and I visited the colony and soon found six nests with three eggs each and three nests with two eggs each. Two of the three-egg sets were collected, evidently the first of the Black Tern for Kansas. On July 9, we found two additional nests with three eggs each, of which one set was collected. Those nests that contained but two eggs on July 1 had three eggs on July 9; apparently the full clutch-size for this colony in 1961 was three eggs. During our visits the adult terns flew low overhead, occasionally diving at us.

On July 16, I visited the colony and took one of three eggs from a nest that had two eggs on July 1. The egg was placed in an incubator and checked several times daily. It was pipped July 20. The chick was heard peeping for the first time on the morning of July 21, and it hatched at 11:00 a.m. on July 22. At 8:30 p.m. on July 23 it was preserved as the first specimen of its kind for Kansas.

Unfortunately, the entire colony and much of the resident bird life at Cheyenne Bottoms was virtually destroyed during the brief but severe hail storm that leveled the great marsh in the afternoon of July 19. There was absolutely no trace of any tern nests on July 23, when I next visited the area. Nesting success was nil.



Fig. 1.—A pair of Black Terns at their nest. Note the white feathers on the heads and throat. Photograph taken on July 16, 1961, at Cheyenne Bottoms, Barton County, Kansas, by David F. Parmelee.

Within or immediately adjacent to the colony, I noted the following dead birds afloat among the smashed rushes July 23: Pied-billed Grebe (*Podilymbus podiceps*) four large, but flightless young; Great Blue Heron (*Ardea herodias*) one adult; Black-crowned Night Heron (*Nycticorax nycticorax*) 22 adults; Blue-winged Teal (*Anas discors*) three adults and 23 large, but flightless young; King Rail (*Rallus elegans*) four large, but flightless young; Sora (*Porzana carolina*) one adult; American Coot (*Fulica americana*) five adults and 11 large, but flightless young. Nothing remained of many grebe and coot nests that were found there previously. Elsewhere the destruction of bird life, not to mention plant and other animal life, was wholly bizarre.

Whether the Black Terns will return another year and nest again at Cheyenne Bottoms is uncertain, but it seems likely that they will, since most adults apparently survived the hail. Only one was found dead in the nesting area and none elsewhere. On the morning of July 23, a dozen or so terns flew over crying half-heartedly, occasionally alighting on floating debris within the nesting area. They were in fact still strongly attracted to the site.

Throughout June and up to the time of the storm literally hundreds of Black Terns were seen flying aimlessly and feeding along the dykes or resting for hours on end in sizeable flocks at the many mud bars. Despite the fact that most of them were in breeding feather and color, they appeared to be non-breeding birds (gonads not examined). There were far too many of these bright adults along the dykes, and it can be safely concluded that only a small part of them bred at Pool 3.

It is worthy of note that about half the terns had white feathers on the forehead and throat (see fig. 1). This is a character of first-year birds, and an indication that about half the terns were breeding for the first time. The occurrence of both full adults and first-year birds may also indicate that the colony was established earlier than 1961, because if it were new this year most of the colonizers could be expected to be first-year birds. This is additional evidence that the terns are likely to return to the site in 1962.

Following the hail storm most of the non-breeders disappeared. By September, many Black Terns were again seen along the dykes, but not in numbers comparable to those seen earlier. Conceivably, the birds in September could have arrived from afar. Only eight terns were seen on September 11; about 30, including a flock of 21, were seen on September 16. A thin scattering of individuals was noted on September 17 and 23, and none on September 30, or thereafter.

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- Department of Biology, Kansas State Teachers College, Emporia, October 30, 1961.*

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## THE BREEDING BIRDS OF DECATUR COUNTY, KANSAS: 1908-1915

BY L. R. WOLFE

The following notes add a little to our knowledge concerning the bird-life of western Kansas, but they probably are of greatest value in assessing the present status of birds of northwestern Kansas in terms of the past. Fifty years ago both Sappa and Prairie Dog creeks were clearwater streams with many deep ponds. Likewise, there was running water in many of the so-called draws, such as Rock, Johnson, and Wild Cat, with many deep ponds that afforded excellent fishing. The open range had been partly converted into farms, but much of the original prairie remained, with tall bluestem in the bottomlands and "bunch grass" (probably a species of bluestem) and buffalo grass covering the uplands.

I was born on a ranch in Decatur County and from my earliest memory was intensely interested in birds. From an interest in their habits, in distinguishing their songs, and in watching their nests, it was natural that I became interested in birds' eggs. From about 1905 until 1914 I was active in making an egg collection. In that time a few specimens of birds were taken in order to make exact identification of those that were unknown to me. The comments below are based primarily on my memory, but they are supplemented by field notes made at the time and by existing records of data accompanying eggs. To the best of my knowledge the list includes all species that were then breeding within the county.

Green Heron: *Butorides virescens*.—A fairly common summer resident along the streams. Green Herons build a very frail nest of twigs, usually overhanging water; they begin nesting about the last week in May.

Blue-winged Teal: *Anas discors*.—A very rare summer resident; I found one nest with seven eggs on Johnson Draw, north of Oberlin, and another on Wild Cat Draw, southeast of Oberlin.

Turkey Vulture: *Cathartes aura*.—Eight or more pairs nested within the county every year, usually in small caves or under low limestone ledges; one set of eggs now in my collection was taken May 20, 1914.

Cooper Hawk: *Accipiter cooperii*.—Not uncommon in the fringe of trees growing along Sappa and Prairie Dog creeks. One or more nests were found nearly every year; nesting began about the last week of April.

Red-tailed Hawk: *Buteo jamaicensis*.—Very rare as a nesting species. Nests were usually placed 65 to 70 feet from ground, in the top of the tallest available tree; eggs were found in early March and young in April.

Swainson Hawk: *Buteo swainsoni*.—Not uncommon for a hawk. Nests were placed 30 to 40 feet from ground, wherever trees were available; several nests were observed

every year from 1909 until 1914. Normally they began nesting about mid-May; a set of three eggs now in my collection was taken in Wild Cat Draw on May 29, 1909.

Marsh Hawk: *Circus cyaneus*.—Not uncommon, nesting in the tall grass on the high prairie. Nests were thick mats of grass and stems, placed on the ground, usually in late May.

Greater Prairie Chicken: *Tympanuchus cupido*.—Very common over the entire county in the early days, but rare by 1914. The birds nested in thick bunch grass, about the middle of May.

Bobwhite: *Colinus virginianus*.—Very common along all of the streams, draws, and timber claims where brush and other suitable cover was available. Bobwhites were popular game birds at that time.

Killdeer: *Charadrius vociferus*.—A common summer resident.

Mountain Plover: *Eupoda montana*.—Very rare summer resident found only in areas of short buffalo grass on open plains. The nest was a slight depression in the ground lined with a few grass stems. The number of eggs was usually three, laid in the last of May.

Upland Plover: *Bartramia longicauda*.—This species was not uncommon in the early years but was not seen after about 1910. The nest was well concealed in thick grass and the sitting bird would not flush until right under foot.

Mourning Dove: *Zenaidura macroura*.—This species was a common summer resident, nesting in trees and bushes, on rocky ledges and occasionally on the ground.

Yellow-billed Cuckoo: *Coccyzus americanus*.—This cuckoo was a summer resident along the streams and draws wherever there were trees or brush.

Barn Owl: *Tyto alba*.—Three or four pairs were known to reside in the county. They nested in holes in dirt banks or on rocky ledges.

Screech Owl: *Otus asio*.—Scattered pairs were resident along the Sappa and Prairie Dog creeks. Two pairs were known to nest in holes in rocky ledges, which are unusual nesting sites.

Great Horned Owl: *Bubo virginianus*.—This owl was a rare resident. One pair nested in a large hole in a dirt bank for many years, and others used rocky ledges.

Burrowing Owl: *Speotyto cunicularia*.—A rather numerous summer resident on the open prairie.

Long-eared Owl: *Asio otus*.—An irregular summer resident. In some years two or three nests with eggs or young could be found and then the birds would not be seen again for a year or more.

Short-eared Owl: *Asio flammeus*.—A rare summer resident. These owls were found only on open prairie thickly covered with bunch grass or bluestems; the nest was a depression in ground under thick grass.

Common Nighthawk: *Chordeiles minor*.—A very common summer resident. Eggs were deposited on bare ground of rocky areas, open fields, old roads, etc.

Belted Kingfisher: *Megaceryle alcyon*.—One or two pairs were to be found along every stream, nesting in May.

Yellow-shafted Flicker: *Colaptes auratus*.—Not uncommon along streams where trees were available.

Red-headed Woodpecker: *Melanerpes erythrocephalus*.—Uncommon summer resident.

Hairy Woodpecker: *Dendrocopus villosus*.—An uncommon resident; normally the nesting hole was in smaller trees and not over 20 feet from ground. Eggs were laid in late April and early May.

Downy Woodpecker: *Dendrocopus pubescens*.—A rare resident, using nesting sites similar to those of the Hairy Woodpecker.

Eastern Kingbird: *Tyrannus tyrannus*.—An abundant summer resident, always found around timber claims and wherever there were scattered trees. Eggs were laid about the middle of June. Nests were sometimes placed on fenceposts and one was on the seat of an abandoned farm implement.

Western Kingbird: *Tyrannus verticalis*.—A summer resident, equal in numbers to the Eastern Kingbird. In this area these two closely-related species present an interesting problem in their competition for food and nesting sites. They frequently nest close together but I have never observed any actual combat between the two species.

Say Phoebe: *Sayornis saya*.—A not uncommon summer resident, nesting about rocky ledges and in abandoned buildings. In the early days abandoned dug wells were fairly numerous and these birds often descended a well to nest on a projecting shelf. As a result they were known locally as Well Birds.

Horned Lark: *Eremophila alpestris*.—An abundant resident; first nestings were usually in early April, but nests were found regularly until early June.

Bank Swallow: *Riparia riparia*.—A rare summer resident; only two or three small colonies were ever observed.

Rough-winged Swallow: *Stelgidopteryx ruficollis*.—One or two nesting pairs were observed every year. They usually occurred as isolated pairs, probably because suitable nesting holes were scarce. I never saw rough-wings excavate a tunnel.

Barn Swallow: *Hirundo rustica*.—Uncommon summer resident.

Purple Martin: *Progne subis*.—A common summer resident in Oberlin, but not observed elsewhere. In the early days of Oberlin there were numerous one-story frame store buildings with higher facades on the street, some more or less ornate. Small nooks and crevices in these facades were a common nesting place for the martins. Twenty or more could frequently be seen around or over the buildings. Nesting began in early June.

Blue Jay: *Cyanocitta cristata*.—A common summer resident along the creeks and draws where there was timber.

(Black-billed Magpie: *Pica pica*.—There were no magpies in Decatur County during my early collecting period. On a visit there in the autumn of 1921 I was informed that a large black and white bird had appeared in the country about 1918, and that their nests were large, roofed-over piles of sticks. Upon investigation I found two magpie nests, apparently used earlier that year. I also managed to see birds at two different locations. Since that time the magpie has become a regular resident. I have seen them in Decatur County numerous times since 1921, the last in May, 1961.)

Common Crow: *Corvus brachyrhynchos*.—Crows were rare in Decatur County until about 1909 or 1910. My first nest was found on April 29, 1908. During the next few years the crow population increased rapidly, and by 1915 they were common over the entire county.

Black-capped Chickadee: *Parus atricapillus*.—An uncommon resident observed only along Sappa and Prairie Dog creeks.

House Wren: *Troglodytes aedon*.—A common summer resident. Wrens nested under bridges, in abandoned buildings, or in crevices of ledges. In those days there were no man-made "bird houses."

Rock Wren: *Salpinctes obsoletus*.—Not uncommon as a summer resident in suitable habitat. Normally these wrens were found around rocky ledges, and rarely along dirt banks. Nests were placed well back in rock crevices, or holes, but were easily recognized because the birds always laid many small, flat pieces of stone, forming a runway or pavement, from the entrance back to the nest. Nesting began by the last week of June.

Mockingbird: *Mimus polyglottos*.—A very common summer resident.

Catbird: *Dumetella carolinensis*.—A rather common summer resident.

Brown Thrasher: *Toxostoma rufum*.—A common summer resident, found around thickets, in timber claims, and areas of brush. Nesting began in late May or early June.

Robin: *Turdus migratorius*.—A common summer resident.

Wood Thrush: *Hylocichla mustelina*.—An uncommon summer resident. One or more nests were observed nearly every year in the timber along Prairie Dog or Sappa creek; nesting began in early June.

Eastern Bluebird: *Sialia sialis*.—An uncommon summer resident, usually nesting in woodpecker holes in fence posts.

Loggerhead Shrike: *Lanius ludovicianus*.—Extremely rare; only two nests were ever observed and these in different years.

Bell Vireo: *Vireo bellii*.—A common summer resident where suitable shrubs and thickets were available. Nearly every nest observed was host to a cowbird.

Red-eyed Vireo: *Vireo olivaceus*.—A very rare summer resident; only one nest was positively identified as of this species.

Warbling Vireo: *Vireo gilvus*.—A rare summer resident, nesting in more open situations and higher in vegetation than the Bell Vireo.

Yellow Warbler: *Dendroica petechia*.—An abundant summer resident and a common host of the cowbird. At times when a cowbird egg was laid in their nest these warblers abandoned their eggs with the cowbird egg and built a second nest atop the first. If this was again used by a cowbird it occasionally was again abandoned and a third nest added atop the others. Such three-story nests were observed nearly every year.

Louisiana Waterthrush: *Seiurus motacilla*.—I have but a single nesting record for this species. On June 10, 1910, a nest containing three young was found under an overhanging bank about three feet above the water on Sappa Creek, east of Oberlin.

Yellow-breasted Chat: *Icteria virens*.—A not uncommon summer resident nesting in mid-June in suitable thickets separated from taller trees.

House Sparrow: *Passer domesticus*.—An abundant resident.

Western Meadowlark: *Sturnella neglecta*.—A very common summer resident, but rare in winter.

Red-winged Blackbird: *Agelaius phoeniceus*.—A common summer resident where suitable habitat was available. A very common host of the cowbird.

Orchard Oriole: *Icterus spurius*.—A common summer resident where there was a fringe of willows or other shrubs along the draws.

Baltimore Oriole: *Icterus galbula*.—Not an uncommon summer resident; one or two pairs were observed each summer, nesting in early June.

Bullock Oriole: *Icterus bullockii*.—A rare summer resident. This oriole could have been present in the county during the early years and escaped my observation. However I do not think so and it was not until June of 1912 that a pair was found on Johnson Draw north of Oberlin. At that time this was a new bird to me and I thought it entirely new to the area. One or more pairs were again observed nesting in the summers of 1913 and 1914.

Common Grackle: *Quiscalus quiscula*.—A rather rare summer resident; a colony of 15–20 pairs annually nested in an orchard just north of Oberlin.

Brown-headed Cowbird: *Molothrus ater*.—A common summer resident.

Black-headed Grosbeak: *Pheucticus melanocephalus*.—Fairly common as a summer resident, nesting in early June. One or more nests were found each year.

Blue Grosbeak: *Guiraca caerulea*.—A rare summer resident. Normally seen around small thickets in open draws.

Dickeissel: *Spiza americana*.—An irregular summer resident; in some years Dickcissels were rare or absent, and in other years they were very common.

American Goldfinch: *Spinus tristis*.—A rather common summer resident, usually nesting in late July or August.

Lark Bunting: *Calamospiza melanocorys*.—An irregular summer resident, quite common in some years, and in others very rare. Nesting began in mid-June.

Grasshopper Sparrow: *Ammodramus savannarum*.—A rather common summer resident, nesting about the first of June.

Lark Sparrow: *Chondestes grammacus*.—A common summer resident. Nesting began in early June. Nests were placed on the ground of sparsely grassed hillsides, in low trees, or in a pocket of a rocky ledge.

Kerrville, Texas, August 24, 1961.

**Common Gallinules at Cheyenne Bottoms.**—On June 18, 1961, Homer Stephens, J. R. Zuvanich, Robert Boles, Thomas Eddy and I saw a Common Gallinule (*Gallinula chloropus*) at the south edge of Pool 3 in Cheyenne Bottoms. I shot the bird, the first Kansas specimen for the Kansas State Teachers College collection. It was a laying female with enlarged ova measuring 24.0, 17.0, and 14.0 mm, respectively—proof enough that the species breeds in central Kansas. Heretofore, there were breeding records for only Douglas and Coffee counties (see Johnston, Univ. Kansas Mus. Nat. Hist., Misc. Publ. 23, 1960: 1–69).

On July 1, 1961, members of my ornithology class and I saw another Common Gallinule at exactly the same spot where the first specimen was collected. This bird proved to be an adult male (testes  $6.5 \times 10.5$  mm,  $6.5 \times 10.0$ ). Having been especially watchful for the species during the past several years, I conclude that it is not at all

common at Cheyenne Bottoms.—DAVID F. PARMELEE, *Department of Biology, Kansas State Teachers College, Emporia.*

**May Record of Scrub Jay in Kansas.**—According to Johnston (Univ. Kansas Mus. Nat. Hist., Misc. Publ. 23, 1960: 1-69) the Scrub Jay (*Aphelocoma coerulescens*) is an irregular winter resident in southwestern Kansas. Five specimens were taken 12 miles northeast of Elkhart, Morton County, November 8, 10, 14, 1934, and there are sight records in January for Finney County.

On May 14, 1961, about seven miles north of Elkhart, members of my ornithology class and I noted at least three Scrub Jays in trees and brush along the Cimarron River. Despite the late date, the birds appeared not to be nesting; this was borne out by an adult female (ovary examined) that I collected that day.

There can be little doubt that the jays wander down the Cimarron from out of the Black Mesa country of extreme northwestern Oklahoma, where they are fairly common the year around.—DAVID F. PARMELEE, *Department of Biology, Kansas State Teachers College, Emporia.*

**Some Recent Records of Caspian Terns in Kansas.**—On May 20, 1961, I noted two Caspian Terns (*Hydroprogne caspia*) on the Ross Natural History Reservation, about four and a half miles west of Americus, in Lyon County. The birds, flying together, circled low over a pond several times and then flew directly north and were not seen again.

On June 2, 1961, Richard H. Schmidt and I saw a single flying Caspian Tern at Cheyenne Bottoms in central Kansas. Likely the same bird was seen the following day, June 3, when it flew upwind along the dyke canal at Pool 4. Schmidt shot it (male, testes  $8.0 \times 12.0$  mm,  $7.0 \times 10.0$ ) apparently the second specimen ever taken in Kansas.

On September 11, 1961, also at Cheyenne Bottoms, I noted a single Caspian Tern standing among Ring-billed Gulls (*Larus delawarensis*) on a mud bar in Pool 2. It remained there most of the afternoon, occasionally flying off with the gulls and returning with them.

We are inclined to agree with L. B. Carson that these terns are probably more common in Kansas than the records indicate (for notes on the species at Lake Shawnee see Topeka Audubon News Vol. 16, No. 1, 1961).—DAVID F. PARMELEE, *Department of Biology, Kansas State Teachers College, Emporia.*

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## NOTES AND NEWS

K. O. S. dues are payable every January 1st, for the membership year is the calendar year. New members, and delinquent members paying dues after that date, receive any issues of the Bulletin they have missed earlier in the year.

At the spring meeting in Topeka, The Board of Directors authorized the use of remittance envelopes to facilitate the payment of dues. The treasurer, the secretary, and the editor also hope they will accelerate such payment.

This year almost a fifth of the membership paid dues after the list was published in the June number of the Bulletin. Those members, and several students who have joined this fall, bring the year's total to 237. This is a decrease of only eleven from 1960, although 51 members were dropped for non-payment or by resignation.

K. O. S. has always had a large turnover in membership. The average for the last ten years has been 44. The Board believes that the use of these reminders will decrease this average, while renewed effort on the part of all members could bring in many new names.

Reminders have been placed in all Bulletin mailings. If you have paid for 1962 already, please use your envelope to enlist a new member.

Let's aim for at least 300 members in 1962!—AMELIA J. BETTS, SECRETARY.

## REVIEW

**A Field Guide to Western Birds.** Roger Tory Peterson. Houghton Mifflin Company, Boston. 2nd Ed. 1961. xxvi + 360 pp., 46 figs., 60 pls., 2 maps. Price \$4.95.— Those who were pleased with the over-all excellence of the recent *Birds of Texas* undoubtedly will be delighted with Mr. Peterson's most recent guide to avian identification. The much-needed and long-awaited second edition of *A Field Guide to Western Birds* is so superior to the first edition in both text and illustration that there is scarcely basis for comparison.

The book is divided into two major parts; the first deals with western birds of the continental United States; the second, a shorter section, with the birds of the Hawaiian Islands. The preface concerns the "history and origin" of this western guide and acknowledges numerous contributors. Other features of the book include a map of the western United States (showing the division between the "True West" and the "West-East Blend-Zone" from an avifaunal standpoint), a map of the Hawaiian Islands (in the second major section of the book), the traditional Peterson introduction ("How to Use This Book") containing sections explaining the various sub-headings included under each species account, as well as related reference material useful to the student and observer of western birds. Two appendices, the first "Accidental and Marginal Species in Western North America" and the second "Casual and Accidental Species in the Hawaiian Islands" complete the work.

Peterson presents information descriptive of families and of distribution, both ecological and geographical, for all species, a feature first instituted in the Texas field guide. Much attention has been devoted to bringing the ranges of various species up to date; for example, the Ridgway Whip-poor-will, only recently detected in Guadalupe Canyon in southwestern New Mexico, has been included. Other innovations of the Texas work have been preserved, such as data on food, nest site, and color and number of eggs. Although certain of the color plates will be recognized as having first been published in the Texas guide, most of the color plates are at least in part new, and none from the old edition have been retained.

This second edition includes, of course, Alaskan birds and special reference to the occurrence of a species in that state is made. Some Alaskan specialties, as the Bluethroat, White Wagtail and McKay's Bunting are portrayed only in black and white text figures, but readers who wish to see them in "Peterson color and pose" will find these birds illustrated thus in *A Field Guide to the Birds of Britain and Europe* (1954, R. T. Peterson, Guy Mountfort and P. A. D. Hollom).

Perhaps the outstanding feature of the guide is the section on the Hawaiian Islands. Accounts of species are organized in the same manner as those dealing with the continental United States. The two color plates of Hawaiian birds, featuring exotic species as well as the rare honeycreepers and other endemics, are most praiseworthy.

Members of the K.O.S. will find this guide of both utilitarian and aesthetic value owing to the excellence of the color plates. Naturally the book is suitable for use in the western states and northwestern Mexico; it is adequate for most of Kansas, lacking coverage for only a few eastern species.—JON C. BARLOW.

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