150-mm white flowers of the balsa tree (*Ochroma limonensis*) from December 1968 through March 1969. Two resident icterids that also fed regularly at the balsa flowers were the Yellow-backed Oriole (*Icterus chrysater*) and the much larger Chestnut-headed Oropendola (*Zarhynchus wagleri*).

Skutch (1954, Pacific Coast Avifauna No. 31) gives good descriptions of nectar drinking in other tropical icterids (e.g. *Gymnostinops montezuma*), and I know that other field workers have made similar observations. Thus nectar feeding, at feeders or in the wild, is indeed an established habit of the family, although its seasonal variations and overall importance are still unknown.—CHARLES LECK, *Department of Zoology, Rutgers University, New Brunswick, New Jersey 08903.* Accepted 20 Feb. 73.

The status of the Gray Hawk in New Mexico.—On 23 April 1876, near Fort Bayard, Grant County, New Mexico, Frank Stephens collected two sets of eggs that he identified as those of the Gray Hawk (*Buteo nitidus*). Through the years this identification has been accepted without question, but my recent study of the matter suggests strongly that the eggs are actually those of the Cooper's Hawk (*Accipiter cooperii*). Factors arguing against the eggs being those of *B. nitidus* are their coloration and size, the time of year collected, the nesting habitat, and the lack of other verified records of the species in the state.

The first mention of these eggs seems to be that of Bendire (1892), who examined them and pointed out that they were in the collection of the American Museum of Natural History, where they arrived in the collection of Harry Balch Bailey, who in turn may have obtained them from Stephens or from Charles Aiken, for whom Stephens had collected in New Mexico (Stephens 1918). At the American Museum, the eggs were catalogued as 445 (Ridgway number for the Gray Hawk), sets 1/2 and 2/2, along with their measurements in inches and the annotation: "nest of oak twigs lined with willow bark and leaves in the fork of an oak tree 40 feet from the ground, female flew from nest." In the 1930s the eggs were recatalogued by Dean Amadon (pers. comm.), who noted that one egg in set 1/2 (AMNH 634) was missing and that set 2/2 (AMNH 14,989) was "In group." The latter apparently meant the set was on exhibit, and now (January 1972) both those eggs and the one from set 1/2 are missing and presumed lost. In spite of this loss, we still have the catalog measurements of the eggs and the description in Bendire (1892), plus the one remaining egg. There is no way of knowing which egg of set 1/2 remains, but comparison can be made on breadths, which in the catalog are the same for both eggs, i.e. 1.48 inches (= 37.8 mm). This value is identical to that I obtained, and on this basis I conclude that the catalog measurements provide valid mensural data for the missing egg sets.

In checking the identity of Stephens' sets I considered the eggs of all possible southwestern accipitriform species. My preliminary survey ruled out all species but *Buteo nitidus* and *Accipiter cooperii*. The eggs of these two are generally similar and overlap to some degree both in color and size. The eggs in both are white in color, but typically those of *B. nitidus* are immaculate while up to half those of *A. cooperii* have scattered pale brown to buff spotting (Bent, 1937). Bendire (1892) indicated that two of the Stephens eggs were faintly spotted with buff, and I can confirm this in the one remaining and somewhat stained egg. Bendire actually contrasted this condition with Arizona *B. nitidus* eggs seen by him, in-

dicating that only one of the latter had any markings at all and those were barely discernible. Thus on the basis of color the Stephens eggs are more like those of *A. cooperii* than those of *B. nitidus*. However Lloyd Kiff (pers. comm.) informs me that at least in Sonora the frequency of spotted eggs in *B. nitidus* is greater than is generally believed. This fact calls for caution against overemphasis of color in assessing the identity of these eggs, although the generally immaculate condition in Arizona sets is a highly suggestive factor.

Mensural comparisons of the eggs of *B. nitidus* and *A. cooperii* require some caution also, as there appear to be regional differences in egg size. For example, eggs in northern populations of both species may be larger than those from farther south, at least in the data analyzed by Kiff (pers. comm.) and me. For example, 21 eggs of *B. nitidus* from southern Tamaulipas average 3.0 mm shorter and 1.7 mm narrower than 25 Arizona eggs of the species (Table 1). The ranges overlap, but Mann-Whitney U tests reveal that the differences are significant at the 0.05 level. In this case there are parallel differences in such measurements as wing length, and in fact van Rossem (1930) separated Arizona and northwestern Mexico birds as a new race, *B. n. maximus*, distinguished by larger size from *B. n. plagiatus* of southern Tamaulipas and elsewhere in eastern Mexico. Friedmann et al. (1950) extended the range of *maximus* eastward to northern Tamaulipas and Texas, which suggests that egg size in those areas should also be large. Thus the likeliest sources for any birds breeding in New Mexico would be *maximus* populations, rather than the smaller *plagiatus*. Even if the birds from Texas and extreme northeastern Mexico are not large, the species seems to be so rare there as to be an unlikely source for New Mexico birds. Thus, I am comparing Stephens' eggs specifically to those of *B. nitidus* from Arizona and *A. cooperii* from Arizona and New Mexico.

Based on average measurements (Table 1), in the area specified above the eggs of *B. nitidus* average 3.2 mm longer and broader than those of *A. cooperii*. These differences are significant at the 0.05 level, although the values overlap—particularly length (by 4.7 mm). The lengths of Stephens' eggs are all in the range of overlap, so that this measurement is not conclusive in identifying them. In breadth, where

TABLE 1

MEASUREMENTS OF THE EGGS OF *ACCIPITER COOPERII* AND *BUTEO NITIDUS*, INCLUDING THE PUTATIVE NEW MEXICO SETS OF THE LATTER

Species, samples, and sample sizes	Egg length (mm)			Egg breadth (mm)		
	$\bar{x}$	SD	Range	$\bar{x}$	SD	Range
Accipiter cooperii						
Arizona, New Mexico (34 eggs)	48.9	1.6	45.7–52.5	37.8	0.9	35.4–39.6
Buteo nitidus						
New Mexico (4 eggs)[1]	50.0	1.1	48.5–51.1	37.9	0.3	37.8–38.3
Arizona (25 eggs)	52.1	2.0	47.8–56.7	41.0	1.1	39.2–44.4
S. Tamaulipas (21 eggs)	49.1	1.6	45.6–51.2	39.3	1.8	35.4–42.5

[1] Data converted to mm from AMNH catalog measurements in inches, i.e. set 1/2, 1.95 × 1.48 = 49.8 × 37.8; 1.90 × 1.48 = 48.5 × 37.8; set 2/2, 2.00 × 1.48 = 51.1 × 37.8; 1.98 × 1.50 = 50.6 × 38.3.

the two species overlap only by 0.4 mm, the Stephens eggs are 0.9 to 1.4 mm narrower than the narrowest egg of Arizona *B. nitidus*. On this basis Stephens' eggs clearly agree with southwestern *A. cooperii* in their smaller measurements, not with *B. nitidus* as originally identified.

Buteo nitidus is a summer resident of a very limited part of southeastern Arizona (Phillips et al. 1964), and the earliest egg dates are mainly in the 2nd and 3rd weeks of May (Bendire 1892, Bent 1937, Brandt 1951). The only earlier one seems to be a set Stephens collected there on 2 May (Bendire 1892). By contrast, *A. cooperii* is resident in the Southwest, and incubation has been observed in Arizona in April before the winter-deciduous trees have leafed out (Phillips et al. 1964). The earliest egg dates there are in the 3rd and 4th weeks of April (Bendire 1892, Brandt 1951), and judging from Bent (1937) such dates are to be expected in New Mexico as well. Stephens took his two sets at Fort Bayard on 23 April, which even in southern Arizona would be more in agreement with *A. cooperii* than *B. nitidus*. Fort Bayard is about 175 miles east and 50 miles north of the Tucson area (where *B. nitidus* breeds in Arizona), as well as about 3,500 feet higher and in the Upper Sonoran Zone. Because spring arrives there later than at Tucson, it is highly unlikely that *B. nitidus* would breed earlier at Fort Bayard than in the Tucson area, which casts further doubt on the original identification of the Stephens eggs. Also puzzling is the report that *B. nitidus* bred in a life zone the species does not occupy in Arizona, particularly in view of the general absence of the bird in suitable-appearing lowland habitats in the intervening region. In Arizona *B. nitidus* is confined to Lower Sonoran habitats, nesting primarily in woodlands, often with large mesquites (*Prosopis juliaflora*). Even allowing for some degree of inexactitude in Stephens' citing of Fort Bayard as his collecting locality, his referral to oak trees as the nesting sites and the general range of habitats in the area would indicate a departure from "normal" ecological preferences of *B. nitidus* in Arizona. Under the circumstances, these aspects of habitat usage provide added evidence that what Stephens actually found nesting at Fort Bayard was *A. cooperii* and not *B. nitidus*.

The final consideration is that no trained ornithologist, or at least anyone with prior experience with *B. nitidus*, has ever reported the species in New Mexico. The only other record from the state was obtained by a New Mexico Game and Fish Department employee, Levon Lee, on the Gila River near Cliff on 24 July 1953 (Ligon 1961). Lee was quoted as saying that he found a fledged young and an adult, the latter being quite shy but still offering a clear view. While it is possible that the Gray Hawk might breed in that area and that this is a valid record, it is notable that no other observer has found the bird in that relatively well-worked region. On the other hand, the Black Hawk (*Buteogallus anthracinus*) breeds there regularly, and in certain light it has a distinctly gray appearance. Further, in spite of the seeming distinctiveness of adult *B. nitidus*, apparent misidentifications have also plagued workers such as J. Eugene Law in the Chiricahua Mountains of Arizona (Hubbard 1972), and Otho Poling in the nearby Huachucas (Bendire 1892). In their cases the birds actually seen were probably Goshawks (*Accipiter gentilis*), and to date the only verified records of *B. nitidus* in Arizona are in the upper Santa Cruz Valley-Sonoita Creek-Arivaca region.

I submit that Frank Stephens, a newly arrived and inexperienced student of southwestern birds in 1876 and without familiarity with *B. nitidus* (at least in the wild), erred in identifying the eggs he collected at Fort Bayard on 23 April of that year. The agreement in egg color and size, timing of breeding, and nesting

habitat point to *A. cooperii* as the source of these eggs, rather than *B. nitidus* which has been reported in New Mexico only one other time and without substantiation.

I am especially grateful to Dean Amadon, Lloyd Kiff, and Roxie Laybourne, who provided data and other information from egg collections of their respective institutions, i.e. the American Museum of Natural History, Western Foundation for Vertebrate Zoology, and the United States National Museum of Natural History. Others who made appreciated contributions are David M. Niles, Kenneth C. Parkes, Allan R. Phillips, and Col. L. R. Wolfe.

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Songs of two Kenya turdids.—For the Brown-chested Alethe (*Alethe poliocephala*) Mackworth-Praed and Grant (1960, Birds of eastern and north eastern Africa, vol. 2, second ed., London, Longmans, Green, p. 310) mention "A repeated short whistle" as the only call known. Chapin (1953, The birds of the Belgian Congo, 3, Bull. Amer. Mus. Nat. Hist. 75A: 500) says of the race *carruthersi*, "I cannot recall hearing any note." I am very familiar with this species, but have only twice heard it utter anything. On 10 October 1972 I banded and released an adult caught in a mist net at the Kakamega Forest, western Kenya. As it flew off it produced a rather quiet, scratchy, finchlike song of about 20 notes. The song ceased just before the bird perched on a small twig, and I heard nothing more. An adult R. Stjernstedt and I released at the same locality on 28 January 1973 gave a similar, but shorter song in flight.

Of the Equatorial Akalat (*Sheppardia aequatorialis*) Chapin (op. cit., 504) says, "No one has yet described its song..., but it may be expected to sing in a brief, 'thin' voice like *S. sharpei usambarae*" and states that *S. cyornithopsis lopezi* makes a "series of three or four short whistles, not very musical, which are occasionally repeated so as to seem to continue without a pause." Mackworth-Praed and Grant (op. cit., 306) give only "A curious toad-like croak." This is