Table 1						
1975-1976 REPRODUCTIVE SUCCESS OF ZONE-TAILED HAWKS IN WEST TEXAS						

	Nests	Eggs	Eggs hatched	Percent hatching success <sup>a</sup>	Young fledged	Percent nest success <sup>b</sup>
1975	7	14 (2) <sup>c</sup>	12 (1.7) <sup>d</sup>	86	8 (1.14)e	67
1976	9	18 (2) <sup>c</sup>	7 (0.7) <sup>d</sup>	39	7 (0.78) <sup>e</sup>	100

- a Hatching success = no. of eggs hatched/no. of eggs laid.
- h Nest success = no. of young fledged/no. of eggs hatched.
- c Mean = no. of eggs/no. of nests.
- d Mean = no. of eggs hatched/no. of nests.
- e Mean = no. of young fledged/no. of nests.

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Three Crested Eagle records for Guatemala.—The Crested Eagle (Morphnus guianensis) has not previously been reported for Guatemala (Brown and Amadon, Eagles, Hawks and Falcons of the World, McGraw-Hill Book Co., New York, New York, 1968:631). Russell (Ornithol. Monogr. 1, 1964) included no records for Belize, and Monroe (Ornithol. Monogr. 7, 1963:83) stated that the 2 Honduran records "are the northernmost records for the species." Peterson and Chalif (A Field Guide to Mexican Birds, Houghton Mifflin Co., Boston, Massachusetts, 1973) omitted this species from their field guide for Mexico, Guatemala, Belize and El Salvador. Herein we report a visual record (with photographic support) and 2 specimen records for Guatemala.

On the evening of 7 February 1978, while camped in a recently cleared area in the Petén area of east-central Guatemala, a medium-sized eagle passed directly over (25–35 m overhead) our camp and perched ca. 100 m away on a tall snag in the burned-over swamp. The bird remained ca. 5 min while we carefully observed it through 20X spotting scopes and photographed it with 300 and 350 mm lenses on 35 mm cameras. Thereafter, the eagle flew to another snag (ca. 150 m distant), remained ca. 2 min, then flew into the dense forest on a nearby mountain slope. After several minutes an eagle of the same species was again observed flying along the mountain slope, then into a tunnel-like opening in the dense forest canopy.

This observation took place near the southwest corner of Belize, less than 2 km west of the Petén highway (gravel) at a point ca. 48 km northwest of the Río Dulce crossing of Lago Izabal and 38 km south-southeast of the village of Poptún.

The following field characters were clearly noted, separating this bird from the somewhat similar Harpy Eagle (*Harpia harpyja*). The broadly barred primaries, secondaries and rectrices distinguished it from immature birds of both species. The bird did not have the blackish

breast band of an adult Harpy Eagle; rather, it had a light gray breast and very light belly characteristic of a normal phase adult Crested Eagle (Brown and Amadon 1968: plate 109). The general appearance of the bird was of a slender medium sized eagle rather than a stout large eagle as would be expected if the bird were a Harpy Eagle. Less clearly identified were the distinguishing traits of the crown. The bird, although carefully observed with its crown erect for several minutes, did not appear to have the double crest of *Harpia* but rather a single broad crest as in *Morphnus*.

Two final identifying traits were not clearly seen in the field but did show in photographs taken just as the bird left its nearer perch (photographs on file at the Institute for Raptor Studies). Brown and Amadon (1968: underwing plate 11) show the under wing coverts on the adult Harpy Eagle as heavily marked and, in general, as dark as the primaries and secondaries. The adult light phase Crested Eagle has nearly immaculate under wing coverts which contrast with the darker primaries and secondaries. The Harpy Eagle also has a light basal patch in its proximal primaries, a trait lacking in the Crested Eagle. In our photographs, the light basal patch characteristic of the Harpy Eagle is lacking and the under wing coverts appear unmarked. Both of these features are diagnostic of an adult Crested Eagle. In summary, all features observed on the bird lead to the conclusion that it was a light phase adult Crested Eagle.

On 8 February 1978, while visiting a small bakery in Flores, Guatemala (ca. 35 km southwest of the Mayan ruins at Tikal), we noticed that the whisk broom used to dust the counter had been made from the remiges and rectrices of a large, heavily barred raptor. The matron reported that the bird had been taken by hunters in the forest around Flores. We obtained a portion of the whisk broom, and subsequently compared these feathers with specimens at the American Museum of Natural History where they are now deposited (AMNH No. 812849). Our conclusion, later confirmed by John Bull, was that the feathers had come from an adult or subadult Crested Eagle.

An additional record came to our attention after our return to the United States (K. Kaufman and A. R. Phillips, pers. comm.). A Crested Eagle was recovered dead by Robert W. Dickerman (pers. comm.) 30–50 km east of Flores, Petén, Guatemala, on the road to Melchor de Mencos between 5 and 7 April 1966. The specimen (Royal Ontario Museum No. 115862), consists of a skeleton together with some remiges and rectrices, and was identified as an adult male (Jon C. Barlow, pers. comm.).

The previous northernmost and westernmost locations for this species were La Ceiba, Honduras, and San Pedro Sula, Honduras (Monroe 1963:83). All 3 records for Guatemala are north of La Ceiba, Honduras, and between 140 and 200 km west of San Pedro Sula, Honduras. These records extend the known range of the Crested Eagle over much of northern Guatemala. The close proximity of both the visual record and the 1966 specimen to the Belize border suggests that the bird may also occur there.—DAVID H. ELLIS, Institute for Raptor Studies, Box 4420 OM Star Rt., Oracle Arizona 85623 AND WAYNE H. WHALEY, 224 North 250 East, Orem, Utah 84057. Accepted 10 Apr. 1980.