

breeding females lose weight (De Steven, *Evol.* 34:278–291, 1980), their reserves of energy may be depleted by the time later females arrive.

Why males do not defend against intruding females, but rather are willing to mate with them at the expense of losing their initial mate part of the way through incubation or brooding, remains to be explained. This is especially puzzling with respect to intruding SY females, as these have been shown to have lower reproductive success than ASY females (De Steven, *Ibis* 120:516–523, 1978). In our study, the three males that mated with SY females after the eggs laid by their original ASY mates had hatched all fledged fewer young with the new SY females than they would have had they remained with their ASY mates. This pattern of mate change has also been found in other studies on the Tree Swallow (Shelley, *Bird-Banding* 6:33–35, 1935).

In our study area, it appears that both parents are needed to fledge a full brood of nestlings (Lefelaar, M.Sc. thesis, Queen's University, Kingston, Ontario, Canada, 1983); perhaps this explains why the three females referred to above did not persist in trying to raise their nestlings alone, while their mates were consorting with new SY females. Two parents may be needed for feeding nestlings because there may be a low food supply in our study area. At Long Point, Ontario, where the food supply is greater, there is evidence of a higher incidence of polygyny. That there is a greater food supply at Long Point is suggested by the lower brood success (75%) found in our study area as compared with that found at Long Point (95% and 88%) by De Steven (1980) and Quinney (1983), respectively. Quinney (*Auk* 100:750–754, 1983) found several cases where two females were mated with a single male and nested together in a single box. This also supports the contention that the operational sex ratio may be skewed towards females.

Polygyny may thus be a strategy pursued by males under conditions of high food abundance, explaining why males do not assist in defense against intruding females. In areas with lower food availability monogamy may be required. This in turn may have led to female competition for the limited number of potential mates possessing nest sites. Whether the apparent decrease in reproductive success of those males which abandoned their mates during the nestling period is a result of an inferior reproductive strategy, or is due to some other as yet unknown factor, has yet to be determined.

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Wintering Bald Eagles along the Rio Yaqui, Sonora, Mexico.—Wintering Bald Eagles (*Haliaeetus leucocephalus*) in Mexico have been recorded only from the coasts of Baja California and from the Sonoran coast of the Gulf of California (Brown and Amadon, *Eagles, Hawks and Falcons of the World*, Vol. 1, McGraw-Hill, New York, New York, 1968). Inland sightings of Bald Eagles in western Mexico are rare, and wintering areas for the species west of the continental divide have not been reported, probably because ornithologists visit the area infrequently (G. Monson, S. M. Russell, pers. comm.). This note provides information on the status of Bald Eagles wintering along the Rio Yaqui drainage of Sonora, Mexico.

Controlled water releases since construction of a dam in the mid-1960s guarantee relatively

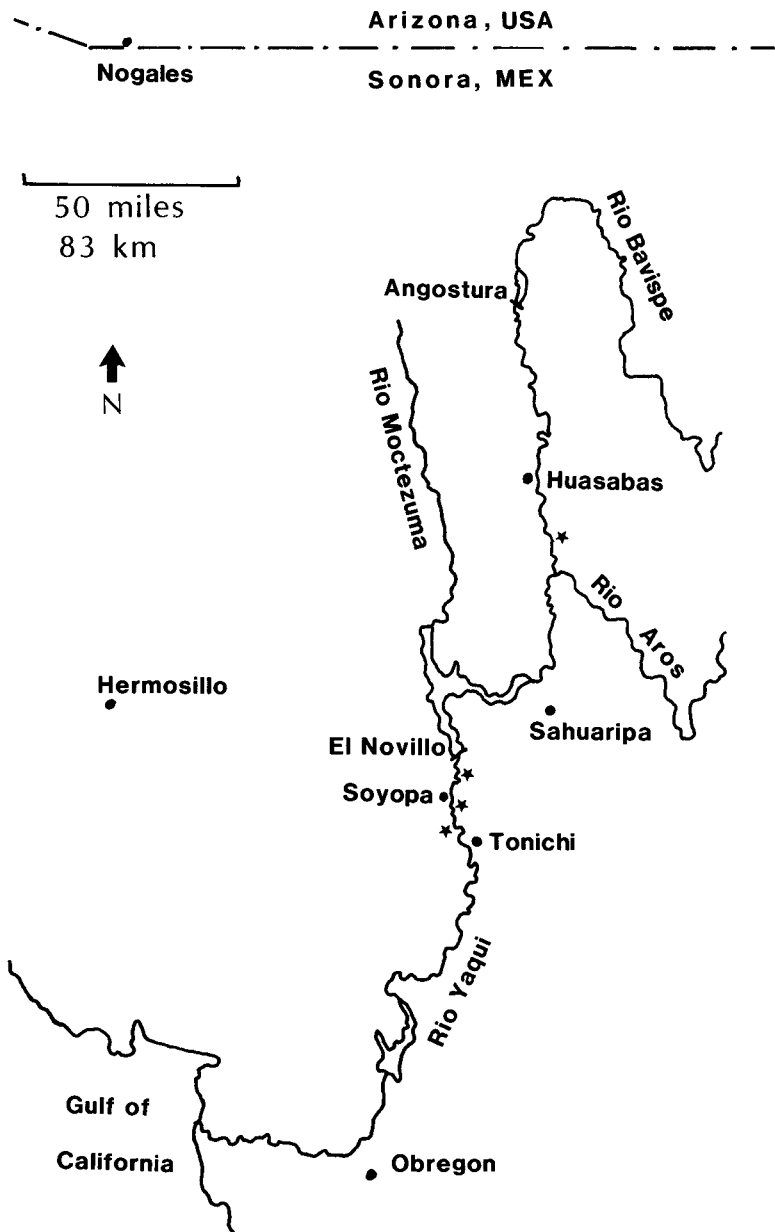


FIG. 1. Study area for Bald Eagle censuses along the Rio Yaqui, Sonora, Mexico.

uniform, high-volume flow on the Rio Yaqui below the El Novillo reservoir. Above the reservoir, and particularly above the Aros/Bavispe confluence, flow is highly seasonal with a peak from August to October and a low from December to June. Although a smaller dam on the Rio Bavispe at Angostura may stabilize the flow above El Novillo to some extent, portions of the upper river are sometimes dry during winter and spring.

The authors made five censuses by boat on various stretches of the Rio Yaqui and its tributaries from December 1981 to December 1983 (Fig. 1). Three censuses were in winter, and two were in summer. Two winter censuses (31 Dec. 1981 to 7 Jan. 1982; 31 Dec. 1982 to 8 Jan. 1983) were conducted along the 160-km stretch from the El Novillo reservoir to the Alvaro Obregon reservoir near Obregon. The third winter census, from 12 to 19 Dec. 1983, was made from Huasabas on the Rio Bavispe to its confluence with the Rio Aros, and from there to the head of the El Novillo reservoir, a distance of 145 km. Summer censuses were made along a 70-km route from the El Novillo dam to Tonichi on 10–15 Sept. 1982 and 31 Aug. to 5 Sept. 1983. The location, date of observation, and number of all eagles sighted were recorded. Approximately 20 km of river were censused each day by two to six experienced observers. The relatively long length of the census periods, up to eight days, meant that some eagles may have been counted on more than one day.

Seven Bald Eagles were seen during the 1981–82 census: three adults near Soyopa on 2 Jan. 1982 below the El Novillo Reservoir; two immature eagles (individuals with white mottling and lacking a white head) and an adult below Soyopa on 3 Jan.; and one adult above Tonichi on 3 Jan. At least four adults were seen during the 1982–83 census: one adult was seen 16 km below the dam on 1 January 1983; another adult observed at the same locality a few hours later could have been the same individual; two adults were seen on 2 Jan. near Soyopa; and one immature was seen on 3 Jan. below Soyopa. The early winter trip of 1983 produced a single sighting of an adult on 14 Dec. at the mouth of the Arroyo Bacadehuachi, approximately 120 river-km above the El Novillo reservoir. No Bald Eagles were seen on either summer trip.

In addition to our observations, we spoke with local residents along the river near El Novillo. They were familiar with *Aguilas de Cabeza Blanca* (Bald Eagles) and had observed them fishing in the reservoir in prior years.

The distribution of Bald Eagles along the Rio Yaqui prior to construction of the dam is unknown. Based on our observations and local interviews it is evident that Bald Eagles now are regular winter residents in small numbers along the Rio Yaqui drainage, especially below the El Novillo dam. The Rio Yaqui locality represents the only area of inland Sonora where Bald Eagles are known to occur regularly in winter, and it is the southern-most known wintering location west of the continental divide in North America.

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Food habits of Richardson's Merlins in southeastern Montana.—Early information on food habits of Merlins (*Falco columbarius*) in North America was derived primarily from examination of stomach and crop contents (Fisher, U.S.D.A. Bull. No. 3., 1893; Bent, U.S. Natl. Mus. Bull. 170, 1938), observation of hunting and feeding activities (Craighead and