## **GRAY HAWK**

## BY GEORGE MIKSCH SUTTON

THE northernmost of the five currently recognized races of the Gray Hawk (Buteo nitidus) has long been known as the Mexican Goshawk, a color-ful name, but inappropriate since the bird is not accipitrine in shape, voice, or behavior. To more southward ranging races the name Shining Buzzard Hawk has been applied—again a not very satisfactory appellation. The species is about the size of the Red-shouldered Hawk (B. lineatus), and it is strikingly like that bird in that it is given to screaming loudly while circling above its nesting ground. It is especially noisy just before the season of egg-laying.

At a distance a perching adult Gray Hawk appears to be pearl gray all over. Actually, the upper parts of the body are gray; the under parts silvery white, finely barred with gray; the tail black, crossed with three white bands. The bill and claws are black; the cere, mouth-corners, tarsi and toes waxy yellow; the eyes dark brown. Seen from below, the wings of flying adults are white with black tips. Immature birds are pale buff below, boldly streaked on the throat, chest, belly, and sides (barred on the flags) with dark brown. Above they are dark brown with buff and rufescent markings. The tail (which is decidedly larger than that of the adult) is brownish gray, crossed with several black bars. Dickey and van Rossem (1938. Zool. Ser. Field Mus. Nat. Hist., 28:115) inform us that "in those few individuals which breed the first year there is a partial body molt in which, in February and March, a few gray, adult feathers make their appearance." The Cornell University-Carleton College Expedition obtained two subadult males (with pearl gray feathers in the fuscous back plumage, and patches of gray-barred plumage on the chest and belly) on April 15 and 21, 1941, respectively, along the Río Sabinas in southwestern Tamaulipas (Sutton and Pettingill, 1942. Auk, 59:9). These individuals may or may not have been breeding.

Buteo nitidus is a bird of hot wooded lowlands. It breeds from the Lower Rio Grande Valley, southwestern New Mexico, and southern Arizona southward to "tropical eastern Bolivia" and "southern Brazil" (Peters, 1931. "Check-List of Birds of the World," 1:240–241). Its range is far from continuous throughout this vast area. In southern Arizona, where it appears to be commoner than elsewhere in the United States, it is virtually confined to the "grand mesquite forest" just south of Tucson (Brandt, 1951. "Arizona and its Bird Life," pp. 35, 75, 192–194). In parts of México visited by me I have found it principally along slow-moving streams, but it is decidedly local. Of its distribution in Central America, Griscom (1932. Bull. Amer. Mus. Nat. Hist., 64:156) says: "... this hawk is found primarily in the Arid



## GRAY HAWK (Buteo nitidus)

Adult, sketched February 18, 1938, along the Rio Corona a few miles north of Victoria, Tamaulipas, by George Miksch Sutton. Fifth in a series of color-plates honoring the memory of Dr. David Clark Hilton. Tropical Zone and is rare or absent elsewhere. It is . . . abundant on the Pacific slope of Guatemala, and occurs in the arid country in the interior, as at San Gerónimo and in the Rio Motagua Valley. It is most exceptional to find it above 3500 feet." Carriker (1910. Ann. Carnegie Mus., 6:459) reports that it "does not occur on the Caribbean slope" of Costa Rica. Todd and Carriker (1922. Ann. Carnegie Mus., 14:153), reporting on the birds of the Santa Marta region of Colombia, call it "a Tropical Zone bird, evidently regularly found only in the heavier forest of the lowlands."

In the United States, México, and at least some parts of Central America, it is migratory. For Sonora van Rossem (1945. *Mus. Zool. Louisiana State Univ.*, Occ. Pap. 21:57) reports "no northerly winter records." Arrival and departure dates for northern localities he gives for that State are March 29 (Nacozari) and October 26 (Oputo). According to Brandt (op. cit., 193), the species returns to Arizona in April.

An adult Gray Hawk which I collected and sketched (see color plate) along the Río Corona, near Victoria, Tamaulipas, on February 18, 1938, apparently was not nesting (Sutton, 1951. "Mexican Birds," pp. 118-120). A male and female which I saw circling above the Río Sabinas later that spring (March 3) must, however, have been on their nesting grounds. The smaller bird "devoted itself to a beautiful courtship display. Swooping gracefully upward, it turned a backward flip, plunged deeply and again shot upward, letting momentum carry it to a position in front of the other bird before flipping backward or sideways again" (*ibid.*, p. 171). Swann, in his "Monograph of the Birds of Prey" (1930. 1:435-436), makes clear that there is a correlation between latitude and the season at which the species nests in North America: Arizona birds nest in May and June, southern Tamaulipas birds earlier (two eggs, Tampico, April 23), Guatemala birds still earlier (three eggs, April 3). Dickey and van Rossem (op. cit., pp. 115) report that the nesting season in El Salvador is "in March or April, for young not able to fly were taken at Lake Chanmico at various dates in late May."

The nest is shallow, rather small, and not very strongly put together. Bent (1937. U. S. Natl. Mus. Bull. 167:265) tells of three Arizona nests (found May 19 and 20, 1922) respectively in a large mesquite, 40 feet up; a "giant hackberry," 60 feet up; and a large mesquite, 30 feet up. In each of these the lining was partly of green leaves. Swann (*loc. cit.*) describes a nest "composed of cottonwood twigs, broken off while green, with a lining of the leaves and bark-strips or willow tops." The eggs, usually two, sometimes three, are bluish white, occasionally flecked with pale brown, and usually more or less nest-stained. Neither the incubation period nor the fledging period has been ascertained, so far as I know. I have never seen a newly hatched young bird.

The Gray Hawk feeds on reptiles (especially lizards), insects, small mammals, and small birds. Otho C. Poling (in Bent, op. cit., 266) observed a female "making daily trips to the mesquite plains for cottontails . . ." which she fed to her brood. On January 18, 1949, near Gómez Farías, Tamaulipas, I saw a Gray Hawk snatch at a branch and make off with a screaming small bird. Dickey and van Rossem (op. cit., 116) tell of a Gray Hawk "shot as it was trying to carry off a white hen from the dooryard of the ranch house" at Volcán de San Miguel, El Salvador.

In northeastern México flocks of Brown Jays (*Psilorhinus morio*) frequently mob the Gray Hawk, screaming loudly but keeping at safe distance or hiding themselves in the foliage; they are especially bold if the hawk happens to be a "brancher" not long out of the nest.

DEPARTMENT OF ZOOLOGY, UNIVERSITY OF OKLAHOMA, NORMAN, OKLA-HOMA, MARCH 1, 1953