NOTEWORTHY BIRD OBSERVATIONS FROM CHIAPAS, MÉXICO

EUGENE HUNN Department of Anthropology University of Washington Seattle, Washington 98105

While engaged in an anthropological investigation of folk-zoology among the Tzeltal-speaking Indians of Tenejapa, Chiapas, México, from April through December 1971, I obtained a number of noteworthy bird records. Those for three shore bird species and the Black-throated Blue Warbler (Dendroica caerulescens) are the first published for the state.

Elanus leucurus. White-tailed Kite. These observations are reported to document further the recent expansion of this species in Central America (cf. Eisenmann, Amer. Birds 25:529-536, 1971). Whitetailed Kites were observed on three occasions in widely separated areas. One was seen on 20 June at Puerto Arista (sea level); two on 10 November at the Virgin River, near Ocosingo (900 m); and one on 4 December near Villa las Rosas (1350 m), 45 km SE of San Cristóbal. These sightings cover the three major geographical divisions of the state: the Pacific slope, the central depression, and the Gulf slope. This species was first documented for Chiapas by Alvarez del Toro in 1966 (Eisenmann, op. cit.). Additional early sightings not yet published are of single individuals seen on 29 July, 31 July, and 1 August 1965 near Tapachula by D. R. Paulson (pers. comm.).

Charadrius alexandrinus. Snowy Plover. One bird in winter plumage was observed at Puerto Arista on 2 August. The bird was accompanied by Semipalmated Plovers (Charadrius semipalmatus), and a close comparison was possible. This locality is at the southeastern extremity of the species' range on the Pacific coast. Blake (Birds of Mexico, Univ. Chicago Press, 1953) states that it winters south only to Nayarit. It has not been recorded in Guatemala (Land, Birds of Guatemala, Livingston Publishing Co., Wynnewood, Penn., 1970).

Charadrius wilsonia. Wilson's Plover. One bird in winter plumage was observed at Puerto Arista on 2 August.

Calidris mauri. Western Sandpiper. Several individuals were seen at Puerto Arista on 2 August and three individuals at Aguacatenango (1700 m), 35 km SE of San Cristóbal, on 22 September. This species and the Wilson's Plover have been recorded on the

CLUTCH SIZE, HATCHING SUCCESS, AND EGGSHELL-THINNING IN WESTERN GULLS

GEORGE L. HUNT, JR.

AND

MOLLY W. HUNT

Department of Population and Environmental Biology University of California, Irvine Irvine, California 92664

Average clutch size for large Larus gulls is close to three eggs, and the production of a clutch of four is Pacific coast of Guatemala (Land, op. cit.) and have most likely been overlooked in Chiapas.

Aegolius ridgwayi. Unspotted Saw-whet Owl. Two birds were mist-netted approximately 15 km NE of San Cristóbal in the Municipio de Tenejapa. The first was collected on 3 October at an elevation of 2440 m in the *paraje* of Matzab on the border of a cultivated field and an isolated remnant of cloud forest. The second was collected on 6 December at an elevation of 2200 m at the edge of pine-oak-sweet gum forest in the rancho of San Antonio, about 4 km NNW of the site of the first collection. Both have been tentatively identified as adults. This extends the recorded range of this form more than 100 km northwestward and doubles the number of specimens from México (Alvarez del Toro, Las Aves de Chiapas, Gobierno del Estado de Chiapas, 1971). Both specimens have been deposited with the Museum of Vertebrate Zoology, University of California at Berkeley, California, as have duplicate color slides of both specimens taken while they were alive.

Protonotaria citrea. Prothonotary Warbler. One female was observed at length at close range in riverine shrub at San Cristóbal on 9, 13, and 17 September. All three observations are presumably of the same individual. This record, one of the very few for Chiapas (Alvarez del Toro, op. cit.), was made at the unusually high elevation of 2130 m.

Dendroica caerulescens. Black-throated Blue Warbler. One adult male was captured and released on 8 December at an elevation of 2200 m approximately 15 km NE of San Cristóbal in the rancho of San Antonio, Municipio de Tenejapa. A duplicate color photograph is deposited with the Museum of Vertebrate Zoology, University of California at Berkeley. All other Mexican (Blake, op. cit.) and Guatemalan (Land, op. cit.) records are from the Caribbean lowlands.

Dendroica chrysoparia. Golden-cheeked Warbler. One adult male in breeding plumage was observed leisurely at close range on 15 September 5 km N of Jitotol (1675 m) on the edge of dry pine-oak woodland. Chiapas is included within the wintering range of this species (Blake, op. cit.). However, the species' small population and precarious status motivates the inclusion of this sighting.

This research was made possible by a Pre-doctoral Combination Fellowship and Research Grant (No. 1 F01 MH49601-01) from the National Institute of Mental Health. I wish to thank Laurence C. Binford and Dennis R. Paulson for helpful comments on the manuscript.

Accepted for publication 20 December 1972.

uncommon (Keith 1966; Paludan 1951; Vermeer 1963). We report here on a colony of Western Gulls (Larus occidentalis) in which many clutches containing four and five eggs were found. It is of particular interest that in these large clutches not only was hatching success low but also eggshell thickness was reduced.

METHODS

The data were collected in May and June 1972, on Santa Barbara Island, Channel Islands, Santa Barbara County, California, during a study of the factors affecting Western Gull chick survival. In each of 63 nests (4% of the colony) in a study area on the west