SOUTHERN RACE OF XANTUS' MURRELET BREEDING ON SANTA BARBARA ISLAND, CALIFORNIA

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We report here the first breeding record of the southern race of Xantus' Murrelet (Endomychura hypoleuca hypoleuca) north of the San Benitos Islands, central Baja California. Two well-marked subspecies of this small black and white alcid, differing in size and facial plumage, were first described by Green and Arnold (1939) and further investigated by Jehl and Bond (1975). The northern race (E. h. scrippsi) breeds from San Miguel Island off the California coast to the San Benitos Islands off Baja California; this form is characterized by an entirely dark facial pattern (Classes "3" and "4", Jehl and Bond 1975:13) in which the white throat and face feathers do not extend all the way up to the eye. Murrelets of the southern race (E. h. hypoleuca) have whiter facial patterns (Classes "0" and "1") "in which the white of the face extends up in front of (and occasionally over) the eye, and onto the ear coverts . . ." (Jehl and Bond 1975:15). Prior to this record, this subspecies had been known to breed only on Guadalupe and the San Benitos islands.

On 30 April 1977 we found an incubating murrelet with white feathers extending over the eye (Class"0") in a 15 cm diameter by 10 cm deep rock crevice on Santa Barbara Island. The site was located amid a colony of *E. h. scrippsi* about 50 m above the high water mark on a rocky cliff slope. An egg had been deposited in the site previous to 13 April but was eaten by a Deer Mouse (*Peromyscus maniculatus*) before the second egg was deposited on 17 April. The bird incubated sporadically until it abandoned the nest on about 15 May. Subsequently the remaining egg was also eaten by mice.

The same rock crevice was occupied in 1978 by a pair of murrelets consisting of one *E. h. hypoleuca* (Class "0"), thought to be the same bird which occupied the site in 1977, and a murrelet having a crescent shaped notch of white feathers extending in front of, but not over the eye. Based on our photographs of this murrelet, J. R. Jehl, Jr., S. 1. Bond and G. McCaskie feel that this bird is probably an intermediate type with respect to facial pattern. Definite subspecies identification is not possible without bill measurements (Jehl pers. comm.). Jehl and Bond (1975) describe a similar intermediate facial pattern (Class "2") as being characteristic of murrelets found on the San Benitos Islands; this condition may be the result of interbreeding in the two subspecies. The single, fertile egg produced by this pair on 28 April was abandoned on 23 May after a period of sporadic incubation. The egg's weight (37 g) and coloration were comparable to *E. h. scrippsi* eggs examined on Santa Barbara Island the same year. Photographs of each member of the pair were deposited at the Santa Barbara Museum of Natural History.

Several thousand Xantus' Murrelets are present at Santa Barbara Island during the breeding season. Only 3 of the 330 murrelets examined since 1975 have had either "white" or intermediate facial patterns, the pair described above and one non-breeding E. h. hypoleuca (Class "0") captured 100 m offshore from the island on 26 May 1976. It seems likely that the pair became established somewhere other than at Santa Barbara Island, where there is an overwhelming majority of typical E. h. scrippsi. It will be interesting to determine whether immigration of southern forms continues at Santa Barbara Island, and if so, whether integrity of the two races is maintained.

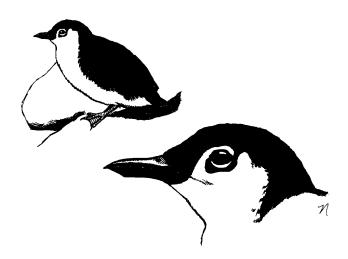
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E.h. hypoleuca
Sketch by Narca Moore