

STENELLA COERULEOALBA IN THE EASTERN AND
CENTRAL TROPICAL PACIFIC

On the basis of a study of the pigmentation patterns of specimens referred to several nominal species of *Stenella* (*Delphinus coeruleoalbus* Meyen 1833; *D. marginatus* Desmarest 1855 ± 1, *D. eufrosyne* Gray 1846, *D. styx* Gray 1846, and *D. lateralis* Peale 1848), Fraser and Noble (1970) concluded that they should all be included in one species, *Stenella coeruleoalba* (Meyen, 1833). Sampson (1970) summarized North Pacific records of the species and reported a sighting about 1000 miles west of Los Angeles. This note lists seven additional tropical locality records for the species and extends the known range of this distinctively marked small delphinid deep into the eastern tropical Pacific (Fig. 1).

A complete skeleton and external cast in the Bernice P. Bishop Museum in Honolulu, Hawaii, are of an animal captured in the Ala Wai Canal, a brackish canal running through Honolulu behind Waikiki Beach, on 2 March 1958 (Fig. 2). The only previous report near Hawaii is for the type of *Delphinus lateralis* (Peale, 1848), which subsequently was reported to have been lost (Poole and Schantz, 1942). Condylbasal length of the skull of the Hawaiian specimen is 452 millimeters.

On 14 November 1966, Balcomb collected by shotgun a specimen (Fig. 3), 179 centimeters long, with testes 3 centimeters long, at approximately 9° N latitude, 178° W longitude, from a school of approximately 70. Its weakly expressed lateral stripe was not apparent in the water. The complete skeleton, photographs, and external measurements are in the mammal collection of the U.S. National Museum (USNM 395776).

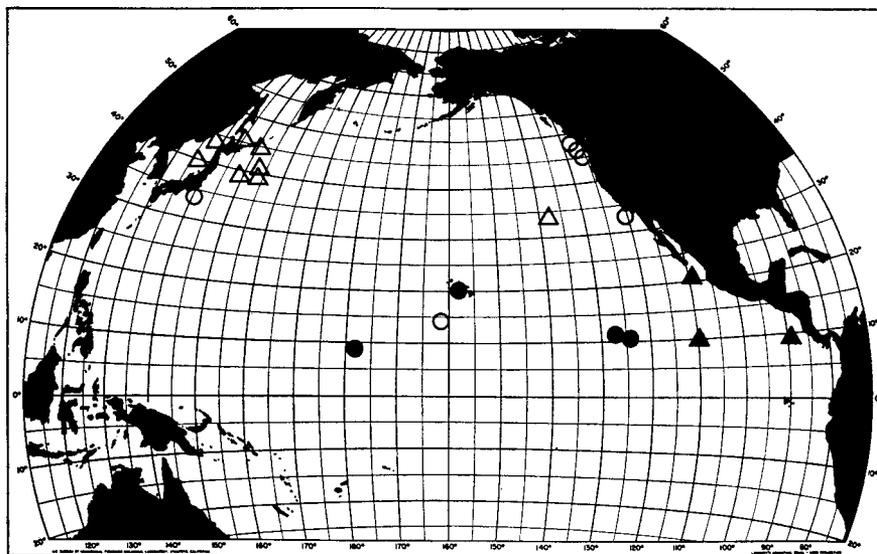


FIG. 1.—*Stenella coeruleoalba* in the Pacific. Circles are specimen localities; triangles are sighting localities. Open symbols are previously published localities, shaded symbols are new localities. Sighting localities in northwestern Pacific are from Sleptsov, 1961; remainder of previously published localities summarized in Sampson, 1970.

A tuna purse seiner captured an immature male on 15 August 1970, at 10° 41' N, 124° 21' W. The animal was associated with an aggregation of spotted porpoises, *Stenella cf. graffmani* (Lönnerberg, 1934), yellowfin tuna, *Thunnus albacares*, and skipjack, *Katsuwonus pelamis*. Craig J. Orange obtained the specimen. This is the southernmost record for a collected specimen in the eastern Pacific. The animal (Fig. 4) was 214 centimeters long and weighed 102 kilograms. A photograph of this specimen appear in Leatherwood *et al.* (1972). The complete skeleton, photographs, and external measurements are in the marine mammal collection of the National Marine Fisheries Service (NMFS), Southwest Fisheries Center, La Jolla, California.

D. W. Rice (personal communication) sighted a group of about 40 animals on 27 February 1965, at 22° 11' N latitude, 108° 49' W longitude, during a whale-marking cruise. The following year, on 25 and 26 February, schools of about 200, 70, and seven animals were seen by Rice and Balcomb in the same area, at 21° 59' N, 106° 54' W; 22° 12' N, 107° 32' W; and 22° 20' N, 108° 04' W respectively. A photograph, although slightly out of focus and not here reproduced, allows positive identification, because the spinal blaze and eye-to-anus stripe (terminology of Mitchell, 1970) are clearly visible. On 16 February 1967, Rice and Toshio Kasuya sighted two groups of about 40 and 10 animals, at 22° 10' N, 108° 13' W and at 22° 10' N, 108° 09' W. These previously unpublished series of sightings near the mouth of the Gulf of California were referred to by Sampson (1970) and by Leatherwood *et al.* (1972).

A school of approximately 100 individuals was sighted on 5 December 1971 at 10° 15' N, 109° 45' W by W. E. Evans, J. C. Coe, and D. B. Holts aboard the NMFS-chartered commercial tuna seiner *Queen Mary* (see Leatherwood *et al.*, 1972). The weather was clear and the sea was calm. The spinal blaze and eye-to-anus stripe were clearly seen (personal communication from W. E. Evans).



FIG. 2.—Specimen of *Stenella coeruleoalba* from Hawaii.

FIG. 3.—Specimen of *Stenella coeruleoalba* from 9° N, 178° W.

FIG. 4.—Specimen of *Stenella coeruleoalba* from 10° 41' N, 124° W.

On 19 March 1972, 300 to 400 animals were sighted at 9° 36' N, 89° 29' W by J. M. Coe, a NMFS observer aboard the tuna seiner *John F. Kennedy*. This is the southernmost and easternmost record for the species in the eastern Pacific. On 20 May 1972 at 11° 14' N, 127° 47' W, two individuals were captured by the seiner *Carol S* from a school of approximately 1500. No tuna were captured with the cetaceans. The complete frozen specimens, a male and a female, have been acquired by the Los Angeles County Museum.

The now-evident wide distribution across the tropical Pacific strengthens the view that the northern and far-southern populations of this species are conjoined and thus confirms the synonymy adopted by Fraser and Noble (1970).

We thank D. W. Rice, T. Kasuya, C. W. Orange, W. E. Evans, J. M. Coe, and D. B. Holts for allowing us to include their unpublished observations. Spencer Tinker, Director of the Bishop Museum, kindly allowed one of us (Hubbs) to borrow the Hawaiian specimen for study and also furnished the photograph used for Fig. 2. J. S. Leatherwood and D. R. Patten allowed us to include the collection record for the two specimens very recently acquired by the LACM. Studies of this species by Hubbs were supported by grants from the National Science Foundation.

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