

*AECHMOPHORUS OCCIDENTALIS* (LAWRENCE)

## WESTERN GREBE

*Podiceps occidentalis* Lawrence, in Baird's Rep. Expl. and Surv. R. R. Pac., 9, 1858, 892, 894 (Washington Territory to California=Fort Steilacoom, Washington).

*Aechmophorus occidentalis* Price, 1899, 90 (mouth of the Colorado River).—van Rossem and Hachisuka, 1937 a, 324 (Guaymas).

Probably a rather common winter visitant in the Colorado delta, southward, sporadically at least, to Guaymas. Contributory data from the Baja California portion of the delta are relatively numerous and there is some seasonal evidence of breeding there. The latest record specifically from Sonora is March 27 (Guaymas).

*PODILYMBUS PODICEPS PODICEPS* (LINNAEUS)

## PIED-BILLED GREBE

*Colymbus Podiceps* Linnaeus, Syst. Nat., ed. 10, 1, 1758, 136 (in America septentrionali=South Carolina).

*Podilymbus podiceps* Thayer and Bangs, 1906, 18 (Opodepe).

Detected only as a spring migrant. The two known specimens were taken, respectively, by Brown at Opodepe in late April, 1905 (exact date not published), and by Mearns and Holzner at Monument 204 on the Colorado River on March 24, 1894 (U. S. Nat. Mus. catl.). There are winter records for the Colorado delta, though for the Baja California side.

## ORDER PROCELLARIIFORMES TUBE-NOSED SWIMMERS

## Family PROCELLARIIDAE Shearwaters, Fulmars, and Petrels

*PUFFINUS GRISEUS* (GMELIN)

## SOOTY SHEARWATER

*Procellaria grisea* Gmelin, Syst. Nat., 1, Pt. 2, 1789, 564 (in hemisphaerio australi—inter 35° et 50°=New Zealand).

*Puffinus griseus* van Rossem and Hachisuka, 1937 a, 324 (near Tiburon Island).

Uncommon spring and summer visitant in the Gulf. Records for the general area extend from April to August; those definitely from Sonora waters are April 19 [not 25], 1925, and a single bird seen by Dickey (notes) on June 2, 1928, both in the vicinity of Tiburón Island.

*Puffinus opisthomelas* COUES

## BLACK-VENTED SHEARWATER

*Puffinus opisthomelas* Coues, Proc. Acad. Nat. Sci. Phila., 1864 [June 30], 139 (Cape San Lucas, Baja California, México).—van Rossem, 1933 b, 199 (San Pedro Nolasco Island to Kino Bay).

Apparently decidedly uncommon in the Gulf at any season although there is fairly good evidence that a few may occasionally breed on suitable islands. The only definite record for the Sonora side is that of about a dozen individuals seen between San Pedro Nolasco Island and Kino Bay on December 26, 1931. Certain shearwaters noted by Dickey about Tiburón Island in June, 1928, were very probably this species. His notes, though, are not certain.

## Family HYDROBATIDAE Storm Petrels

*Loomelania melania* (BONAPARTE)

## BLACK PETREL

*Procellaria melania* Bonaparte, Comp. Rend. Acad. Sci. Paris, 38, No. 14, (for April 3), 1854, 662 (Coast of California=San Francisco).

*Oceanodroma melania* Brewster, 1902, 32 (near Guaymas).—Townsend, 1923, 6 (Guaymas).—Bancroft, 1927 b, 191 (San Esteban Island).

*Oceanodroma melania melania* van Rossem and Hachisuka, 1937 a, 325 (Guaymas; San Esteban Island).

*Cymochorea melania melania* Mathews, 1934, 190 (San Esteban Island).

*Oceanodroma townsendi* Ridgway, 1893, 687 (off Guaymas).

Common summer visitant to the entire Gulf, although not (to date) found breeding on any island actually within Sonora waters. Probably present in limited numbers in winter, although there are no Sonora records for that season. Great numbers of Black Petrels have been seen between April 17 and May 5 in northward migration flight, a circumstance which indicates that many birds leave the Gulf in winter. The only known winter occurrence for the area seems to be that of nine specimens taken by Grenville Ashcraft near Consag Rock on the night of January 31, 1940, and which are now in the Hancock collection at the University of Southern California. This island, though, is properly within Baja California waters.<sup>1</sup>

<sup>1</sup> Breeding birds from the Gulf seem to have slightly wider and deeper bills than those from the Pacific side of Baja California but I can detect no other differences and the Gulf series is too small to serve as a basis for definite conclusions. While there is some variation in wing length (males 167-178; females 174-185), I cannot discern any geographical tendencies in this respect among specimens examined.

*HALOCYPTENA MICROSOMA* COUES

## LEAST PETREL

*Halocyptena microsoma* Coues, Proc. Acad. Nat. Sci. Phila., 1864, 79 (San José del Cabo, Baja California, México).—Bancroft, 1927 b, 191 (San Esteban Island).—Mathews, 1934, 188 (San Esteban Island).—van Rossem and Hachisuka, 1937 a, 325 (San Esteban Island; Tiburon Island; Guaymas).

Summer visitant, breeding abundantly on many of the smaller islands and outlying rocks almost throughout the Gulf. As in the case of the Black Petrel, though, there are no actual breeding records for islands lying properly within Sonora waters. Between April 17 and 21, 1925, in the vicinity of Guaymas, San Estéban and Tiburón Islands, a tremendous migration flight was in progress and some of the resting rafts certainly contained several hundred individuals. No data relative to dates of departure are available.

## ORDER PELECANIFORMES TOTIPALMATE SWIMMERS

## Family PHAËTHONTIDAE Tropic Birds

*PHAËTHON AETHEREUS MESONAUTA* PETERS

## RED-BILLED TROPIC-BIRD

*Phaëthon aethereus mesonauta* Peters, Occ. Papers Boston Soc. Nat. Hist., 5, April 15, 1930, 261 (Swan Key, Almirante Bay, Panamá).—van Rossem, 1932 a, 129 (Tiburon Island).—van Rossem and Hachisuka, 1937 a, 325 (mouth of the Colorado River).

*Phaëthon aethereus* (not of Linnaeus) Goss, 1888, 240 (San Pedro Martir Island); 1889, 253 (ditto).—Brewster, 1902, 33 (ditto).—Bent, 1922, 187, part, (ditto).—Mailliard, 1923, 454 (Georges Island).—Bancroft, 1927 b, 191 (George Island; San Pedro Martir Island).—Grinnell, 1928, 69 (San Pedro Martir Island).

*P.[haëthon] aetherus* Coues, 1903, 972, part (San Pedro Martir Island).

Fairly common resident throughout the Gulf area, with breeding centers seemingly confined to the smaller and more precipitous islands. Within Sonora waters the only two known nesting localities are George and San Pedro Mártir Islands. There seems to be very little seasonal fluctuation in numbers since breeding evidently continues over the greater part of the year. Bancroft (1927 b) found fully grown young and also fresh eggs in early March, and Dickey (notes) observed the same condition in mid-June.