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AN ANNOTATED LIST OF NUDIBRANCHS
AND THEIR ALLIES FROM SANTA BARBARA
COUNTY, CALIFORNIA

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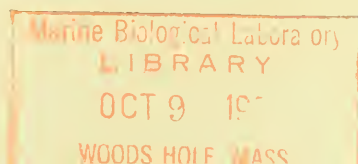
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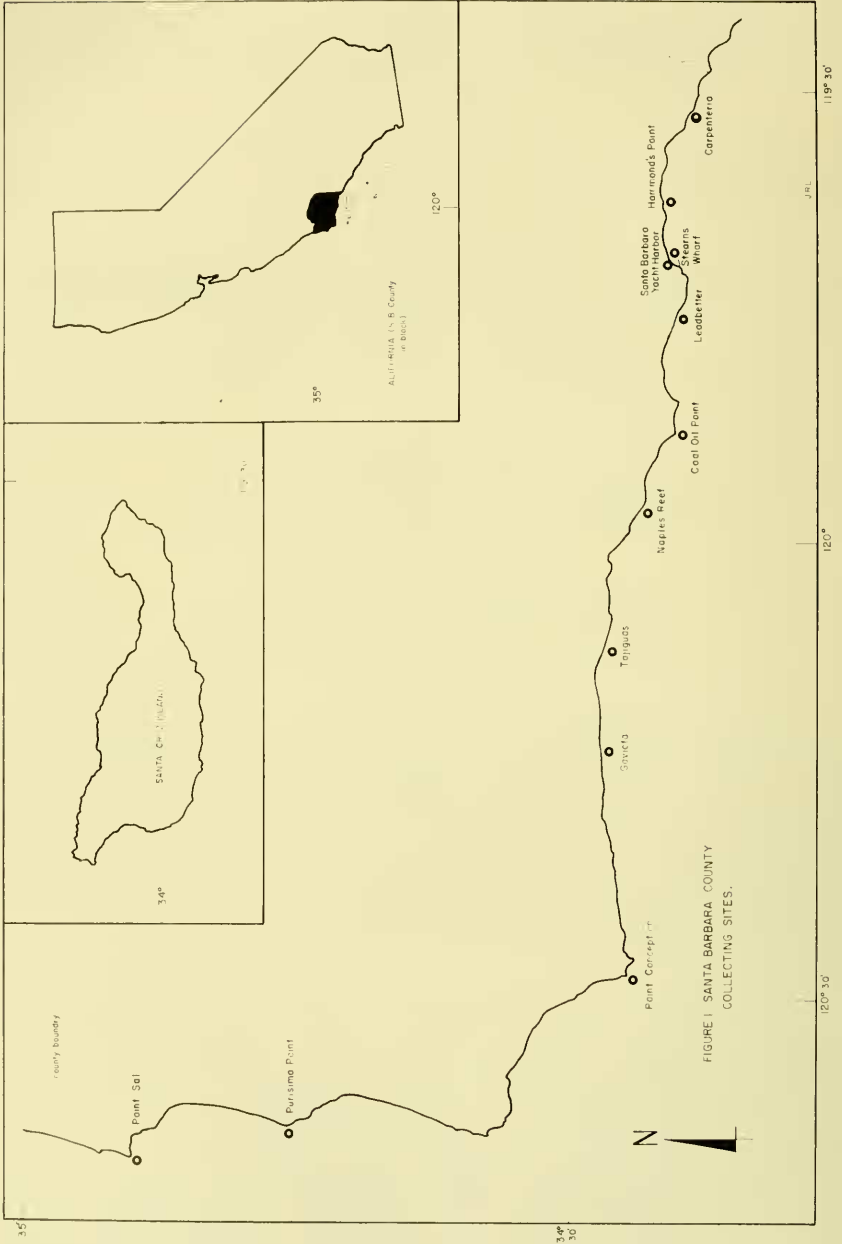
INTRODUCTION

Few shell-less gastropods, nudibranchs and their allies, have been recorded from the coast of Santa Barbara County, California, and its adjacent Channel Islands. Yates (1890), MacFarland (1905, 1906, 1966), Marcus (1961), and others mention a few species from the area. The distributional lists of Lance (1961, 1966) and Steinberg (1963) briefly summarize the known ranges of the northeastern Pacific species, but other than indicating north-south range limits, these authors do not include specific collecting localities within Santa Barbara County.

Point Conception, a promontory thrusting southwestward into the Pacific is the most prominent feature of this 100-mile stretch of shore, and is generally considered to divide the California faunal province into cooler (northern) and warmer (southern) populations. In his list of the pelecypods and scaphopods, Coan (1964) provided data on the topography and zoogeography of the county coastline. These considerations need not be repeated here.

The present annotated list includes bathymetric and locality data for all littoral species (excluding shelled cephalaspideans) currently known from the county. Most of our records result from a number of field trips undertaken by one or both authors. Additional information has been obtained from preserved





specimens contained in the collection of the Santa Barbara Museum of Natural History. In a few instances, we have incorporated noncontroversial identifications based on color transparencies and literature citations.

The species are arranged for convenience in alphabetical order with the name given being the one currently accepted. A capital "R" preceding the specific name indicates a range extension. An asterisk (*) denotes a new record for the county. Certain of MacFarland's (1966) species (published posthumously) have been described by other authors in earlier journals. For these and a few others involving name changes, we have provided an abbreviated synonymy.

The abundance of each species is arbitrarily indicated as common, frequent, or rare. However, considerable latitude must be allowed for such designations since many species exhibit a considerable variability in numbers both seasonally and within local habitats. Also, data on the abundance and distribution of subtidal populations are almost totally lacking.

The localities from which our records have been obtained (fig. 1) are separated from one another by varying distances. In a few cases we have found it advisable to combine several immediately adjacent collecting sites. For example, Coal Oil Point consists of several areas: Coal Oil Point itself, Goleta Point, and University Beach. However, these are all within a mile of each other and have a very similar habitat.

Of the 70 identified species, 53 are reported here for the first time from the county. The latter number includes five range extensions northward and seven southward.

Although not identified from the present collections, nine additional species may occur along the Santa Barbara coast, according to the distributions indicated by Lance (1961, 1966) and Steinberg (1963). Whether the absence of these inferred species from our collections represent disjunct ranges, or merely reflects their sparsity is, at the present time, a matter for conjecture. A list of these inferred species will be found at the end of the text.

During the course of our investigations a number of undescribed species have been brought to our attention. A few of these have been assigned to recognizable genera. Most, however, are known from insufficient material and are not included in the present list.

ACKNOWLEDGMENTS

We are particularly indebted to James Morin for furnishing numerous color transparencies and locality data. We also wish to express our appreciation to Pat Brophy for the many deep-water species that he provided.

LIST OF SPECIES

R**Acanthodoris brunnea* MacFarland, 1905.

Rare. Intertidal and subtidal.

Purisima Point, Point Conception.

Range extension south from Monterey Bay.

- **Acanthodoris lutea* MacFarland, 1925.
Frequent. Intertidal to 160 feet.
Purísima Point, Tajiguas, Coal Oil Point, Leadbetter.
- **Acanthodoris rhodoceras* Cockerell & Eliot, 1905.
Frequent. Intertidal to 80 feet.
Point Conception, Tajiguas, Coal Oil Point, Santa Barbara Yacht Harbor.
- Aegires albopunctatus* MacFarland, 1905.
Common. Intertidal to 60 feet.
Point Conception, Tajiguas, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor, Stearns Wharf, Hammond's Point.
- Aeolidia papillosa* (Linnaeus, 1761).
Frequent. Intertidal to 2280 feet.
Santa Cruz Island, Purísima Point, Point Sal, Tajiguas, Coal Oil Point, Leadbetter, Hammond's Point, Carpinteria.
- R**Aglaja ocilligera* (Bergh, 1894).
Rare. 20 to 60 feet.
Santa Cruz Island, Coal Oil Point.
Range extension south from Bodega Bay.
- Aldisa sanguinea* (Cooper, 1862).
Rare. Intertidal to 30 feet.
Point Conception, Tajiguas, Coal Oil Point.
- **Ancula lentiginosa* Farmer & Sloan, 1964.
Rare. Subtidal.
Santa Barbara Yacht Harbor.
- **Anisodoris nobilis* (MacFarland, 1905).
Common. Intertidal to 30 feet.
Santa Cruz Island, Purísima Point, Point Conception, Tajiguas, Naples Reef, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor, Stearns Wharf.
- Antiopella barbarendis* (Cooper, 1863).
Synonym: *Antiopella aureocincta* MacFarland, 1966.
Rare. Intertidal to 96 feet.
Point Conception, Santa Barbara Yacht Harbor.
- Aplysia californica* Cooper, 1863.
Common. Intertidal to 60 feet.
Purísima Point, Point Conception, Tajiguas, Coal Oil Point, Hammond's Point.
- Aplysia vaccaria* Winkler, 1955.
Common. Intertidal to 15 feet.
Hammond's Point, Carpinteria.
- **Archidoris montereyensis* (Cooper, 1862).
Common. Intertidal to 60 feet.

Santa Cruz Island, Point Sal, Point Conception, Tajiguas, Naples Reef,
Leadbetter, Santa Barbara Yacht Harbor, Carpinteria.

**Armina californica* (Cooper, 1862).

Rare. 30 to 750 feet.

Santa Cruz Island, Gaviota, Coal Oil Point.

R**Austrodoris odhneri* MacFarland, 1966.

Rare. 80 feet.

Point Conception.

Range extension south from Monterey Bay.

**Cadlina flavomaculata* MacFarland, 1905.

Rare. Intertidal to 60 feet.

Santa Cruz Island, Point Conception, Tajiguas, Coal Oil Point.

**Cadlina limbaughi* Lance, 1962.

Rare. 30 to 60 feet.

Coal Oil Point.

**Cadlina luteomarginata* MacFarland, 1966.

Synonym: *Cadlina marginata* MacFarland, 1905.

Frequent. Intertidal and subtidal.

Point Conception, Tajiguas, Coal Oil Point.

**Cadlina modesta* MacFarland, 1966.

Frequent. Intertidal to 30 feet.

Santa Cruz Island, Purisima Point, Point Conception, Tajiguas, Leadbetter.

R**Cadlina sparsa* (Odhner, 1921).

Rare. Probably subtidal.

The only locality is "Santa Barbara."

Range extension north from San Diego.

**Catriona lagunae* (O'Donoghue, 1926).

Synonym: *Cratena rutila* MacFarland, 1966.

Rare. 15 to 30 feet.

Leadbetter.

R**Conualacvia alba* Collier & Farmer, 1964.

Rare. 15 to 30 feet.

Tajiguas, Coal Oil Point.

Range extension north from Newport Bay.

**Corambe pacifica* MacFarland & O'Donoghue, 1929.

Frequent. On floating kelp off Santa Barbara.

**Corambella steinbergae* Lance, 1962.

Synonym: *Corambella bolini* MacFarland, 1966.

Frequent. On floating kelp off Santa Barbara.

**Coryphella trilineata* O'Donoghue, 1921.

Frequent. Intertidal to 160 feet.

Point Sal, Tajiguas, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor, Carpinteria.

R**Cratena albocrusta* MacFarland, 1966.

Rare. Subtidal.

Santa Barbara Yacht Harbor.

Range extension south from Monterey Bay.

**Cumanotus* species.

Rare. Intertidal to 15 feet.

Stearns Wharf.

Cuthona alpha Baba & Hamatani, 1963.

Synonym: *Cratena spadix* MacFarland, 1966.

Rare. Subtidal.

Santa Barbara Yacht Harbor.

Dendrodoris albopunctata (Cooper, 1863).

Common. Intertidal to 120 feet.

Santa Cruz Island, Point Sal, Purisima Point, Point Conception, Tajiguas, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor, Stearns Wharf, Hammond's Point, Carpinteria.

R**Dendronotus albus* MacFarland, 1966.

Rare. Subtidal.

Coal Oil Point.

Range extension south from Monterey Bay.

Dendronotus iris Cooper, 1862.

Rare. 15 to 160 feet.

Santa Cruz Island, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor.

Dendronotus frondosus (Ascanius, 1774).

Frequent. Subtidal to 60 feet.

Tajiguas, Coal Oil Point, Santa Barbara Yacht Harbor, Stearns Wharf.

**Dendronotus subramosus* MacFarland, 1966.

Rare. Intertidal to 15 feet.

Point Conception, Naples Reef.

Diaulula sandiegensis (Cooper, 1862).

Frequent. Intertidal to 60 feet.

Santa Cruz Island, Purisima Point, Point Conception, Tajiguas, Naples Reef, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor, Stearns Wharf.

**Dirona picta* MacFarland in Cockerell & Eliot, 1905.

Frequent. Intertidal to 30 feet.

Point Conception, Leadbetter, Santa Barbara Yacht Harbor, Stearns Wharf.

- **Discodoris hcathi* MacFarland, 1905.
Frequent. Intertidal to 30 feet.
Purissima Point, Point Conception, Tajiguas, Carpinteria.
- R**Doris* (*s.l.*) species.
Rare. Intertidal.
Carpinteria.
Range extension north from Newport Bay.
- R**Doto amyra* Marcus, 1961.
Common. Subtidal.
Tajiguas, Santa Barbara Yacht Harbor, Stearns Wharf.
Range extension south from Monterey Bay.
- **Elysia hedgpethi* Marcus, 1961.
Synonym: *Elysia bedeckta* MacFarland, 1966.
Frequent. Intertidal and subtidal.
Point Sal, Coal Oil Point, Santa Barbara Yacht Harbor, Carpinteria.
- Fiona pinnata* Eschscholtz, 1831.
Rare. Pelagic.
Santa Barbara Channel.
- Flabellinopsis iodinea* (Cooper, 1862).
Common. Intertidal to 60 feet.
Santa Cruz Island, Point Conception, Tajiguas, Naples Reef, Coal Oil Point, Leadbetter, Carpinteria.
- **Glossodoris californiensis* (Bergh, 1879).
Rare. Intertidal to 60 feet.
Tajiguas, Coal Oil Point, Leadbetter.
- **Glossodoris macfarlandi* (Cockerell, 1902).
Rare. 15 to 30 feet.
Tajiguas, Leadbetter.
- **Glossodoris porterae* (Cockerell, 1902).
Rare. Subtidal to 60 feet.
Tajiguas, Naples Reef, Leadbetter.
- **Hermacina smithi* Marcus, 1961.
Common. Intertidal.
Point Sal.
- Hermisenda crassicornis* (Eschscholtz, 1831).
Common. Intertidal to 60 feet.
Santa Cruz Island, Point Sal, Purissima Point, Point Conception, Tajiguas, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor, Carpinteria.
- **Hopkinsia rosacca* MacFarland, 1905.
Common. Intertidal.
Santa Cruz Island, Purissima Point, Point Conception, Carpinteria.
- **Laila cockerelli* MacFarland, 1905.
Frequent. Intertidal to 30 feet.

Santa Cruz Island, Point Conception, Tajiguas, Naples Reef, Coal Oil Point, Leadbetter, Stearns Wharf.

Melibe iconina (Gould, 1853).

Rare. Intertidal to 15 feet.

Naples Reef, Stearns Wharf.

**Navanax inermis* (Cooper, 1862).

Frequent. Intertidal to 60 feet.

Tajiguas, Coal Oil Point, Leadbetter, Santa Barbara Yacht Harbor.

Okenia angelensis Lance, 1966.

Common. Subtidal.

Santa Barbara Yacht Harbor, Stearns Wharf.

**Onchidoris hystricina* (Bergh, 1878).

Rare. 15 feet.

Carpinteria.

**Phidiana pugnax* Lance, 1962.

Synonym: *Phidiana nigra* MacFarland, 1966.

Common. Intertidal to 60 feet.

Santa Cruz Island, Point Sal, Purisima Point, Point Conception, Tajiguas, Coal Oil Point, Hammond's Point.

R**Philine bakeri* Dall, 1919.

Rare. 510 feet.

Gaviota.

Range extension north from La Jolla.

Pleurobranchaca californica MacFarland, 1966.

Rare. Subtidal to 660 feet.

Santa Cruz Island, Point Conception, Leadbetter.

Pleurobranchus strongi MacFarland, 1966.

Rare. Intertidal.

Santa Cruz Island.

**Polycera atra* MacFarland, 1905.

Common. Intertidal to 160 feet.

Tajiguas, Santa Barbara Yacht Harbor, Carpinteria.

**Polycera hedgpethi* Marcus, 1964.

Rare. Subtidal.

Santa Barbara Yacht Harbor.

R**Precuthona divae* Marcus, 1961.

Synonym: *Cuthona rosca* MacFarland, 1966.

Rare. Subtidal to 60 feet.

Coal Oil Point, Santa Barbara Yacht Harbor.

Range extension south from Monterey Bay.

**Rostanga pulchra* MacFarland, 1905.

Frequent. Intertidal.

Point Sal, Purisima Point, Point Conception, Tajiguas, Coal Oil Point.

R**Spurilla chromosoma* Cockerell & Eliot, 1905.

Rare. Intertidal to 60 feet.

Purisima Point, Coal Oil Point, Santa Barbara Yacht Harbor, Hammond's Point.

Range extension north from Newport Bay.

R**Spurilla oliviae* (MacFarland, 1966).

Described as *Aeolidiella oliviae* MacFarland, 1966.

Rare. Intertidal.

Leadbetter.

Range extension south from Monterey Bay.

**Thordisa bimaculata* Lance, 1966.

Rare. 15 feet.

Leadbetter.

**Tochuina tetraquetra* (Pallas, 1788).

Synonym: *Tritoniopsis aurantia* Mattox, 1955.

Rare. Subtidal to 1190 feet.

Santa Cruz Island, Gaviota.

Trapania velox (Cockerell, 1901).

Rare. Intertidal to 15 feet.

Stearns Wharf.

**Triopha carpenteri* (Stearns, 1873).

Frequent. Intertidal to 60 feet.

Purisima Point, Point Conception, Tajiguas, Naples Reef.

**Triopha grandis* MacFarland, 1905.

Rare. 25 feet.

Santa Cruz Island.

**Triopha maculata* MacFarland, 1905.

Frequent. 15 to 60 feet.

Tajiguas, Naples Reef, Santa Barbara Yacht Harbor, Stearns Wharf.

**Triopha* species.

Frequent. Intertidal.

Santa Cruz Island, Point Sal, Purisima Point, Point Conception.

**Tritonia exsulans* Bergh, 1894.

Rare. 30 to 750 feet.

Santa Cruz Island, Coal Oil Point.

**Tritonia festiva* (Stearns, 1873).

Rare. Intertidal to 160 feet.

Purisima Point, Tajiguas.

INFERRED SPECIES

<i>Ancula pacifica</i> MacFarland, 1905.	Moss Beach to San Diego.
<i>Atagema quadrimaculata</i> Collier, 1963.	Monterey Bay to San Diego.
<i>Capellinia rustya</i> Marcus, 1961.	San Francisco Bay to San Diego and Bahia de Los Angeles, Mexico.
<i>Dirona albolineata</i> Cockerell & Eliot, 1905.	Puget Sound to San Diego.
<i>Hancockia californica</i> MacFarland, 1966.	Dillon Beach to Punta Abreojos, Mexico.
<i>Phyllaplysia taylori</i> (Dall, 1900).	Puget Sound to San Diego Bay.
<i>Phylliroe bucephala</i> Péron & Lesuer, 1810.	Pelagic worldwide.
<i>Stiliger juscovittata</i> Lance, 1962.	Puget Sound to San Diego and Bahia de Los Angeles, Mexico.
<i>Tylodina fungina</i> Gabb, 1865.	Cuaycos to Todos Santos, Mexico, and Guaymas, Mexico.

Tylodina fungina was erroneously reported from Santa Barbara by DuShane (1966). The record she quoted from Oldroyd (1924) was Santa Barbara *Island* in Ventura County and not Santa Barbara in Santa Barbara County. The word *Island* was apparently deleted.

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