# **PUBLICATIONS**

The Project distributes news of its progress and findings through several types of documents. The papers (contributions) listed below have been published or accepted for publication in scientific journals or proceedings volumes during the past year. We have also produced six technical memoranda since July 1974: These informal documents contain data or preliminary results that may be of immediate interest to other marine researchers. Much of the material in the technical memoranda will be published in final form in papers or technical reports in the future.

The Project issues periodic progress reports that contain information about our current projects, changes in staff, and new facilities and equipment: Progress Report 14 has been issued since July 1974. Progress Report 13, published early in 1974, is a pamphlet containing general information on organization and staff and a summary of our findings to date (copies are available through the Project office).

#### CONTRIBUTIONS, 1972-74

Young, D.R., and T.R. Folsom. 1972. Mussels and barnacles as indicators of the variation of <sup>54</sup>Mn, <sup>60</sup>Co, and <sup>65</sup>Zn in the marine environment. In Proceedings of the IAEA Symposium on Radioactive Contaminants in the Marine Environment, 10-14 July 1972, Seattle. Contribution 5.

Young, D.R., C.S. Young, and G.E. Hlavka. 1973. Sources of trace metals from highly urbanized southern California to the adjacent marine ecosystem. In <u>Cycling and Control</u> of <u>Metals</u>, pp. 21-39, eds. M.G. Curry and G.M. Gigliotti. National Environmental Research Center, Cincinnati, Ohio. Contribution 6.

Mearns, A.J. 1974. Southern California inshore demersal fishes: Diversity, distribution, and disease as responses to environmental quality. CalCOFI Report 17. Contribution 7.

Young, D.R., J.N. Johnson, A. Soutar, and J.D. Isaacs. 1973. Mercury concentrations in dated varved marine sediments collected off southern California. <u>Nature</u> 224: 273-5. Contribution 8.

Mearns, A.J., and M.J. Sherwood. 1974. Environmental aspects of fin erosion and tumors in southern California Dover sole. <u>Trans. Amer. Fish. Soc</u>. 103: 799-810. Contribution 9.

Chen, K.Y., C.S. Young, T.K. Jan, and N. Rohatgi. Suspended and dissolved trace metals in wastewater effluent. Presented at the 46th Water Pollut. Control Fed. Conf., 5 October 1973, Cleveland, Ohio. <u>J. Water</u> Pollut. Control Fed. 46:2663-75. Contribution 11.

de Goeij, J.J.M., V.P. Guinn, D.R. Young, and A.J. Mearns. Activation analysis trace element studies of Dover sole liver and marine sediments. In <u>Comparative studies of food and environmental contamination</u>, an IAEA/FAO/WHO Symposium on Nuclear Techniques 27-31 August 1973, Otaniemi, Finland. Contribution 13.

Mearns, A.J. 1973. Coastal fish and fisheries. In <u>Proceedings</u> of the conference of government representatives on discharges to the Pacific Ocean from municipal wastewater treatment facilities, 12-13 July 1973, San Francisco, pp. 23-33. Assoc. of Metro. Sewerage Agencies, Seattle, Wash. Contribution 14.

Horn, W., R.W. Risebrough, A. Soutar, and D.R. Young. 1974. Deposition of DDE and PCB in dated sediments of the Santa Barbara Basin. <u>Science</u> 184:1197-9. Contribution 16.

Sherwood, M.J., and A.J. Mearns. 1974. Disease responses in southern California coastal fishes. In <u>Proceedings of the Conference on Marine Biology in Environmental Protection</u>, 13-15 November 1973, San Clemente Island, Calif., pp. 147-62, ed. T.A. Brody. Rept. NUCTP 443, Naval Undersea Center, San Diego, Calif. Contribution 17.

Young, D.R., and T.C. Heeson. Inputs and distributions of chlorinated hydrocarbons in three southern California harbors. Presented at the Fourth Technical Conference on Estuaries of the Pacific Northwest, Corvallis, Oregon. To be published in the proceedings volume. Contribution 18.

Bascom, W. 1974. The disposal of waste in the ocean. Sci. Amer. 231(2):16-25. Contribution 19.

Young, D.R. 1973. Trace contaminants in the Southern California Bight. In <u>Proceedings of the Conference of Government Representatives on Discharges to the Pacific Ocean from Municipal Wastewater Treatment Facilities</u>, 12-13 July 1973, San Francisco. Assoc. of Metro.

Sewerage Agencies, Seattle, Wash. Contribution 20.

### CONTRIBUTIONS, 1974-75

Mitchell, F.K. 1974. Evaluating the impact of sludge discharge to Santa Monica Bay, California. In Rutgers/EPA symposium on the pretreatment and ultimate disposal of wastewater solids. May 1974, New Brunswick, New Jersey. Rept. EPA-902/9-74-002, A. Freiberger, ed. Contribution 21.

Risebrough, R., D.R. Young, T. Munson, M. Goodwin, and R. Parrish. 1975. Contamination of marine resources for human consumption. In <u>Proceedings of the Marine Broassay Workshop</u>, sponsored by the Marine Technological Society and the EPA, 9-11 April 1974, Montauk, Long Island, New York. Contribution 22.

Mearns, A.J., and M.J. Sherwood. 1974. Ocean wastewater discharge and tumors in a southern California flatfish. Presented at International Union Against Cancer conference on neoplasms in Aquatic Animals as Indicators of Environmental Carcinogens, 15-17 October 1974, Cork, Ireland. To be published in the proceedings volume. Contribution 26.

Young, D.R., T.R. Folsom, and Y.F. Hodge. <sup>137</sup>Cs and <sup>40</sup>K in the flesh of Pacific albacore, 1964 to 1974. Accepted for publication in Health Physics. Contribution 28.

Mearns, A.J., and L.G. Smith. Benthic oceanography and the distribution of bottom fish off Los Angeles. Presented at the Annual Conference of CalCOFI, 4-7 November 1973, San Clemente, Calif. To be published in CalCOFI Report 18 (available as TM 218). Contribution 31.

Reish, D.J., A.J. Mearns, and T.W. Kawling. 1975. Marine and estuarine pollution. <u>J. Water Pollut. Control Fed</u>. (June 1975 issue). Contribution 32.

Mearns, A.J., and L. Harris. Age, length, and weight relationships in southern California populations of Dover sole. Presented at the Annual Conference of the CalCOFI, 12-14 November, 1974, Santa Barbara, Calif. To be published in CalCOFI Report 18 (available as TM 219). Contribution 33.

Mitchell, F.K. Sediment trap applications in the nearshore region. Presented at the Annual Conference of the CalCOFI, 12-14 November 1974, Santa Barbara, California. To be published in CalCOFI Report 18. Contribution 34.

Young, D.R., D.J. McDermott, T.C. Heesen, and T.K. Jan. Pollutant inputs and distributions off southern California. Presented at the 169th National Meeting of the American Chemical Society in special symposium. Marine Chemistry in the Coastal Environment, 8-10 April 1975, Philadelphia, Penn. To be published in the proceedings volume. Contribution 35.

Mearns, A.J. Responses of coastal fish and invertebrates to wastewater discharges. Presented at the 3rd Intl. Congress on Marine Municipal and Industrial Wastewater Disposal, 23-27 June 1975, Sorrento, Italy. To be published in the proceedings volume. Contribution 37.

Guinn, V.P., M. DiCasa, J.J.M. deGoeij, and D.R. Young. 1975. Neutron activation analysis studies of marine biological species and related marine sediments. In Proceedings of the 2nd intl. conf. on nuclear methods in environmental research, 29-31 July 1974, Columbia, Missouri. Contribution 38.

Young, D.R., and D.J. McDermott. Trace metal anomalies in marine organisms off southern California. Presented at the Annual Meeting of the CalCOFI, 12-14 November 1974, Santa Barbara, Calif. To be published in CalCOFI Report 18. Contribution 39.

Young, D.R. 1975. A review of the chemical oceanography of the southern California offshore region. In Recommendation for baseline research in southern California relative to offshore resources development, proceedings of a U.S. Bureau of Land Management meeting, 5-7 December 1974, Long Beach, California. Southern California Academy of Sciences, Los Angeles. R.J. Lavenberg and S.A. Earle, eds., pp. 83-90. Contribution 40.

Alien, M.J. Resource partitioning in coastal benthic fish communities of southern California. Presented at the Annual Conf. of the CalCOFI, 12-14 November 1974, Santa Barbara, Calif. To be published in CalCOFI Report 18. Contribution 43.

Bascom, W.B. Instruments for measuring pollution in the sea. Presented at the 3rd Intl. Congress on Marine Municipal and Industrial Wastewater Disposal, 23-27 June 1975, Sorrento, Italy. To be published in the proceedings volume. Contribution 44.

#### TECHNICAL MEMORANDA, 1973-74

Mearns, A.J., and P.L. Haaker. 1973. Identifying and coding color anomalies in flatfishes. TM 200.\* Mearns, A.J., M.J. Alien, and M.J. Sherwood. 1973. An otter trawl survey of the central Orange County coast. TM 201.

Klontz, G.W., and R.A. Bendele. 1973. Histopathological analysis of fin erosion in southern California marine fishes. TM 203.

Mearns, A.J., M.J. Alien, and M.J. Sherwood. 1973. An otter trawl survey off the Palos Verdes Peninsula and Santa Catalina Island, May-June 1972. TM 204.

Mearns, A.J., M.J. Alien, M.J. Sherwood, and R. Gammon. 1973. An otter trawl survey off the Palos Verdes Peninsula and Santa Catalina Island, November-December 1972. TM 205.\*

Mearns, A.J., and M.J. Alien. 1973. Checklist of inshore demersal fishes from southern and central California. TM 206.\*

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Mearns, A.J., M.J. Alien, and M.J. Sherwood. 1974. An otter trawl survey of Santa Monica Bay, May-June 1972. TM 209.\*

Hendricks, T.J., and J.M. Harding. 1974. The dispersion and possible biological uptake of ammonia in a wastefield, Point Loma, May 1972. TM 210.\*

Word, J. and D. Charwat. 1974. Key to shrimp common in southern California trawl catches. TM 211.\*

Young, D.R., T.C. Heesen, D.J. McDermott, and P.E. Smokier. 1974. Marine inputs of polychlorinated byphenyls and copper from vessel antifouling paints. TM 212.\*

Mearns, A.J., and H.H. Stubbs. 1974. Comparison of otter trawls used in southern California coastal surveys. TM 213.\*

<sup>\*</sup> Out of print.

Young, D.R., and T.C. Heesen. 1974. Inputs and distributions of chlorinated hydrocarbons in three southern California harbors. TM 214.\*

## TECHNICAL MEMORANDA, 1974-75

Mearns, A.J., and C.S. Greene, eds. 1974. A comparative survey of three areas of heavy waste discharge. TM 215.

Young, D.R. 1974. Cadmium and mercury in the Southern California Bight. TM 216.

McDermott, D.J., T.C. Heesen, and D.R. Young. 1974. DDT in bottom sediments around five southern California outfall systems. TM 217.

Mearns, A.J., and L.S. Word. 1975. Hydrographic and microbiological survey of Santa Monica Basin, winter and summer 1974. TM 218.

Mearns, A.J., and L. Harris. 1975. Age, length, and weight relationships in southern California populations of Dover sole. TM 219.

Voglin, R.M. 1975. An otter trawl survey off Point Loma, San Diego, California. TM 220.

## **TECHNICAL REPORTS**

Jones, J.H. 1971. General circulation and water characteristics in the Southern California Bight. TR 101.\*

Young, C.S. 1971. Thermal discharges into the coastal waters of southern California. TR 102.\*

Young, D.R. 1971. Mercury in the environment: A summary of information pertinent to the distribution of mercury in the Southern California Bight. TR 103.\*

The ecology of the Southern California Bight: Implications for water quality management. TR 104.

\*Out of print.