

Part II

FIFTIETH ANNIVERSARY SYMPOSIUM OF THE CALCOFI CONFERENCE

La Jolla, California
26 October 1999

THE ECOLOGICAL EFFECTS OF THE 1998 EL NIÑO IN EASTERN BOUNDARY CURRENTS

One of the major achievements of the 50-year CalCOFI program has been the identification and description of major El Niño events in the California Current system (CCS), emphasizing their ecological consequences. Even this achievement could, in retrospect, have been improved: at the time of the 1982–83 El Niño, CalCOFI was sampling extensively only every third year (1981 was a year of sampling), and only modest monitoring of this intense event was achieved, after considerable effort. This mismatch between nature and fiscal planning, plus evidence that the southern California sector of the CCS is representative of other areas on interannual time scales, led to the reduction of spatial coverage and enhancement of temporal coverage of monitoring (quarterly, every year)—the pattern currently followed.

The 1997–98 El Niño was predicted from events in the equatorial Pacific, resulting in enhanced spatial and temporal monitoring of this event by CalCOFI, supported by supplemental funding from the University of California and NOAA. Other research entities mounted

analogous efforts. Accurate description of important, interrelated, properties of the environment, and detection of the timing of significant changes in them, are important steps toward understanding; although the *post hoc ergo propter hoc* logical fallacy must be avoided, an effect should follow its putative cause. Therefore, the purpose of the CalCOFI fiftieth anniversary symposium was to present results—necessarily preliminary in some cases—describing this event, in the context of longer time series defining “normal” conditions (including physical/biological modeling). Speakers were invited to present topics covering several regions of the eastern Pacific, and several trophic levels. The papers that follow are based on these presentations (with the exception of a summary of studies on marine mammals that Robert DeLong of NOAA presented at the meeting but which is not reproduced here). The papers were edited by Michael Mullin and Julie Olfe, but not refereed externally.

Michael Mullin