

INSTITUTO NACIONAL DE PESCA DEL ECUADOR

# BOLETIN CIENTIFICO Y TECNICO

VOLUMEN 1

NUMERO 1

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## COMPILACION BIBLIOGRAFICA

SOBRE LA OCEANOGRAFIA DE LAS AGUAS LITORALES DE  
COLOMBIA, ECUADOR Y PERU, CON ESPECIAL  
REFERENCIA AL FENOMENO "EL NIÑO"

POR

MALVERN GILMARTIN

COMISION INTERAMERICANA DEL ATUN TROPICAL

EL INSTITUTO NACIONAL DE PESCA ES UN PROYECTO DEL  
GOBIERNO DEL ECUADOR —MINISTERIO DE FOMENTO— QUE  
SE REALIZA CON LA AYUDA DEL FONDO ESPECIAL DE LAS  
NACIONES UNIDAS Y DE LA ORGANIZACION PARA LA  
AGRICULTURA Y LA ALIMENTACION (FAO).



ENERO, 1964  
GUAYAQUIL, ECUADOR

## **COMPILACION BIBLIOGRAFICA SOBRE LA OCEANOGRAFIA DE LAS AGUAS LITORALES DE COLOMBIA, ECUADOR Y PERU CON ESPECIAL REFERENCIA AL FENOMENO "EL NINO"**

Malvern Gilmartin

### **Introduction**

The primary purpose of this bibliography is to provide an introduction to the literature of the oceanography of Colombia, Ecuador and Peru; with special reference to the "El Niño" phenomena. It is not intended as a complete review of the subject, and while reasonable comprehensive in physical oceanography is known to be deficient in pertinent biological oceanographic citations. However, it is hoped that it will enable the reader to find further needed information.

The "El Niño" phenomena extend beyond the immediate coastal waters of Colombia, Ecuador and Perú, and it was necessary to arbitrarily limit the geographical area under consideration. For this bibliography the area is accepted as extending from the coast of South America to 95°W longitude, and from 10°N latitude to 20°S latitude.

There is extensive literature on the benthic organisms of the area which has been omitted from the bibliography. However, an effort has been made to include representative citations on the taxonomy of the regions's better known planktonic organisms because of the potential role they play as indicator organisms of water masses. In most cases, references to the rather extensive literature on mass mortality in the sea have been omitted the except where they refer directly to the "El Niño phenomena".

The references are arranged in alphabetical order by author. Entry is made only under the senior author's name. The abbreviation "et al." is used with the senior author's name, to show colaboration of more than four authors. Each author's works are listed chronologically by year of publication, and those published in the same year are given alphabetical listing. Where possible, the abbreviations of periodical titles have been taken from theworld List of Periodicals for Aquatic Sciences and Fisheries (FAO Fisheries Biology Technical Paper, No. 19, Vol. 1). The expected publication dates of all "im press" entries are indicated in parentheses.

It was impossible for the compiler to examine all the original publications, and the references in this bibliography should, therefore not be cited unless thye original paper itself has been viewed. Unfortunately, errors and inconsistencies are inevitable in an effort such as this, and it is only hoped that they are few and will cause no serious inconvenience.