

Published for the WESTPAC Program Group by the Australian Institute of Marine Science and the Department of Science and Technology

WESTPAC NEWSLETTER

Editorial

WESTPAC III enters its second year in a state of good health with strong evidence of widespread support from its various member states. This is certainly apparent from responses for participation in Task Team activities and in other initiatives relevant to The Chairman is especially program interests. encouraged by the enthusiasm and energy shown by the WESTPAC Technical Coordinators and by the Task Team Chairmen. Recent advice indicates that active moves by correspondence are presently in effect to develop specific research objectives wherever necessary. Some, indeed, are already in progress and, in certain instances support has been found or other opportunities taken to hold round table discussions to accelerate progress towards stated objectives. This Newsletter outlines some of those developments. Once again, participants in WESTPAC are invited to offer any information they consider relevant for inclusion in future issues.

THE STATE OF THE TASK TEAMS

For completeness, the list which follows includes all nominations known to have been authorized up to the present. To achieve brevity, full addresses have been provided only for Technical Coordinators. They or the Chairman of WESTPAC would be glad to provide fuller details on request.

An Up-date on Nominations and the Present Composition of Task Teams

WESTPAC TASK TEAM ON MARINE POLLUTION RESEARCH AND MONITORING

Technical Coordinator Dr Aprilani Soegiarto
Director
National Institute of Oceanology LIPI Komplex Bina Samundera, Ancol Jakarta Utara PO Box 580 DAK JAKARTA INDONESIA

Project Coordinator Professor C Burdon-Jones School of Biological Sciences Post Office JAMES COOK UNIVERSITY QId 4811 AUSTRALIA

Task Team Members

Australia Dr Allan J Bremner

China: People's Republic Dr Gin Derun

Monsieur Jacques Arrignon

Japan Mr Daisaku Sugito Mr Masaru Shiozaki

Korea: Democratic People's Republic Mr Go Jun Bong

Korea; Republic of, Dr Kwang Woo Lee

Malaysia Associate Professor Dr Law Ah Theem Dr Abu Bakar Bin Jaafar Dr Noor Azhar Mohamed Shazili

New Caledonia Dr N L Lemasson

New Zealand Dr P Dinamoni

Dr Manuwadi Hungspreugs Captain T Charoenlaph

USA Dr Ford A Cross

Dr E N Shumilin Dr N K Khristoforova Dr A A Kalmakov

WESTPAC PROGRAM GROUP IN THE STUDY OF OCEAN DYNAMICS AND CLIMATE

Technical Coordinator Dr Ron Heath NZ Oceanographic Institute DSIR PO Box 12-346 WELLINGTON NEW ZEALAND

Project Coordinating Group (Task Team) on Ocean Dynamics in the Tropical Pacific

Chairman

Dr J Stuart Godfrey
CSIRO Marine Laboratories
GPO Box 1538
HOBART Tas 7001 AUSTRALIA

Task Team Members

Japan Mr Koichi Nagosaka

USSR Dr A D Nelezin

(further nominations proceeding)

Project Coordinating Group (Task Team) on Ocean Dynamics in the North-west Pacific

Chairman

Burman
Dr Warren White
Mail Code A030
Scripps Institution of Oceanography
La Jolla CA 92037
USA

Task Team Members

Japan Mr Hideo Nishida

USSR

Dr V P Pavlychev Dr S N Protasov

(further nominations proceeding)

Task Team on Coastal and Continental Shelf Oceanography

I. Exchange processes and circulation of coral reefs

Chairman

Dr Jason Middleton Dept of Mathematics University of New South Wales PO Box 1 Kensington NSW 2033 SYDNEY AUSTRALIA

Task Team Members

China: People's Republic Dr G E Youxin

Indonesia Mr D Arief

Japan Dr. T. Sugimoto

USSR Dr V B V Preobrazhensky Dr G I Yurasov

2. Nearshore currents and tides

Chairman

Dr Ron Heath NZ Oceanographic Institute DSIR PO Box 12-346 WELLINGTON NEW ZEALAND

Task Team Members

Australia Professor G W Lennon

China: People's Republic Or G E Youxin

Indonesia Mr R Kastoro

Japan Dr Toshiyuki Hirano

Korea: Democratic People's Republic Mr K Y Chol Dr \$ Chang

Dr H Lee

Philippines Mr C Santos

USSR

Dr V B V Preobrazhensky Dr G I Yurasov

WESTPAC TASK TEAM ON OCEAN SCIENCE IN RELATION TO LIVING RESOURCES (OSLR)

Chairman and Technical Coordinator Dr D Tranter CSIRO CSIRO
Division of Fisheries Research
GPO Box 1538
HOBART Tas 7001
AUSTRALIA

OSLR STUDY GROUP 1: OCEAN PRODUCTIVITY

Chairman Dr T Nemoto Ocean Science Institute University of Tokyo 1-15-1 Minamidai Nakano-Ku TOKYO 164 JAPAN

Members

Australia Dr G Harris

China: People's Republic Dr Dai Ruguang

Indonesia

Dr Anugerah Nontji

Korea; Republic of, Dr Jong Soo Hue

New Caledonia Dr R Le Borgne

New Zealand Dr J Bradford

Philippines Dr Jose A Ordonez

USSR

Dr V P Pavlychev Dr J A S Ovodov

OSLR STUDY GROUP 2: CONTINENTAL SHELF PRODUCTIVITY

Chairman
Dr P Rothlisberg
CSIRO Marine Laboratories
Division of Fisheries Research
PO Box 120
CLEVELAND Qld 4163
AUSTRALIA

Members

China: People's Republic Dr Dai Ruguang Dr Nina Xiuren

Indonesia

Dr Anugerah Nontji Dr Y Kitano

Korea: Democratic People's Republic Dr D G Kim

Korea; Republic of, Dr Hyung Tack Huh

New Zealand Dr J Bradford

Philippines Dr Miguel Fortes

Dr S L Kondrashov Dr V E Rodin

OSLR STUDY GROUP 3: LAND/SEA INTERFACE

Members

Australia Dr D W Kinsey

China: People's Republic Dr Dai Ruguang

Indonesia Dr Anugerah Nontji

Japan Dr Masuoki Horikoshi

Korea: Democratic People's Republic Or B D Jon

Korea; Republic of, Dr Jae Sang Hong

USSR

Dr G M Gavrilov Dr V L Kajonov

OSLR STUDY GROUP 4: TOXIC AND ANOXIC PHENOMENA ASSOCIATED WITH ALGAL BLOOMS

Chairman Dr T Okaichi Dean Faculty of Agriculture Kagawa University Miki-machi KAGAWA-KEN JAPAN Members

Dr J Baker

China: People's Republic Dr Dai Ruguang Dr Jiang Jialun

Dr Anugerah Nontji

Korea: Democratic People's Republic Dr J D Liyu

Korea; Republic of, Dr Joo Suck Park

New Zealand Dr F Hoe Chang

Philippines Dr Ruben A Estudillo

Thailand

Dr Surophol Sudara

WESTPAC TASK TEAM ON OCEAN SCIENCE IN RELATION TO NON-LIVING RESOURCES (OSNLR)

Technical Coordinator for Marine Geology and Geophysics Professor N Nasu

Director Ocean Research Institute University of Tokyo 1-15-1 Minamidai Nakana-ku TOKYO 164 JAPAN

Group of Experts

Australia

Dr D A Falvey

Indonesia Mr Sugiarta Wirasantosa

Korea; Republic of, Dr Chong Su Kim

New Zealand Nominations submitted

USSR Dr B I Vasilijev

Task Team Members

China: People's Republic Mr Chen Bingxin

New Caledonia Dr Jacques Daniel USA Dr Brian Taylor

USSR Dr A V Zhirmunsky

WESTPAC IGOSS TASK TEAM ON OCEAN SERVICES (IGOSS)

Task Team Convenor
Commander Ian Bofinger
Director
Oceanography and Meteorology
Department of Defence (Navy)
Russell Offices
CANBERRA ACT 2600
AUSTRALIA

Task Team Members

Fiji
Director
Mineral Resources Department

Korea: Democratic People's Republic Mr Ri Zu O

Japan Dr Yoshiro Sekiguchi

New Caledonia Dr Jean Rene Donguy

New Zealand Mr J S Hickman

Philippines Dr Conrado M Santos

Thailand Dr Manuwadi Hungspreugs

USSR Dr V C H Berdin

ESTPAC III Report

has come to the attention of the Chairman that some of those participating in the work of the Program Group do not have copies of the Report of WESTPAC III. To obtain copies, it is suggested that enquiries be directed to the Secretary of IOC, Dr M Ruivo at the address below:

Dr Mario Ruivo Secretary Intergovernmental Oceanographic Commission UNESCO 7 Place de Fontenoy Poris 75700 FRANCE

REPORTS OF PROGRESS

The statements which follow were kindly provided by several of the Technical Coordinators.

Ocean Dynamics and Climate - Within physical oceanography (variously called The Study of Ocean Dynamics and Climate and Ocean Sciences) in WESTPAC the year since WESTPAC III has been occupied by the setting up of specific Task Teams. As evident from the Task Team titles the first two encompass mainly open ocean dynamics with ongoing active research involvement from several nations and a natural progression from the WESTPAC Task Team on Ocean Monitoring. The last two groups encompass near shore studies which although specific for each country have a common thread of specific processes information on national programmes is now being sought which should lead to co-operative research (examples at present under discussion are logically between the neighbouring countries of Australia and New Zealand and the passages in south-east Asia bordered by Indonesia, Korea and Japan). There is of course a considerable observational and process overlap between the nearshore and offshore aspects.

Names of present Task Team members have been listed in this Newsletter. The number of scientists in the ocean dynamics Task Teams should increase rapidly in the next month as nominations of various scientists are confirmed.

The general mode of operation is by correspondence leading to identification of future research needs. Consideration is presently being given to arranging meetings in conjunction with major physical oceanographic conferences in the region. Of course especially in the ocean dynamics area such meetings and identification are already common under the auspices of projects such as the World Climate Research Project.

Ocean Sciences and Living Resources (OSLR) - The Task Team is now approaching full strength. It is anticipated that some U.S. scientists will soon join the team. The research theme is "Biological Production" with an emphasis on processes influencing recruitment to resource populations.

The Task Team is made up of 4 study groups. The first, lead by Professor T Nemoto, is concerned with open ocean ecosystems. In May 1985 (18-25) a workshop will be held at the Ocean Research Institute, University of Tokyo on ocean eddies, particularly those associated with the Kuroshio, East Australian Current, and Gulf Stream.

Dr Peter Rothlisberg leads the study group on biological production on continental shelves. He is currently exploring the question of developing a specific WESTPAC program on recruitment in relation to penaeid prawn resource. In some parts of the Gulf of Carpentaria, annual recruitment is determined by the magnitude of monsoonal rains.

The third study group, concerned with production at the land-sea interface, has yet to develop a coherent program. There is some interest in studies on the impact of monsoonal run-off on the resources of the continental shelf.

The fourth study group is concerned specifically with the causes and consequences of "Red Tide" and the processes involved. A seminar was held on this subject in Australia in June 1984. The group is now organizing a training workshop on "Taxonomy and Techniques for Red Tide Research". This will be held in Bangkok during the course of 1985 at a date yet to be determined.

The Task Team works mainly by correspondence. Ad hoc meetings are held on an opportunistic basis, usually in conjunction with seminars or workshops. One such meeting was held in Shimizu Japan in July in conjunction with the International Plankton Symposium.

The Task Team is linked through the technical coordinator to activities underway elsewhere in the world, coordinated by the IOC. There is particular interest in linking up activities in the WESTPAC region with similar activities in the Caribbean.

Ocean Services (IGOSS) - Since the WESTPAC III meeting in Townsville last year the Task Team has been formed and a number of activities commenced or actioned which will be discussed in succeeding perspectable.

Sea Level Pilot Project
The IGOSS Sea Level Pilot Project for the Pacific has started and for the August analysis of sea level anomalies the following WESTPAC member countries contributed: Australia, Fiji, France (Polynesia), Japan, New Zealand and the USA. A number of other nations have contributed and the product from the Specialized Oceanographic Centre at the University of Hawaii is forwarded to all participants each month.

Ships of Opportunity Garry Meyers CSIRO, Matt Tomczak University of Garry Meyers CSIRO, Matt Tomczak University of Sydney, (Australia) have joined forces with Jean-Rene Donguy, ORSTOM in Noumea, to monitor changes in the heat content of the Pacific Ocean, by collecting bathythermal data on the shipping route from Sydney to Panama via New Zealand. Three XBT systems have been installed on container ships. This route is across ocean from which observations of this type are rare.

IGOSS Specialized Oceanographic Centre
Japan have advised that they have established an IGOSS Specialized Oceanographic Centre for the Pacific Ocean. This Centre, which will focus on the WESTPAC Region will:

- collect and edit the sea surface temperature, subsurface temperature and sea surface current data on a real time and operational basis,
- analyse the above data and disseminate the products by FAX broadcasts and publications,

- make non-operational data available to IGOSS Responsible Centres, and National Oceanographic Data
- d. input delayed mode BATHY messages into the

Commander H L Daw, Chairman of the IGOSS WESTPAC Task Team has been relieved by Commander Ian Bofinger, Commander Bofinger will take over as Chairman and will be located at the same

WESTPAC Cruises

On October 26, 1984, M.L. Lemasson of the Office la Recherche Scientifique et Technique Outre-Mullon (ORSTOM) notified the wish of France to declare its cruise PROLIGO for July, 1985 by R/V Jean Charcot to be within WESTPAC. The general aims of the program are :

Study of productivity mechanisms in oligotrophic tropical pelagic marine environments and assessment of their actual primary and secondary productions is the general idea of PROLIGO. It is part of the PROCAL program (Production in the economical New Caledonian area) for the study of production around islands and/or with respect to the bottom topography and for the description of functioning characteristics of those pelagic ecosystems.

Several cruises of Japanese research vessels have already been notified as contributions to WESTPAC.

Other Activities

- I. Marine Pollution Research & Monitoring A meeting of this group has been convened for April 17-19, 1985 in Townsville, Australia. The Australian Government has offered some subsidy towards the meeting. An agenda proposed for the meeting fallows: follows:
 - Assessment of pollution research monitoring capabilities within the region.

 laboratories, equipment etc

 personnel

 Recent and I. Assessment
 - Personnel
 Recent and ongoing research (especially into heavy metal pollution)
 Training and train
 - Training and/or training opportunities available within member states N.B. Participants would be expected to prepare and present country status reports for the above
 - Review of relevant decisions of WESTPAC III Review of recent research conducted by GIPME, GESAMP and UNEP Scope for interaction between WESTPAC and
 - other bodies definition of responsibilites
 - Immediate research priorities Long term objectives Requirements for support.

2. Second Workshop on Warm Core Rings - Details of the first circular are :

The first 'Warm Core Rings' workshop held in Wellington in 1982 under the auspices of the US/Australia and US/New Zealand co-operative science programmes and sponsored by DSIR (New Zealand) and CSIRO (Australia) dealt with disciplinary Zealand) and CSIRO (Australia) dealt with disciplinary and interdisciplinary problems associated with rings and their dynamics, and indicated future directions of research. A recommendation of the first workshop was that the next meeting on warm core ocean eddies be held in Japan to exchange information on Gulf Stream, East Australian Current, and Kuroshio systems.

The second workshop on warm core rings will be held of the Ocean Research Institute, University of Tokyo in May 1985. The aim of this workshop will be to review recent studies on warm core rings and make on interdisciplinary analyses of their dynamics.

Scientists working on Kuroshio rings in the western North Pacific will be invited. About 30 participants half of which are Japanese, are expected to attend.

Organization The 2nd workshop is being planned under the chairmanship (convenor) of Prof Takahisa Nemoto of the Ocean Research Institute, University of Tokyo. Dr P Wiebe of USA and Dr D Tranter of Australia are advisers. The local secretarial work will be done by Dr Takashige Sugimoto, Associate Professor of the Ocean Research Institute, University of Tokyo. These four persons constitute the alganing graps. the planning group.

Date Monday 20 to 24 May 1985 (Tentative)

Locality The 2nd workshop on warm core rings will be held
at the Ocean Research Institute, University of
Tokyo. The hotel accommodation will be arranged
in the Shinjuku area, not far from the Ocean
Research Institute.

Weather -

Middle May in Tokyo is mild and pleasant.

All correspondence relating to the workshop should be addressed to:

Dr T Sugimoto Ocean Research Institute University of Tokyo I-15-1, Minamidai, Nakano, Tokyo I64 JAPAN

Telephone:

03 (Tokyo) - 376-1251 3 (Tokyo from overseas)

J - 25607 (ORIUT) Telex:

3. Meeting of Technical Coordinators - The Australian Government has invited all WESTPAC Technical Coordinators to meet with the Chairman in Townsville at the Australian Institute of Marine Science for several days toward the end of January 1985. The purpose of the meeting is to assure coordination of activity within WESTPAC wherever possible, to review progress, consider outstanding needs and assist in the development of the Chairman's report for the meeting of the IOC Executive Council, scheduled for March 1985.

JECSS (Japan & East China Sea) Newsletter

Dr T Ichye wishes to draw attention to the above Newsletter. New Series No. 1 was issued in October 1984. Copies may be obtained by writing to Dr Ichiye at the address below:

> Dr Takashi Ichiye Texas A & M University College of Geosciences Department of Oceanography College Station TEXAS 77843 USA

MESSAGE FROM THE CHAIRMAN

IOC ASSEMBLY

As Member States will be aware the IOC Assembly will be holding its thirteenth session in Paris from 12-28 March 1985. The Assembly will be immediately preceded by the 18th Executive Council Meeting.

Documentation for the Assembly has not yet been distributed but I have no doubt that major items for discussion will include:

IOC Budget 1986/87

Regional implementation of IOC global programs

Structure and functions of regional subsidiary bodies
Major elements of the IOC program eg OSLR, Marine Pollution, OSNLR, TEMA etc

Cooperation with other bodies

In short, the discussion at and decisions of the Assembly will have both immediate and long term implications for the structure and development of the WESTPAC group.

I will be attending the Assembly meeting and endeavouring as far as possible to generate further support for WESTPAC initiatives. In this regard, and with the assistance of Task Team Co-ordinators, I have passed to the IOC Secretariat my views on the draft IOC budget for 1986/87 as it relates to WESTPAC, for incorporation into the submission for consideration by the Assembly.

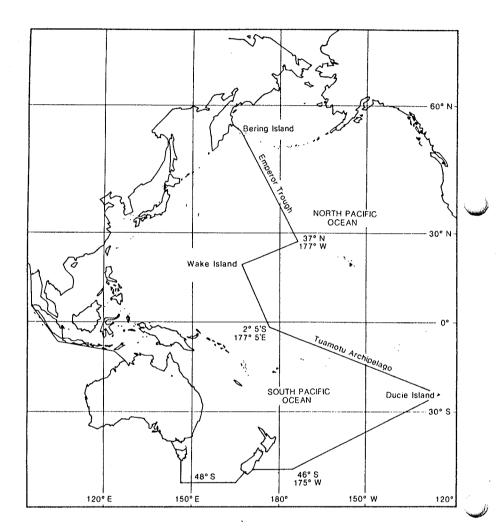
Given the importance of this session to the direction of WESTPAC, I encourage all WESTPAC National Coordinators to ensure that their delegates to the Assembly are fully briefed on WESTPAC activities and aspirations. Delegates should also be encouraged to support the proposals which will assist in program development of relevance to the region or which will direct additional resources towards WESTPAC.

In a similar vein, elections to the Executive Council will be held during the course of the assembly meeting. I am aware of two nominations to date from within WESTPAC. Professor Inocencio Ronquillo of the Philippines is seeking re-election as IOC Chairman and Mr Doug Keeley of Australia is seeking re-election to the Executive Council. I believe it is important that the views of WESTPAC members be heard in the Executive Council and, as such, encourage Member States to give serious consideration to these and other regional candidates who present themselves for election.

CONTRIBUTIONS

Those who can offer information about WESTPAC are invited and encouraged to make contributions at any time through the Chairman to the address given below:

Dr John S Bunt Chairman WESTPAC PROGRAMME GROUP Australian Institute of Marine Science PMB No 3 TOWNSVILLE MC QId 4810 AUSTRALIA



The WESTPAC region