

Report of the Seventh Meeting of the Consultative Committee for the Indian Ocean Biological Centre, held at Ernakulam (Cochin) from February 24th to March 1st, 1969.

The Seventh meeting of the Consultative Committee for the Indian Ocean Biological Centre was held from 24th February to 1st March 1969. Formal sessions concluded on the 28th February. The opening session on the forenoon of 24th February and the closing session on the afternoon of 28th February were held at the Indian Ocean Biological Centre at its new premises at Pullepady Cross Road, Ernakulam. The intervening sessions were conducted at the Grand Hotel.

The opening session on the forenoon of 24-2-1969 was attended by the Chairman and members of the Consultative Committee, the representatives of Unesco and SCOR and invited guests who included members of the Indian Advisory Board for IOBC, visiting scientists at IOBC and senior staff members of NIO at Ernakulam. This session was devoted to welcome speeches by the Committee Chairman, Professor Krey, and the Director of NIO, Dr. N.K. Panikkar. It was followed by the discussion and adoption of the Agenda for the following sessions. Presentation of reports by the Director of IOBC (Appendix 1) and by the Unesco Curator (Appendix 2) was also done at this session although detailed discussions arising out of the reports were deferred to the afternoon.

I. Welcome by the Chairman

Professor J. Krey welcomed the members and invited participants to the

seventh meeting of the Consultative Committee. He drew the attention of the members to the circulated papers, to the progress recorded by IOBC and to its changing pattern of activities. He invited the members to participate fully in the discussions during the week ahead and formulate recommendations which would help the scientific development of the IOBC.

II. Review of the Previous Year's Work

The Director of IOBC presented the Report for 1968-69 and this was followed by discussion. The points which figured in the discussion *inter alia* were: (1) Acquisition of a building site of 1.6 acres for putting up a permanent building for IOBC; (2) Full-time Chief Scientist-in-Charge for IOBC; (3) A Librarian or a Library Clerk to organize and maintain the IOBC Library on efficient lines. The present position of these were explained by the Director.

The Unesco Curator next presented report for 1968-69 and discussions followed. While some members appreciated the information contained in about fifteen appendixes, other members felt that the main report should be recast in a different form and give a running account of greater length, including details of plankton work. Accordingly a modified report was later presented by Mr. D.J. Tranter which was quite acceptable to all the members. In the course of discussions, Dr. Humphrey on behalf of SCOR laid very strong emphasis on the need to bring out a "Guide book" to the IOBC, which would give essential and introductory information to an interested outsider and mentioned the types of information that should find a place in the Guide book. He felt that the UNESCO Curator was the right person to compile the Guide book. The idea of the Guide book was endorsed by the Committee.

The Chairman called upon Dr. Ostvedt to give an account of the steps leading to the setting up of the Plankton Sorting Centre at Singapore. Dr Ostvedt

gave a brief account and also circulated the reports from the Singapore Centre. In the ensuing discussions, the relation between the CSK Centre (Co-operative Scheme for Kuroshio) for plankton-sorting only and the Regional Marine Biological Centre where it was located, was explained. The possibility that the IOBC could be developed into another Regional Marine Biological Centre after 1970 was also discussed. It was fully recognized that there was wide scope for fruitful cooperation between IOBC and the Singapore Centre by exchange of information on techniques adopted in sorting and reciprocal visits by staff-members.

The following recommendations 1, 2 and 3 were adopted :

(1) The Consultative Committee noted with satisfaction the progress reviewed in the reports for 1968-69 of the Director and Curator and recommended that they be published in full, in the IIOE Information paper.

(2) The Consultative Committee request the Curator to prepare for the Secretariat of the IOC before May 1969 a guide book to the IOBC, in consultation with the Director, in accordance with the lines given in the report discussed at the seventh meeting of the Consultative Committee.

(3) The Committee, noting the operation of the Plankton Sorting Centre for the Co-operative Study of Kuroshio (CSK) at the Regional Marine Biological Centre in Singapore established under an agreement between Unesco and the Singapore Government, recommends to Unesco that close collaboration between IOBC and the Singapore Centre concerning sorting and curatorial procedures be encouraged through exchange of information and visits of staff between the two Centres.

III. Routine Sorting and Sub-sorting of the International Collections

Discussion of this item of the Agenda opened with a brief account given by

the Unesco Curator about (1) completion of basic sorting of 1927 samples, (2) special problems posed by groups such as Copepoda and fish-larvae in regard to sub-sorting (3) the need for some of the members of the IOBC to receive specialized training abroad with Unesco travel support ; (4) the need to balance time spent by an individual on his own research projects with the time devoted by the individual to routine activities of the Centre. In the course of the discussions, the recommendation of Dr. Ahlstrom in his report on Fish eggs and Larvae of the International Collections was recalled and the desirability of preparing and publishing quickly a general account of the Fish Larvae component as a whole was emphasized. The advisability of utilizing bilateral agreement between India and USSR for the visit of specialists from the Institute of Oceanology at Moscow to help the work of the IOBC Fish Larvae team was also pointed out. It was agreed that Mr. P. Gopala Menon and Mr. V.T. Paulinose, who had accomplished very good work in subsorting the Decapod Crustacean Larvae, should be supported by Unesco with travel aid to go to Britain and France for further training at the Laboratories of Dr. Williamson and Dr. deChance. The Committee discussed at length how to meet the challenge posed by the large group Copepoda and considered whether procedures alternative to those of Dr. Fleminger could be devised to speed up the work. Prof. Krishnaswamy and Dr. J. Eric Smith were very helpful in discussing this topic and their continued efforts to find ways and means to speed up work on Copepoda was requested and embodied in a recommendation.

The following recommendations were adopted :

(4) The Committee noted with satisfaction that basic sorting of 1927 samples had been completed. The more difficult and complicated task of subsorting and specialist sorting had now become a priority. The Committee therefore re-

commends that Research Fellows participate in the sorting programme of the Centre. It further recommends that all qualified staff be given opportunities for research.

(5) (a) The Consultative Committee recommends that owing to the urgency to finish subsorting of fish eggs and larvae in a short time, two specialists from the Institute of Oceanology in Moscow be invited to come to IOBC for two to three months in 1969 to collaborate in subsorting. This could possibly be arranged under the bilateral agreement between India and USSR for exchange of specialists.

(b) The Committee recalling the report by Dr. Ahlstrom, further recommends that the team under Mr. K.J. Peter be authorised to give a general account on the distribution of fish eggs and larvae arising out of the basic and subsorting programmes and that the report be made available as soon as possible.

(6) The Consultative Committee, having considered the progress made in the basic sorting and subsorting of samples and recognising the special difficulties that arise in the subsorting of the Group Copepoda, recommends that, in order to expedite the process of subsorting of the group, Prof. Krishna-swamy be invited, in collaboration with Dr. J.E. Smith, to discuss by correspondence with Dr. Fleminger alternative methods of processing samples in order to expedite the placing of subsorted material in the hands of specialists.

(7) The Consultative Committee, noting the need for Mr. Gopala Menon to collaborate with Dr. Williamson (Port Erin) and for Mr. Paulinose to collaborate with Dr. DeChance (Paris) on working up taxa from the International Collections, recommends that UNESCO provide the necessary facilities for them to do this.

IV. Analysis of the International Collection by Taxonomists

The Unesco Curator gave a brief statement about the visit of Dr. Gruner

to examine the Amphipoda of the International Collections. Dr. Gruner's report was read out, discussed and recommended to be published in IOE Information Paper. Two visiting scientists were invited to present their reports in person. Dr. Marta Vannucci gave a review of her findings after examining the Hydromedusae of the International Collections, and Dr. Alan Be' on the Foraminifera. A number of minor groups were allocated to scientists (Recommendation 8). The need to keep in touch with the scientists who had been entrusted IOE material for study and to obtain periodical progress reports from them was then discussed and the following recommendations adopted.

(8) The Consultative Committee recommends that the Curator invite the following specialists to examine material from the International Collections :—

Cirripede Larvae	Daniel (Alternative—Wagh)
Pelagic Tunicata	Nagabhusanam (Alternative—Godeaux)
Cladocera	Della Croce (Possible Collaborators :—Tiwari, Kimor, Mor-dulay, Boltovskoy)
Tornaria	K.P. Rao
Trochophore	Thorson
Meroplanktonic Gastropoda	Pilkington
Tanaidacea	Karl Lang (Alternatives—Batescu, Kurian)
Echinoderm Post-larvae	L. Fenaux (Alternative—Tortonese).
Actinotrocha Larvae	Wilson (Alternative—Thorson)
Halobates	Hinton

(9) The Committee took note of the report on Amphipoda by Dr. Gruner

(Berlin Zoological Museum, GDR) and the reports by Dr. Allen Be' (Lamont Geological Observatory, USA) on Foraminifera and Dr. M. Vannucci (San Paulo, Brazil) on Hydromedusae, and recommends that the three reports be printed in the IIOE Information Paper.

(10) The Committee reviewed the present position regarding the material distributed on loan to institutes. It recommends that, in accordance with the Rules of Procedure, the Curator send at yearly intervals to each specialist (with a copy to the Institute) a letter requesting a progress report. Copies of progress reports would be distributed at regular intervals to the members of the Committee and to UNESCO.

V. Seminars, Lectures and Publications

Discussions on this item of the Agenda took a great length of time. The earlier considerations were about the Workshop on Plankton Methodology organized at the IOBC during the preceding week (17 to 22 February, 1969) and to appreciation of the efforts put forth by the staff of IOBC to make it a success. The advisability of organizing such meetings at intervals of two or three years because of the stimulus it affords to the workers in this field, was also recognized. The importance of choosing a topic for the Workshop to be organized in future, without infringing on the spheres of work of Universities, Fishery Institutions etc., was also underlined. "Taxonomy of Tropical Planktonic Organisms" was accepted as a possible topic for the Workshop of 1971.

The Committee was informed that Fascicle 2 of Volume I of the IIOE Plankton Atlas had been published and the Atlas project as a whole was discussed at length, the chief participants being Dr. Humphrey and Dr. Panikkar. The discussions mainly centred on increasing the usefulness of these publications and for bringing those on the same lines as the other series of Atlases. It was felt that a more comprehensive proposal might be put up to the Atlas working

group of the IOC. The status of the present issues as background material for more detailed atlases was appreciated by members who desired wide circulation of these publications.

The procedure to be adopted in bringing out future numbers of the Atlas series and how far computer plotting could be or should be utilized in the preparation of distribution maps was also discussed. The advantages of plotting distribution maps manually, irrespective of whether computer facilities are available or will become available, was also stressed by Dr. Panikkar and others.

The Committee was appreciative of the very neat get-up of the "Hand Book to the International Collections, Volume I, Station List" which was printed locally and recommended that a further volume, devoted entirely to methods used at the IOBC in treating the International Collections, should be got ready by the Curator.

The following recommendations were adopted :—

(11) The Committee recorded its approval and appreciation of the Workshop on Plankton Methods organized at the IOBC from 17 to 23 February, 1969, and complimented the Curator and the staff of the IOBC on the success of the workshop. It recommends that similar activities be organized at intervals from 2 to 3 years, and welcomes the suggestion that "Taxonomy of Tropical Planktonic Organism" be a possible topic for the next workshop, to be held in 1971.

(12) The Committee noted the important use which would be made of the first and second fascicles of volume I of the Plankton Atlas issued by IOBC and made some suggestions how these could be improved. The Committee requests the General Editor of the series to give IOC a report on the progress of work and a detailed proposal for further parts of the Atlas, including those on special categories of organisms, and involving the use of computer plotting.

(13) The Committee welcomed the publication of the "Hand Book to the International Collections" Volume I, Station List; commented on the high quality of the production of work at low cost. It recommends that a further volume be published describing methods used on the International Collections at IOBC. Relevant papers presented at the Workshop on Plankton Methods (February 1969) should be included.

VI. Research Activities in Indian Ocean of Interest to IOBC

The Curator recalled that the building up of "Reference Collections" was one of the aims with which IOBC was started and that it was now time to make a beginning. The very idea and scope of a reference collection came in for much discussion. While some of the participants thought of a "Reference Collection" of identified taxa for each station embracing all the 2000 stations, others questioned whether a reference collection at IOBC was called for, once type specimens had been deposited at the Indian Museum, which is the National Reference Centre. A middle course was agreed to as necessary and useful; it would be on the basis of reliably identified and named species occurring in the International Collections. It would be periodically revised as taxonomic expertise improved. It would expand as more and more groups from the International Collections were studied and worked up by specialists.

The Committee also discussed a proposal of Dr. Hamond (CSIRO, Australia) for identification sheets of tropical zooplankton, details of which were explained by the Curator. The scope for IOBC to collaborate in this proposal was also explored. The Committee decided to refer the proposal to Unesco for closer consideration.

The Committee adopted the following recommendations :--

(14) The Consultative Committee noting the original aim of the IOBC to

build up reference collections at the Centre, endorsed the proposal of the Curator that a start should now be made by the staff at IOBC towards this end.

(15) The Consultative Committee, recognizing the need for identification sheets of tropical zooplankton in research and teaching, commends the proposal of Dr. Hamond (CSIRO, Australia) concerning such sheets, for close consideration of Unesco.

VII. Further Development of IOBC

The future of the IOBC was informally discussed at length. The Unesco-CSIR agreement would end in December, 1970 and whether after that date, the IOBC would continue as a purely national body and a part of the NIO (India), or continue to fulfill an international role and discharge functions as a Regional Marine Biological Centre for South Asia, with Unesco support, was a matter for thought and decision. It was stressed by the Chairman that IOBC now incorporates so much scientific and specialized talent that this should be fully utilized by providing for the continuation of both its national and international activities. Dr. Panikkar referred to the forthcoming extensive programmes in the Indian Ocean envisaged by the USSR, by the Indian Ocean Fisheries Council, and by the USA agencies, particularly the Smithsonian Institution. He spoke of the scope for IOBC to play a prominent role and cooperate in these programmes, with the help of bilateral agreements or support from Unesco (or FAO) or support from both sources. The following recommendation was then formulated and adopted.

(16) The Consultative Committee noted that the basic sorting and despatch to specialists of the International Collections will be completed in 1969 and that the present Unesco-CSIR (India) agreement will end in December, 1970; recognised the commendable contribution made by the Indian Ocean Biological Centre to the International Indian Ocean Expedition; noted the need for further

training and research projects in the region; and being aware of the many national and international projects proposed for the region, the Committee recommended that before the next meeting Unesco should give active consideration to the role which the Indian Ocean Biological Centre, in its present or in an altered form, could play in the marine science activities in the region and elsewhere.

VIII. Other Matters

With the permission of the Chairman and arising out of points made by Dr. Ostvedt, Mr. Tranter, and Dr. Panikkar pointing to gaps in the system of inter-communication, the following recommendation was adopted.

(17) The Consultative Committee requests the Chairman and Secretary of the Committee and the Unesco Curator to keep each other, the Committee members

and the National Institute of Oceanography informed, by means of copies of relevant correspondence, of matters relating to the IOBC which fall within the terms of reference of the Committee. Full files of correspondence relating to International Collections will be maintained at the IOBC.

IX. Election of New Chairman

At a closed meeting of members only, Prof. J. E. Smith was elected Chairman of the Committee in succession to Prof. J. Krey.

X Concluding Remarks

The concluding session 28-2-1969 was devoted to bidding farewell to Prof. Krey, Dr. V. N. Greze, Prof. S. Krishnaswamy and Dr. M. Anraku who retired from the Committee after conclusion of their terms. Dr. Ostvedt on behalf of Unesco expressed satisfaction at the successful outcome of the meetings.

LETTER FROM THE DIRECTOR

The headquarters of the National Institute of Oceanography (of the Council of Scientific & Industrial Research) which has so far been functioning from New Delhi, is being shifted to Panaji (Goa) with effect from 15th of July 1969. The offices, Laboratories and residence of the Director are located in hired buildings pending the construction of the Laboratories and residences at a site between Cabo-Raj Niwas and Dona Paula which has been acquired for the Institute.

The new address of the NIO headquarters is :

NATIONAL INSTITUTE OF OCEANOGRAPHY (CSIR),
MIRAMAR,
PANAJI (Goa), INDIA. } Telephone No. 2 9 2 3
Grams OCEANOLOGY
PANAJI

The Planning & Data Division of the Institute (the Indian National Oceanographic Data Centre) which has been functioning at B-7, Hauz khas, New Delhi 16, will be shifting at the same time.

The Indian Ocean Biological Centre, the Physical Oceanography Division and the Biological Oceanography Division of the NIO so far functioning at Ernakulam (COCHIN) and the Liaison Office at Bombay will continue to do so, and their addresses are given below :—

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| 1. Indian Ocean Biological Centre (NIO),
Pullepady Cross Road,
Post Box No. 1913, Ernakulam,
COCHIN-18, INDIA. | } Telephone No. 3 3 3 0 6
Telegrams : OCEANOLOGY
ERNAKULAM |
| 2. Biological Oceanography Division of NIO,
Karikkamuri Cross Road, Ernakulam,
COCHIN-11, INDIA. | } Telephone No. 3 1 8 1 4
Telegrams : GEOPHYSICS
ERNAKULAM |
| 3. Physical Oceanography Division of NIO,
Karikkamuri Road, Ernakulam,
COCHIN-11, INDIA. | } Telephone No. 3 3 5 3 8
Telegrams : GEOPHYSICS
ERNAKULAM |
| 4. Bombay Office of the NIO,
169-170, B.P.T. Buildings,
Sassoon Docks, Colaba, Bombay-5. | } Telephone No. 2 1 3 5 9 7
Telegrams : OCEANOLOGY
BOMBAY |

All the activities of the Indian Programme of the International Indian Ocean Expedition have been merged with the N.I.O.

It is requested that publications intended for the National Institute of Oceanography and for the Planning & Data Division of the NIO may kindly be sent to Panaji address. These will be placed in the main Library of the Institute which is being developed at Goa. The publications intended for the branch establishments at Cochin may continue to be sent to the respective addresses in Cochin.

Visitors to the Institute may please note that the airport for Panaji is at Dabolim, about 30 kilometres away, but near the Marmugao Harbour. There are daily flights connecting Dabolim with Bombay and Cochin. The nearest Railway Station for Panaji is Margao which is 25 kilometres from Panaji by Road, on the Poona Marmugao Sector of the Western Railway