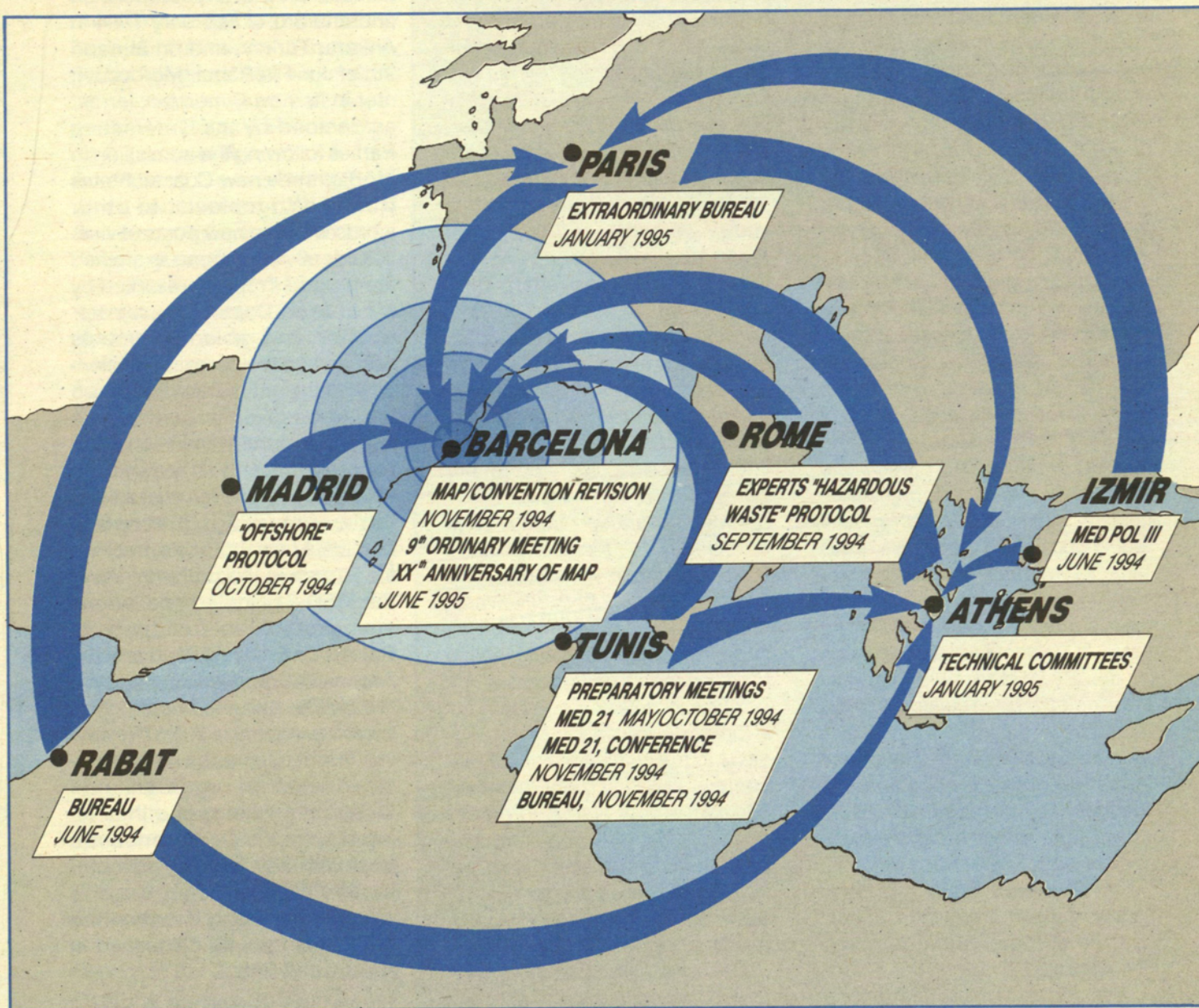




UNEP

MED WAVES

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"ALL MEDITERRANEAN ROADS LEAD TO BARCELONA JUNE 1995"

AUTUMN 1994



TO OUR READERS

The financial crisis facing the Mediterranean Action Plan and which, furthermore, we deal with in this issue, has meant that many of the activities on our programme have had to be cancelled, delayed or postponed since the Antalya meeting. It was therefore only natural that **Medwaves** should share the common lot and tighten its own belt. This edition has come out six months late, and for 1994 as a whole only two issues will be published instead of four—this one, number 30, in September/October, and number 31 in December/January. We beg our readers' indulgence in what we hope you will understand is a case of "force majeure". We owe an apology to our readers of the Arabic version in particular since the serious lack of funding which characterised the first few months of 1994 meant that we had to delay by six months publication in their language of special edition no. 29 on the results of the Antalya meeting and the dossier on Turkey. In the same edition our readers will also have noticed a drop in presentational quality due to the use of recycled paper. This had logically been called for by the Contracting Parties, since any publication like ours is duty-bound to set an example—once again financial reasons have meant sacrificing form to some degree in order to better safeguard the content. Thanks to these technical readjustments **Medwaves** should get back to its usual quarterly cruising speed in 1995.

The upside of a financial crisis is that it does at least force us to concentrate on the essential values which provide the foundations and justifications for our activities. The reshape which has been going on within MAP for almost a year has

already started to bear fruit. Light is appearing at the end of the tunnel, even though we should still be cautious in expressing our optimism. Several Mediterranean countries recently settled their financial dues which meant that some of our suspended activities could be put back on-line. The coming months will be marked by some major meetings and conferences which should see a continuation of work on the drafting of the Protocol on Hazardous Waste and the adoption of the Offshore Protocol, the start of a review of the institutional and legal framework for Mediterranean cooperation and, on Tunisia's initiative, the drawing up of an "Agenda 21 for the Mediterranean" programme, picking up on the main principles defined in Rio de Janeiro. All this intense activity, illustrated on our cover, shows how from now on "all Mediterranean roads lead to Barcelona", in other words to the Ninth meeting in June 1995. This meeting will mark both the twentieth anniversary of MAP and its "re-founding" on a solid basis, putting Mediterranean governments in a position to define and implement a form of cooperation capable of rising to the challenges of the 21st century. In this respect the nomination of a new MAP Coordinator comes at just the right moment to provide the political impetus essential to the strengthening of confidence between the programme and the Mediterranean States which strove to create it in their common interest. Future editions of **Medwaves** should logically provide confirmation of this hope by reflecting the revival of the "spirit of Barcelona".

Medwaves

Since the Eighth meeting held in Antalya in October 1993 the Bureau of the Contracting Parties has met twice under the Presidency of Mr. Riza Akcali, Turkish Minister for the Environment—on 2nd and 3rd of February 1994 in Ankara, Turkey, and on 8th and 9th of June in Rabat, Morocco. It met in its new 6 member format as decided by the Contracting Parties following the admission to MAP of three new Coastal States from ex-Yugoslavia, in other words with two new posts of vice-president. The Bureau examined the progress report presented by Mr. L. Jetic, Deputy Co-ordinator of MAP, and tabled comments with an eye to improving efficiency and co-ordination. Follow up had to be given in particular to certain important decisions and recommendations reached in Antalya—the drawing-up of a timetable of meetings planned to complete new Protocols, backing for Tunisia in the preparations of the MED 21 Conference, an examination of the draft terms of Reference for the Bureau and the Technical Committees, links with the NGOs, and the implementation of new financial rules (Revolving Fund). Since the details decided upon for organisation of technical meetings and the Plenipotentiaries Conference are dealt with later on (viz. Forthcoming MAP meetings on p. 9) at this stage we will only mention the other main points discussed in Ankara and Rabat.

The Terms of Reference of the Bureau and the Committees.

In the words of a MAP consultant, there is a "legal deficit" in the Barcelona Convention system, since the basic documents contain no official and specific defini-

THE TWO BUREAU MEETINGS IN ANKARA AND RABAT

(February and June 1994)

tion of the respective roles of the Bureau, the two Standing Committees—the Scientific and Technical Committee and the Socio-Economic Committee—and the Regional Activity Centres. It is therefore essential to define the Terms of Reference of these important bodies if MAP is to work more smoothly and steadily in the future. Back in February the draft Terms of Reference for the Bureau and the two Committees which had been prepared by the Secretariat were submitted to the Bureau during its meeting in Ankara. The Bureau's draft Terms of Reference set out its role in the periods between the Ordinary meetings of the Contracting Parties—to see to it that the decisions, recommendations and guidelines of the Ordinary meetings of the Contracting Parties are implemented, to supervise and guide the work of the Secretariat and the Regional Centres under the Parties' authority, to take decisions in cases of emergency, to make recommendations to the Contracting Parties on admission of new members, etc. As for the Technical Committees whose joint meetings serve in practice to prepare the Ordinary meetings several months before they are held, they are responsible in particular for examining the work programme and budget proposed for the next biennium and for giving their views on any adjustments required. During its Rabat meeting in June 1994 the Bureau decided to ask its members for their suggestions and comments on the draft concerning the Bureau itself. As for the Terms of Reference for the Standing Committees, it reiterated its request to the Secretariat to prepare a report on evaluation

and efficiency of the two committees for submission to the next meeting. The Bureau members were also asked to offer their comments and suggestions on this point. These decisions respect the spirit of the Eighth Ordinary meeting in Antalya which decided that "the Coordinating Unit and the Bureau should review the functioning of the Scientific and Technical Committee and the Socio-Economic Committee, and that pending their conclusions the present structure of meetings should be retained".

MAP Cooperation with NGOs.

A proposal from the Secretariat setting out the main principles and modes of cooperation with the non-governmental organisations (NGOs) was submitted to the Bureau at its two meetings in February and June 1994. The Bureau decided to think things over so that a final version could be drawn up for its November 1994 meeting on the basis of comments and suggestions made by its members. We should remember that MAP's general policy is to encourage NGOs to cooperate with it and to participate in its activities in the Mediterranean. This political will was expressed by the amendment to MAP's rules of procedure in 1989 to allow NGOs to take part as observers in the open sessions of meetings and conferences of the Contracting Parties to the Barcelona Convention. The document in the pipeline will define the criteria applied by MAP (aims and activities, statutes etc.) in granting observer status to an NGO, the admission procedure, the privileges granted to NGOs and their responsibilities in their relations with MAP. Whilst deciding to null

things over the Bureau stressed "the importance of collaboration with NGOs particularly in the light of the post Rio situation", and felt that for this reason "a selective and cautious approach" should be followed so that the details of this cooperation could be worked out in such a way as to reconcile fairness and efficiency.

The financial situation

Late 1993 and early 1994 were marked by a highly critical phase which led to a good number of activities being cancelled or postponed. This situation was partly due to the policy of financial discipline adopted at the Eighth meeting in Antalya in October 1993 given the budgetary deficit at the time of around U.S. \$ 2.5 million, and partly due to the persistence and worsening of what had given rise to the deficit and ensuing discipline in the first place i.e. the fact that many Mediterranean countries had not paid their contributions. On April 30th 1994 arrears on contributions for 1993 and previous years amounted to about 3.7 million dollars (by way of comparison we should remind you that at this moment in time an annual MAP budget is about \$ 6.3 million). In order to cover immediate requirements for staff salaries and running costs of the Coordinating Unit and the Regional Activity Centres, one million dollars has been borrowed from the UNEP reserve. The OCA/PAC has for its part granted an additional 100,000 dollars from the Environment Fund. On the same date, April 30th 1994, a total of \$ 1.7 million had been received by way of contributions for 1994, whilst unpaid pledges amounted to 2.9 million. In spite of an improve-

THE EXPERTS MEETING ON PREPARATION OF MED POL-PHASE III

WAS HELD IN IZMIR, TURKEY, FROM 20th-23rd JUNE 1994

Twenty experts and twelve representatives from UNEP and from international organisations discussed the formulation and implementation of activities which from 1996 to 2005 will mark the third phase of the MED POL Programme for pollution monitoring and research in the Mediterranean.

ment in the payment of contributions the situation is still very unstable, and the Bureau reminded the Contracting Parties of their financial obligations, a basic prerequisite for the respect of their common commitment to protect the environment. The countries making up the Bureau decided to set an example by paying their contributions as soon as possible.

A heavy schedule.

The Bureau decided to hold its next meeting in Tunis on 2nd and 3rd November 1994 so that it will coincide with the Ministerial Conference on MED 21. However, it also felt that an Extraordinary meeting should be convened in early 1995 during which all the questions linked with preparation of the Ninth Ordinary meeting of the Contracting Parties in Barcelona (June 1995) could be examined. On this point the Vice-President from France indicated that his country was ready to host and finance this meeting in Paris on 5th and 6th January 1995. His offer was accepted. Since by then the important technical meetings on the two new protocols, the conference which should see adoption of the Offshore Protocol, the Ministerial Conference on the Agenda 21 programme for the Mediterranean and the experts' meeting on the review of MAP, the Convention and its protocols will have been held, the Bureau will have at its fingertips all the elements it requires to take stock of the situation and to decide on the final practical arrangements concerning the organisation and holding of the crucial Barcelona meeting.

Some two hundred scientific teams from around one hundred Mediterranean institutes having participated in monitoring networks and research projects, the setting-up of national monitoring programmes in most Mediterranean countries, an intensive programme on training and technical assistance to laboratories, regular exercises in data quality control: for nineteen years the MED POL programme has been the cornerstone of Mediterranean cooperation in the environmental field. In operation since 1975, the same year in which the Mediterranean Action Plan was launched, at the outset during Phase I it represented the "assessment" aspect of MAP based on seven pilot projects. In 1981 the Mediterranean countries decided to launch Phase II for the following decade, with three closely linked facets i.e. sustained monitoring, research and activities implementing the land-based sources Protocol. In 1991, the Seventh meeting of the Contracting Parties in Cairo decided to extend Phase II until the end of 1995 so that the programme could be completed and Phase III for the decade covering 1996-2005 could be drawn up. Several meetings and technical consultations were held both in and outside of MAP to study future problems in the fields of pollution monitoring, research, and processing and interpretation of data collected. At the end of 1992 at the request of the Bureau of the Contracting Parties, five consultants carried out an in-depth assessment of MED-POL which was submitted to the Eighth meeting in Antalya in October 1993. This meeting adopted certain basic principles and objectives for the preparation of Phase III "taking into account that MED POL as the scientific and tech-

nical component of MAP, provides the scientific basis for decision making related to marine pollution in the region in the process of achieving sustainable development". The Izmir meeting, held June 20th-23rd 1994, had before it a draft programme document for revision. The revised draft will be submitted for approval at the joint meeting of the Scientific and Technical Committee and the Socio-Economic Committee January 16th-20th 1995, before being forwarded for final approval to the Ninth meeting of the Contracting Parties in Barcelona, June 1995. It was the Deputy Coordinator of MAP, Mr. L. Jeftic, who introduced participants in the Izmir meeting to the draft document which is built up along three main lines-assessment of pollution-related problems, pollution control and support measures. Recognising that achieving sustainable development is MAP's ultimate goal, the meeting stressed the following three points-MED-POL should deal with pollution from all sources; the term control of pollution should be interpreted as including also elimination of pollution; measures for the restoration of systems already damaged by pollution should be seen as a high priority. In the corridors of-or as an addition to-the meeting, participants were invited to air their views and suggestions on the revision of the Barcelona Convention, its Protocols, and of MAP. Given the importance of the subject dealt with in Izmir to the future of pollution control in the Mediterranean we asked the Deputy Coordinator of MAP, Mr. L. Jeftic, to present in the interview which follows the general outline of Phase III and the philosophy on which MED POL will be based over the coming decade.

L. JEFTIC, Deputy coordinator for MAP:

“MED POL PHASE III WILL EMPHASISE THE DEVELOPMENT OF POLLUTION CONTROL MEASURES AND CHECKS ON COMPLIANCE.....”

Medwaves. In the current draft of the MED POL-Phase III programme, as amended by the Izmir meeting, can we consider that there will be significant changes in comparison with Phases I and II? What would these changes involve?

L. Jeftic. At the risk of repeating things that Medwaves readers already know, allow me to start by setting the introduction of Phase III in its historical perspective since it obviously rounds off a lengthy period of evolution. With the adoption, in 1976, of the Barcelona Convention by the Mediterranean governments, and the subsequent adoption of the Protocols to this Convention, the objectives and methodologies of the MED POL programme were gradually modified in order to respond to the expanding goals set by these governments. To sum it up briefly: MED POL-Phase I, 1975-1981 focused on strengthening national capabilities in order to enable all countries to participate in the programme and on the development of the methodologies needed to implement it. Phase II, 1981-1995, had a more general and broader objective to assess, through monitoring and research, the pollution of the Mediterranean Sea, and to develop common measures for pollution control. By the end of 1993 thirteen such common measures for the control of land-based sources of pollution had been adopted by the Contracting Parties.

Medwaves. Basically then, the “assessment” element prevailed until this point?

L. Jeftic. I wouldn't put it that way. A scientific assessment of problems related to pollution of the Mediterranean region is only the first step towards actions to prevent, mitigate and control pollution and its effects. Therefore, the substantive focus of Phase II was gradually shifted from the assessment of pollution-related problems to the development of proposals for concrete pollution control measures.

Medwaves. Which brings us to Phase III....

L. Jeftic. At the beginning you asked me where Phase III would differ from

the previous ones. My answer would be that, rather than introducing any radical changes, it is going to consolidate the evolution I mentioned just now. In other words, taking into account the data and information obtained over the two previous phases of MED POL, and relying on a permanent system for keeping present assessment up to date, Phase III-planned to run from 1996-2005-will further emphasise the development of proposals for pollution control measures and checks on compliance by the countries with the measures they have adopted.

Medwaves. “Checking of compliance”, that's a new idea in MED POL, isn't it?

L. Jeftic. Actually it implicitly underpinned the whole programme! What's the point of drawing up legal provisions in the Convention and its Protocols (particularly the Land-Based Sources and Dumping ones), and adopting decisions and recommendations during our biannual intergovernmental meetings if they're not going to be complied with? Compliance is obviously the key to the successful protection of the environment in the Mediterranean Sea.

Medwaves. The MED POL evaluation report presented at the Antalya intergovernmental meeting identified several major shortcomings in the programme: unequal geographical coverage, lack of cooperation between the participating institutes-particularly between those in developed and those in developing countries-, negligence of National Coordinators towards MED POL, etc. Will phase III remedy these shortcomings?

L. Jeftic. The Secretariat fully intends it to! It is sparing no effort or financial support to improve participation by the southern countries, but unfortunately until now success has been rather limited, even though we can see a major improvement in the institutional capacities of some of these countries. Cooperation between institutions from developed and developing countries is

only symbolic and this is another area where considerable improvement is called for. It is very regrettable that in a number of Contracting Parties, National Coordinators for MED POL are not fulfilling their role which is to disseminate information on MED POL and to initiate and coordinate activities by the various relevant ministries and national research centres. The Secretariat has proposed certain activities in order to remedy the situation.

Medwaves. For known financial reasons, the MED POL budget has been severely cut back over past years. Under these conditions how can we make sure that the programme remains effective?

L. Jeftic. Allow me to start with a general comment: the development of suitable measures for the prevention, mitigation and control of pollution from all sources and continuous monitoring of the effectiveness of their implementation are the central goals of the new phase of MED POL. All other activities are subsidiary to these goals and contribute to their more efficient achievement. By concentrating on these goals, Phase III is expected to provide critically important inputs into all other components of MAP, notably in the CAMPs (Coastal Areas Management Programmes), and thus make a significant contribution to the sustainable development of the Mediterranean region. Bearing these considerations in mind, we can expect, over and above our own resources, additional financial support for Phase III from new forms of financing-World Bank, European Investment Bank, European Union, UNDP, Global Environment Facility, bilateral aid programmes and others. A dynamic, coherently conceived programme will obviously attract this kind of support. On this point-as a sort of conclusion to this brief overview-I should stress that the data quality assurance programme will of course still be an essential part of MED POL because if good measures are to be introduced it is better to rely on a limited amount of reliable data than on a vast amount of data which has not been validated by strict scientific procedures.

PREPARATION FOR THE *MED 21* CONFERENCE NEXT NOVEMBER



The first meeting of the preparatory committee was held in Tunis

16th-20th May 1994

The idea of an "Agenda 21 for the Mediterranean" came into being in the wake of the June 1992 Rio Conference, and just one month later prompted the Aspen Institute Italia to organise a mini conference cruise from Genoa to Corsica, bringing together important Mediterranean decision-makers (including six Ministers for the Environment, viz. Medwaves no. 26). Within MAP the idea also gained ground and gave rise to an informal meeting held in Malta from 11th to 13th February 1993 (Medwaves no. 27). Tunisia took the initiative in relaunching the idea during the Eighth meeting of the Contracting Parties in Antalya, the following October. On the basis of a proposal made by that country, the Mediterranean delegates decided to entrust to it the organisation of a Mediterranean Conference on Sustainable Development to be held in November 1994. It was decided that in the interests of the best possible preparation two preparatory experts' meetings would be held in May and October 1994. The first meeting was held in Tunis from 16th to 20th May 1994, at the invitation of the Tunisian Minister of the Environment and of Land Planning. Experts were sent by sixteen Mediterranean countries including Bosnia-Herzegovina, Croatia and Slovenia, new members of MAP, and also a point worthy of note since it will go down in the Medi-

terranean environment annals-Israel and Palestine. Experts from the Coordinating Unit and the Directors of MAP's Regional Activity Centres as well as observers representing twelve United Nations specialised agencies and non-governmental organisations were also present in Tunis.

A Mediterranean Commission for Sustainable Development?

Once the Tunisian representative, Mr. Mohammed Ennabli had given the general background to the meeting and the Deputy Coordinator of MAP Mr. L. Jetic had stressed the great importance which MAP/UNEP attached to this Tunisian initiative which the Mediterranean Countries meeting in Antalya had decided to back, the Tunisian Minister of the Environment, Mr. Mohammed Mehdi Mlikan made his opening speech. He immediately set a clear aim for the November conference when he mentioned a project to set up a "Mediterranean Commission for Sustainable Development" "which, for greater efficiency, would be integrated within MAP and would fall under the authority of the Contracting Parties to the Barcelona Convention". He went on to specify that "in an effort to avoid the mushrooming of experts' and advisory groups, although their contributions always represent an additional rich source, it would be a good idea for this committee to take over from the Scientific and Technical and Socio-Economic Committees already existing within MAP, even if this means increasing the representation of our respective countries within the Commission". The ensuing general discussion dealt with the status of the four documents submitted to the meeting. Consensus was reached on the following points: 1) the draft "Tunis

Declaration" will be submitted to the November Ministerial Conference for approval; 2) the draft "Agenda 21 for the Mediterranean" is a reference document and source of ideas which will serve as a platform and guide to facilitate future activity; the Ministerial Conference will be informed; 3) the document "Legal Arrangements" will be an information document for the Conference since only the Mediterranean States which are Contracting Parties to the Barcelona Convention are empowered to revise it according to the established procedures; 4) finally, the document "Institutional Arrangements" is a working document aiming at preparing the Conference's decisions on whether or not to set up a Mediterranean Commission for Sustainable Development (MCSD) within MAP. The meeting then split its work between two discussion groups, one on "Agenda 21" chaired by Mr. Van Klaveren (Monaco) and the other on the Tunis Declaration, and the legal and institutional arrangements, chaired by Mr. J. Ros (Spain).

The Agenda MED 21 draft

Group I carried out a chapter by chapter examination of the document on "Agenda MED 21", making various amendments, comments and proposals. The drafting group will include these in a revised text which will be sent to all Mediterranean countries and the specialised agencies for their comments before August 15th 1994. These comments will then be reflected in the final version which will go to the second preparatory meeting in October 1994. The document submitted in Tunis is a "Mediterranean version" of "Agenda 21" adopted in Rio. It therefore repeats the line developed in "Agenda 21", taking into

account the specific context in the Mediterranean region, and reflecting the level of commitment already reached by the States either individually or collectively in the framework of intra-Mediterranean cooperation (Genoa Declaration, the Nicosia Charter, the Cairo Declaration, the Algiers Conference on water etc.) Given that certain important Mediterranean problems were not explicitly dealt with in the Agenda MED 21 draft, the majority of participants agreed that the following questions should be prepared and added to the amended version of the document—tourism and related activities, maritime transport, energy, fishing and aquaculture.

The draft Tunis Declaration

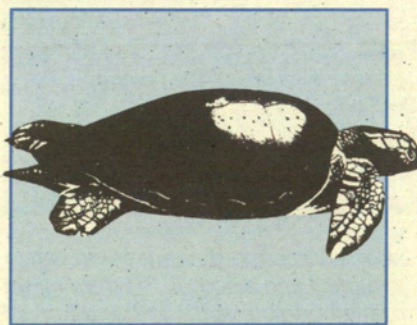
Following an in-depth discussion of both the form and the content of the Declaration, the second group made certain changes and additions to the paper before it. The amended text will be re-read at the second preparatory meeting in October before then going for approval to the Ministerial Conference. In its present provisional version the Tunis Declaration reaffirms the commitments made in Rio, and the political will to respect them in striving to achieve sustainable development in the Mediterranean. The meeting also approved a draft resolution on the setting-up of a Mediterranean Commission for sustainable development, and inviting the Ninth meeting of the Contracting Parties to decide on this in Barcelona in June 1995. All the delegates and the Tunisian authorities stressed that the easing of political tensions in the Eastern Mediterranean prompted a thorough review of environmental questions encouraging closer cooperation between the coastal states.

Training session on the management of protected areas in the Mediterranean region

(Tunis, 27th June-2nd July 1994)

Seen as the source of biological diversity, the specially protected areas can only play this role effectively if they are managed according to rules and methods which will, on the one hand, allow rational development of their potential while, on the other hand, guaranteeing the sustainable conservation of the ecosystems to be protected.

Around twelve years ago, the Mediterranean countries adopted the "Protocol on Mediterranean Specially Protected Areas" and there are at present some 130 protected marine and coastal areas around the basin. Unfortunately, in certain countries the efforts to create protected areas have not been accompanied by the steps required for the introduction of management plans.



Particularly in the southern countries, this loophole is due to a lack of financial and human resources. At the end of last June the Tunis based Regional Activities Centre for the Specially Protected Areas (RAC/SPA) organised a "training session on the management of protected areas in the Mediterranean region" as part of its activities to support countries in promoting protected areas. Several subjects were covered, concern-

ing in particular the methodologies for drawing-up and implementing management plans for the marine and coastal parts of a protected area. Particular attention was paid to use by the public and involvement of the local population in the management of protected areas.

This session was backed by the Ministry of the Environment and of Land Planning (Tunisia), the Miramare Marine Reserve (Italy), the "Tour de Valat" biological station and the Port-Cros national park (France). It was attended by fourteen heads of protected areas from French-speaking countries. A second session is planned for English-speakers.

First meeting of the Task Team on the implications of climatic change for the Albanian coast

(Tirana, 12th-14th July 1994).

This first meeting of the Albanian team on climatic change was part of the so-called "third generation" of case studies launched in 1993 within the framework of the Coastal Areas Management Programme, one of which projects actually concerns the Albanian coast. Two studies on climatic scenarios are at present in the pipeline—one on the Albanian coastline and one on the coastal region of Fuka-Matrouh in Egypt. The Albanian study, coordinated by Mrs E. Demiraj, is in its preparatory stages. The Deputy Coordinator of MAP, Mr. L. Jetic, carried out a detailed examination of the aims, hypotheses and expected results of the study according to a proposal from the Athens Unit. At the meeting it was decided which sections of the study would be allotted to each member of the Task Team, and a timetable was attached.

Mr. Lucien Chabason,
the new Coordinator of MAP,
took up office on August 1st.



Mrs. Elizabeth Dowdeswell, Executive Director of UNEP, announced on 26th May 1994 the appointment of Mr. Lucien Chabason, a French national, as new Coordinator for the Mediterranean Action Plan. Mr. Chabason took up office in the Athens Unit on August 1st. He is taking over in this post from Mr. Salvinio Busutil (November 1991-August 1993) and Mr. Aldo Manos who held it for eleven years (1980-1991) and left his mark on the development of Mediterranean cooperation.

From 1993 Mr. Chabason was Deputy Director for Water in the French Ministry of the Environment, with responsibility for international and scientific affairs in the field of water management. Over the same period he also carried out several special assignments such as reforming the organisation of protected areas in his country, and French policies in the field of GATT-environment relations.

During his career the new Coordinator

of MAP has served in a series of high level posts in his country's civil service-in 1984 he was head of the Scientific Research Service in the Ministry of the Environment, having served for 6 years as Director for Land Planning in the Ministry of Public Works. From 1988 until early 1992 he was Director of Cabinet and then Advisor to Mr. Brice Lalonde, one of the pioneers of the French ecology movement who then became Minister of the Environment.

His appointment at the head of MAP comes at a time when the Plan is moving into a critical relaunch phase, one of institutional and legal restructuring, as becomes clear from the future activities and meetings announced in this issue. His long-standing experience in the French Environment Service, and his involvement in international relations (he represented France at UNEP's Governing Council and took part in meetings organised under the auspices of UNESCO and the OECD in particular) should provide MAP with a new impetus in the spirit of the Antalya decisions by giving "greater emphasis to concrete and operational activities, leading to early tangible results...." and by implementing "a stringent management system. A graduate of the Institute of Political Studies, the Faculty of Law and the National School of Public Administration (breeding-ground of Senior Officials of the French State), Mr. Chabason is 53 and is married with two children.

Medwaves

Mr. Louis Saliba, WHO expert at the Coordinating Unit, retired 31st May 1994.

Mr. Louis Saliba, WHO Senior Scientist working in the MAP Coordinating Unit, retired on May 31st. The Maltese scientist who graduated in biology from the universities of Malta and London, was appointed to the Coordinating Unit in January 1982. He was responsible for the implementation of the programme's WHO facet and answered to the WHO's Regional Bureau for Europe. In this capacity he organised and supervised all the health-related aspects of the programme, such as the periodic assessments of pollution of the Mediterranean by pathogenic micro-organisms, carcinogenic, mutagenic, and teratogenic

substances, the guidelines on waste treatment and disposal, the drawing up of methodologies for microbiological determination etc. From 1979 to 1981 he served as Rapporteur for the Bureau of the Contracting Parties to the Barcelona Convention. A lively, energetic man with a biting wit, all those who worked alongside him in MAP's meetings and daily activities will remember him as someone combining scientific rigour with human warmth. They wish him the only sort of retirement he is likely to be hoping for - a studious one packed with new activities to support the Mediterranean and its environment. Mr. George Kamizoulis, Director of the Department for Environmental Hygiene in the Greek Ministry of Health took over from him on August 1st

Convening in Rome (September 1994) of the second technical and legal meeting on the "Hazardous Waste" Protocol and in Madrid (October 1994) of the 4th meeting of the Experts group and of the Conference of Plenipotentiaries for the adoption of the "Offshore" Protocol.

Begun at the Sixth Ordinary Meeting in Athens (1989), confirmed and relaunching by decisions taken at the Cairo (1991) and Antalya (1993) meetings, the drawing-up process for the Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Waste and its Disposal (Hazardous Waste Protocol) and for the Protocol on the Protection against Pollution resulting from Exploration and Exploitation of the Continental Shelf, the Sea Bed and its Sub-soil (Offshore Protocol) will be moving into its final phase. This should result in immediate adoption of the latter in Madrid in October 1994, and of the former sometime in 1995. That being so, the Mediterranean States and the European Union will go into their Ninth meeting in Barcelona with a legal battery supplemented by these two new and important instruments.

The "Hazardous Waste" Protocol-second technical and legal experts' group, Rome, (September 1994)

Over the last two decades the question of the transboundary movement of hazardous waste has become a pressing one around the globe due to the export of waste produced by developed countries towards developing countries. This bartering of "waste for hard currency" has been illustrated by certain distressing events which have become an international talking point. You will remember in particular the affair with

FORTHCOMING MAP MEETINGS

the Zanoobia cargo in 1988, the ins and outs of which went on for 17 months-in Venezuela the Syrian vessel took onboard 12,000 toxic barrels of Italian origin which had already been refused in the Mediterranean, and returned in vain to the region where Syria, Turkey and Greece refused entry to their ports, before it finally unloaded its cargo in Genoa where it was disposed of. Meeting in Basel, in March 1989, 115 countries answered UNEP's call and adopted the Final Act of the Convention on the control of transboundary movement of hazardous waste and its disposal-or the so-called Basel Convention. They included 17 Mediterranean countries-6 of them immediately signed the Convention, the African ones doing so following a meeting of the OAU and also committing themselves through the Bamako Convention of 1991. The particularly exposed position of the Mediterranean-at the crossroads of trade from three continents-prompted the leaders of several Mediterranean countries and of MAP to think about strengthening the legal framework of the Barcelona Convention in this area by drawing up a document more closely adapted to the region. On certain points this text would strengthen and clarify the Basel commitments. A draft legal instrument drawn up by Greenpeace and reviewed by the UNEP Secretariat was submitted to the Seventh Ordinary Meeting in Cairo, in October 1991. The meeting invited UNEP to convene a legal and technical experts' meeting to examine a provisional text for a Protocol. This text, drafted by the MAP Secretariat with the help of the UNEP Secretariat from the Basel Convention, was reviewed during the first meeting of the experts' group in Cervia, Italy, from 23rd to 25th April 1993. Whilst "actively supporting the total prohibition of the export and transfer of hazardous waste to developing countries" in one of its recommendations, the Eighth meeting in Antalya in October 1993 decided-with the reservation of one country-to push ahead with the drafting process by convening a second experts' meeting. This will be held in

Rome from 20th to 24th September 1994. If negotiations take a positive turn and allow the remaining contentious points to be settled a Conference of the Plenipotentiaries will be convened in 1995 with a view to adopting the Protocol.

**The "Offshore" Protocol
fourth experts' meeting, Madrid,
(11th-12th October 1994),
to be immediately followed
by the Plenipotentiaries
Conference, also in Madrid,
(October 13th-14th)**

The drafting of the "Offshore" Protocol has proved particularly hard-going. Three experts' meetings have already been held due to the reservations expressed by certain countries on several of its provisions for which a final wording has still not been found. The Antalya meeting in October 1993 decided to convene a Conference of the Plenipotentiaries in 1994, to be immediately preceded by a fourth meeting of the technical and legal experts' group so that the remaining unresolved points could be settled. Consequently, following consultation with Spain the Bureau set the dates of 11th-12th October and 13th-14th October 1994 for the holding of the technical meeting and the successive diplomatic conference in Madrid. A MAP/UNEP technical mission went to Madrid from 19th-23rd April 1994 to run through the details of the two meetings, including a draft host country agreement to be signed between MAP/UNEP and Spain. The idea is that following adoption of the Final Act of the Conference, including the minutes of discussions, the resolutions adopted and the final text of the Protocol, the latter will be open for signature with Spain (the Depository State).

**The first meeting of legal and
technical experts, to
revise/amend the
Mediterranean Action Plan
(MAP), the Barcelona
Convention and its four
relevant Protocols-Barcelona,
(14th-18th November 1994)**

The idea of revising the legal framework of the Barcelona Convention and of MAP was raised following the Rio Conference. It basically aims at updating the framework by including certain principles-such as sustainable development, precautionary approach, biodiversity, "the polluter pays" etc.-which had not been explicitly coined when the Barcelona Convention was adopted in 1976. In October 1993, the Eighth meeting in Antalya agreed that "the Secretariat would organise a meeting of national experts to examine amendments to the Dumping Protocol and the possibility of adapting the texts of the Barcelona Convention and its related Protocols to the latest developments in international environmental law". In other words, the Mediterranean partners will enter into broad-ranging discussions to examine-and possibly redefine-the legal and institutional basis of their cooperation. In view of current activities in this field the Bureau decided in its last meeting in Rabat in June 1994 that for a better strategy:

a) a revision of MAP, the Convention and its related protocols must await the recommendations of the above-mentioned experts' meeting on the revision of MAP legal instruments, the Tunis meeting on Agenda 21 on 1st November 1994 and the Izmir meeting on MED POL Phase III on 20th-23rd June. The participants at this last meeting tabled a variety of suggestions on the matter.

b) the Secretariat should ask the Contracting Parties for their comments and suggestions on this issue.

Finally, the Extraordinary Bureau Meeting in Paris, on 5th and 6th January 1995 should provide the opportunity to take stock of all these discussions so that the practical details for the Ninth meeting in Barcelona in June 1995 can be organised. Thus the next few months are going to see the setting-up in the Mediterranean of a "think tank" fed by various interlinking sources.

MAP PUBLICATIONS

MAP Technical Reports Series

MED POL UNEP/FAO Report: Final reports on research projects dealing with eutrophication problems.

This volume contains the results of seven research projects: Long term eutrophication in the Northern Adriatic: scientific evidence and control; study of the phytoplankton populations in a bay in the Gulf of Genoa in relation to the eutrophication features of its waters; study of plankton populations in relation to the eutrophication state of the water in an area of the Ligurian Sea; eutrophication processes in the Krka estuary (Adriatic); impact of eutrophication on sea urchin populations in the Gulf of Amvrakia (Ionian Sea, Greece); effects of phytoplankton bloom consequences on benthic organisms; and the mechanisms of initiation and persistence of a "red tide" in some polluted areas.

(MAP Technical Reports Series, no. 78, 153 pages, English only).

MED POL-UNEP/FAO Report: Final reports on research projects dealing with toxicity of pol- lutants on marine organisms.

This volume contains five reports in English (effects of organophosphorous and carbamate pesticides on mussel esterases; study of osmoregulation mechanisms in marine invertebrates under polluted conditions; effects of Cd, Hg and Zn on the metabolism of the gastropod *Nassarius gibbolosa*; in situ toxicity of dispersants; bioaccumulation studies and physiological and biochemical responses in marine organisms exposed to heavy metals and polychlorinated biphenyls) and two reports in French (effects of selenium on marine algae; study on the bioaccumulation, persistence and toxicity of uranium and plutonium on Mediterranean marine organisms eaten by man);

(MAP Technical Reports series no.79, 135 pages, in English and French).

MED POL UNEP/FAO Report: Final reports on research projects dealing with the effects of pollutants on marine organisms and communities: ecological and evolutionary implications of hydro-medusae life cycles; identification of biological indicators of heavy metals at the site of a smelting factory; effects of sewage on the distribution of benthic fauna in the Saronic gulf (Greece); evaluation of the influence of suspended matter due to civil and industrial discharge on benthic rocky communities; the influence of pollution on the physiology of certain zooplanktonic and benthic organisms from the Saronic gulf.

(MAP Technical Reports series no. 80, 123 pages, English only).

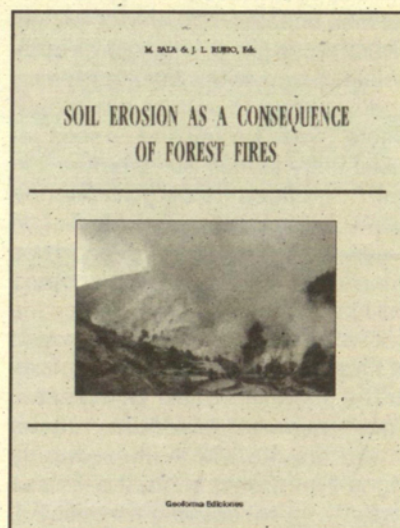
MED POL-UNEP/IAEA Report: Data quality review for MED POL: Nineteen Years of Progress.

For all those interested in MED POL, this volume is a must as it deals with "data quality assurance", a sensitive area which is the most decisive in the programme. Its authors are Laurence D. Mee, Milena Horvat and J.P. Villeneuve, three scientists from the MESL in Monaco, the laboratory which for many years now under the aegis of the IAEA, has been responsible for developing a comprehensive and interactive strategy for enhancing the capacity of Mediterranean laboratories participating in MED POL by organising Quality Assurance activities-such as intercomparison exercises-and for providing instrument maintenance and training. Following a brief introduction sketching out the conceptual framework and implementation of Mediterranean Quality Assurance the authors then examine the quality of data collected over 19 years by MED POL on trace metals and trace organic contaminants. They point out the shortcomings which are still a cause for concern. This report includes tables and figures on laboratory participation and evaluation of their results. Annexed to it is a list of laboratories participating in the intercomparison exercises.

(MAP Technical Reports Series no. 81, 79 pages, English only).

BOOKS - REVIEWS

Soil erosion and degradation as a consequence of forest fires.



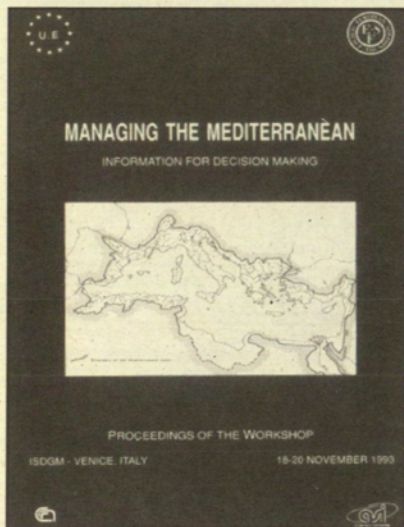
Under the guidance of M. Sala and Mr. J.L. Rubio this book reproduces the papers presented at a conference of the same title organised in September 1991 in Barcelona and Valencia, Spain, by the European Society for Soil Conservation (ESSC). Fires, like erosion, are just another element of the natural evolution of Mediterranean ecosystems. The problem lies in the way in which the balance is upset by a major increase in uncontrolled forest fires.

That is why it is becoming increasingly necessary for us to fully understand the environmental effects of fires so that we can correctly use and control them and thus avoid accelerated desertification.

**(275 pages, in English only.
Geoforma Ediciones, Apartado
de Correos 1293, 26080 Logrono,
Espana, 1994)**

Managing the Mediterranean - Information for decision making.

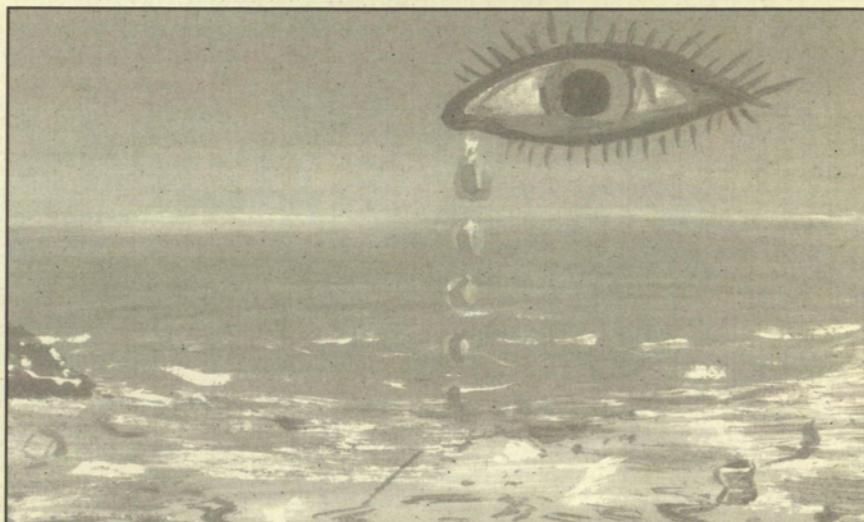
This volume contains the proceedings from the ESF (European Science Foundation)-CEC (Commission of the European Communities) Workshop held in Venice from 18th to 23rd November 1993. Fifty experts from various countries participated, including a number of Directors of Mediterranean Institutes.



Although a whole host of activities and programmes exist in the Mediterranean, they are badly coordinated amongst themselves. This causes unfortunate delays in potential technical and scientific progress and in the provision of useful and reliable information to decision-makers when required. The Venice Workshop aimed at assessing the possibility for concerted action by the existing national and international sources of scientific and socio-economic information based on agreed standards for data bases and methodologies. MAP was represented at the Workshop by Mr. Batisse, President of the Blue Plan ("The Observatory Role of the Blue Plan"). Mr. Grenon, Director of the Mediterranean Energy Observatory and scientific advisor to the Blue Plan ("Reflections on Energy in the Mediterranean") as well as A. Manos, former Coordinator of MAP ("Information for Decision-Makers. How to help the Users") also took part.

(192 pages, all papers in English apart from one in French. CNR-ISDGM, San Polo 1364, 30125, Venezia, Italia, 1994).

MOROCCAN CHILDREN AND WORLD ENVIRONMENT DAY



As part of the activities organised for the celebration of World Environment Day last June the Under-Secretary of State to the Moroccan Minister for the Interior responsible for the Environment organised a national drawing competition for children in all the Kingdom's Atlantic and Mediterranean regions and provinces. The theme chosen for the competition which was open to children from 9 to 14 was "clean beaches". Prizes went to the

five best drawings from each province, which were then shown in an exhibition at the start of the national clean beach operation. It was difficult for us to choose between the drawings sent to us by the Moroccan authorities as they were all so close in terms of sensitivity, imagination and colour sense. The one we reproduce here unfortunately gives but a pale reflection because of the monochromatic nature of Medwaves...

CALENDAR	
Second meeting of experts for the preparation of a draft protocol on Hazardous waste <i>20-24 September 1994</i>	Rome Italy
Experts meeting on Offshore Protocol <i>11-12 October 1994</i>	Madrid Spain
Second Preparatory meeting of Mediterranean experts on Agenda 21 for the Mediterranean <i>29-30 October 1994</i>	Tunis Tunisia
Ministerial Conference on "Mediterranean 21" <i>1st November 1994</i>	Tunis Tunisia
Meeting of the Bureau <i>2-3 November 1994</i>	Tunis Tunisia
Experts meeting for the revision of the Barcelona Convention, its related Protocols and MAP <i>14-18 November 1994</i>	Barcelona Spain

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PRINTED ON RECYCLED PAPER

JELLY-FISH PLAY IT BY THE SCIENTISTS' BOOK IN THE MEDITERRANEAN!

The reappearance of jellyfish blooms around the Mediterranean Basin since the start of the summer provides the opportunity to remind ourselves of some of the results of the MED POL jellyfish project-periodicity (which seems thus to be confirmed) of around twelve years, few, if any, links with pollution, the importance of hydroclimatic factors, virtually no health risk, but serious repercussions on tourism and fishing.

In a MAP Technical report published in 1991 which included the main conclusions drawn by the research teams working between 1985 and 1987 on a MED POL project on summer jellyfish blooms observed over several consecutive years (1), one of the papers mentions a periodicity of twelve years established according to data from the archives of the most reliable past 111 years. Another researcher noted that if a dry period continued beyond 1991, the blooms could reappear two to three years later. Starting in June-July of this year, 1994, there were again reports of blooms in many parts of the Mediterranean comparable to the ones seen between 1980 and 1983, particularly of the *Pelagia noctiluca* species: These reports came from both research centres and the media (the local press in particular because of their effects on tourism). The first point to be noted then is that the jellyfish have indeed respected the timing forecast by the scientists. According to the observations of three researchers (2), "the chronology of *Pelagia* occurrences, established over two centuries, immediately showed an agglomeration of "jellyfish years" and "jellyfish free years" since the beginning of the 1775 series. The jellyfish periods are not exceptional, they can last up to seven years and account for more than 40% of a century..... This abundance of *Pelagia noctiluca*, noted by past writers who describe them as

1) Jellyfish Blooms in the Mediterranean, Proceedings of the Second Workshop on Jellyfish in the Mediterranean Sea (Trieste, 2-5 September 1987) MAP Technical Reports series no. 47. Athens, 1991

(2) J. Goy, P. Morand and S. Dallot, see report p. 112

(3) F. Boero, see report p. 72

swarming "around the boat in their millions" or as "jellyfish soup" is therefore not due to increased pollution in the Mediterranean; its reasons should rather be sought in the cyclical modifications of its marine environment....".

This lack of correlation with pollution is confirmed by most researchers, at least in terms of the cause of the phenomenon. Some researchers claim, however, that certain conditions of pollution (availability of nutrients and eutrophication) could cause increased bloom persistence. In general terms, jellyfish swarms were not noted in highly polluted areas such as the deltas of large rivers (for example the Po's outlet in the Adriatic). It would even seem that their presence is linked to relatively clean water, the swarms spotted near the coast and on the beaches corresponding rather to a "passive export" of dying jellyfish by currents and displacement of water masses, whilst active aggregations tend to occur in offshore waters.

As for the real causes, the various hypotheses are still being widely debated, and involve a whole series of factors the interplay of which, it is fair to assume, governs the periodic reappearance of the blooms-hydroclimatic changes (particularly a rise in mean and minimum winter temperatures), major displacement of water masses, changes in the predator/competitor ratio of the species of jellyfish concerned leading to a drop in the factors limiting population density etc. But before any more reliable conclusions can be drawn, long time-series of hydrological data will have to be added to the existing climatic data (such as that from Genoa) and compared with the evolution series for population density. Another interesting hypothesis, the "circannual clock", is summed up in the following way by an Italian researcher (3): "a possible answer to the general problem of blooms can be derived from all the observations concerning annual and pluri-annual cycles and from the discovery that many animals and especially cnidarians possess internal circannual clocks, anticipating more or less regular changes of physical factors..... Thus, it is possible that in a given year a certain species is better "tuned" to seasonal changes than its competitors..... This species would therefore "fill" the environment more completely from a structural and a functional point of view, exploiting the available resources and overcoming its competitors. A bloom would then occur".

Provisional interpretations aside, the di-

rect effects of jellyfish blooms are quite clear and represent the most important aspect as far as the public is concerned. Jellyfish have nematocysts (or cnidocysts) in their tentacles, unicellular capsules filled with a toxic liquid and containing a rolled-up injector thread which is rapidly unrolled when prey comes into contact. A species of jellyfish like *Pelagia noctiluca* whose blooms occur in summer therefore represents a problem for swimmers because of its stings and its capacity to poison man. It can however also become a professional illness among fishermen who net large numbers and have to handle them. For the species occurring in the Mediterranean at least the clinical picture is usually benign, consisting of redness, swelling and blistering linked with a burning and itching sensation. It is only in exceptional cases involving highly sensitive individuals or following multiple stings that general symptoms of an anaphylactic nature with dizziness, nausea, vomiting and collapsus may occur. Medical treatment is therefore limited in most cases to flushing with seawater (not freshwater), application of weak ammonia or alcohol to the site of the sting to fix the remaining nematocysts, and prescription of a corticosteroid-based or antihistamine cream to limit the allergic reaction. Obviously it is impossible to protect beaches from the blooms apart from by putting protective nets around the swimming zone. As far as individual protection is concerned, swimmers are advised to use a diving mask so that they can see and avoid jellyfish. Although the health risk is limited, the nuisance caused to holiday-makers by swarms of jellyfish does, however, have economic repercussions, even causing a sharp drop in the number of visitors to the most affected coastal areas. Economically speaking, though, it is in fishing that the effect is most clearly to be felt. It has been seen that *Pelagia* blooms hamper fishing activities by clogging nets and thus reducing catch yields, and possibly also by reducing the market value of fish which has been exposed to *Pelagia* or has ingested it whilst caught in the net. Finally and in more general terms, the occurrence of mass blooms may have a marked impact on the pelagic ecosystem, by bringing about changes in the speed of nutrient renewal and also by dominating natural competitors for food and other requirements (such as dissolved oxygen), thereby causing changes in the species composition of coastal communities.