

Newsbrief

WIOMSA and CRC Launch World's First Certification Program for MPA Professionals



MPA Experts gathered for a planning meeting in February 2008 at Zanzibar Beach Resort.

Photo: Amanda Billner

WIOMSA together with the Coastal Resources Center at the University of Rhode Island are pleased to announce the launch of the Certification of Marine Protected Area Professionals Program in the Western Indian Ocean (WIO-COMPAS).

The first MPA professionals certification programme in the world has been launched in the Western Indian Ocean (WIO) region, following a number of consultative meetings with various intergovernmental and conservation organizations over the past two years.

The Western Indian Ocean Marine Science Association (WIOMSA) in collaboration with the Coastal Resources Center at the University of Rhode Island (CRC/URI) are pleased to an-

nounce the first ever certification programme of MPA professionals in the Western Indian Ocean region.

The main objective of the programme is to bring the knowledge and skills of those working in MPAs to a level of professional standard. This programme assesses and certifies MPA professionals based on recognized standards of excellence. It promotes core competences, professional growth and ethical conduct.

The programme is structured around four "E" components of experience, education, examination and ethics with a minimum of secondary school education and experience requirements for entry into the programme.

The WIO-COMPAS programme is specifically designed and available for MPA professionals who have worked for at least two years at MPAs in the WIO region. The program offers three levels of certification based on work experience and proven performance capabilities:

- **Level 1** - for professionals similar in duties to an MPA ranger
- **Level 2** - for professionals working in an MPA with supervisory responsibilities and equivalent to MPA manager
- **Level 3** - professionals responsible for policy development and several MPAs

WIOMSA with its partners believe this certification programme will not only enhance individual knowledge and skills but will also improve career development.

APPLY NOW!

Applications are due by 23 May, 2008. We encourage those MPA leaders with proven performance related to the certification standards to apply now. Scholarships are available. More information and application forms can be found at:

www.wiomsa.org/wio-compas/

“Dolphin tourism needs to be managed sustainably”



Photos: IMS *Bottlenose dolphins, one of four dolphin species in the WIO.*



Dolphin tourism in action - tourists snorkeling with and taking pictures of dolphins.



One of this MASMA project's activities was this training and field trip for dolphin tourism operators in 2006.

Sustainable Dolphin Tourism in East Africa is the latest publication in the WIOMSA book series. It is the result of a MASMA project that was implemented between 2003 and 2006. The sites studied were the Menai Bay Conservation Area in Zanzibar and Ponta do Ouro in Mozambique.

The book, which is based on a MASMA report, shows that dolphin tourism could be having a negative effect on dolphin behaviour. On the other hand, dolphin tourism has become a very important source of income for the local people and is also important in that it stopped dolphin hunting. The report gives some important recommendations on how the management of tourism could be improved to ensure that it is conducted with minimum negative impact.

The main hub for dolphin tourism in Zanzibar is Kizimkazi, a village divided into two subvillages, Mkunguni and Dimbani. Many tourists take boats from here to visit the Menai Bay, which is managed and run by the Zanzibar Department of Fisheries. Dolphin tourism started in the early 1990s and has become very popular.

TOURISM or DOLPHIN HUNTING?

The author of the guidebook “The Rough Guide to Zanzibar” which was published in July 2006 expresses a common view of the way that dolphin tours are being conducted:

“For some visitors, the experience comes depressingly close to Disneyland, with dozens of noisy boats crowding and hounding the dolphins on a daily basis, the tourists encouraged to leap into the water just as pods are passing by. The potentially detrimental effects of this regular disturbance are the subject of on-going research, so think twice before taking part in the melee.”

The aim of the MASMA funded project was to study the biology of dolphins as well as the effects that tourism and fisheries had on the

dolphins. Furthermore, it aimed to work out how sustainability of these activities could be realised.

"REAL" HUNTING STOPPED

On a positive note, dolphin tourism has improved the incomes in Kizimkazi. Before tourism was introduced, dolphins were being hunted. The last known dolphin hunt took place in 1996 when 23 dolphins were killed:

“Since then, dolphin tourism has become more valuable than hunting by supplying new job opportunities and other incomes for the villagers.”

DOLPHINS STRESSED

But tourism has not only had positive effects. The researchers noticed a change in the behaviour of dolphins subjected to tourism activities. They

ABOUT THE REPORT

The MASMA study *"Sustainable Dolphin Tourism in East Africa"* was conducted by Jiddawi, N.S, Amir, O.A., (Institute of Marine Sciences, University of Dar es Salaam, Tanzania) Guissamulo, A., (Museo de Historia Natural, Mozambique) Ngazy, Z. (the State University of Zanzibar), Stensland, E., Sarnblad, A., Berggren, P. (Dept of Zoology, Stockholm University, Sweden) and Cockcroft, V.G. (Centre for Dolphin Studies, South Africa). It was funded by WIOMSA's MASMA program.

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appeared stressed, moving erratically and slapping their tails, as well as coughing. Another main threat to the dolphins is gillnet fishing.

GUIDELINES NOT FOLLOWED

Guidelines for dolphin tourism, including leaflet to hand out to tourists, were produced in the late 1990s. But these guidelines have proven difficult to enforce. The authors stress the need of increased efforts to ensure that they are indeed followed.

“Management of dolphin-watching in Kizimkazi is critical to maintain the dolphins on which the tourism sector relies while ensuring that livelihoods are supported and visitors/consumers satisfaction remains high.”

ELIMINATING POVERTY

The local population in Kizimkazi have seen great improvement in their economic situation since tourism activities began, according to a survey in the village made by the researchers. None of the respondents in the survey saw their economic situation as very poor or poor.

This stands in sharp contrast to their economic situation before the advent of dolphin tourism. 80 percent of the villagers who participated in the survey said that their economic situation was poor before dolphin tourism began. Only 20 percent said that it was good.

DOWNLOAD THE REPORT:

The full list of recommendations, the guidelines for dolphin tourism and suggestions of further study of dolphins can be found in the report, which is available for download here:

<http://www.wiomsa.org/filearchive/2/2689/Book%20number%207.pdf>

NGO Formed to Implement the Recommendations



Members of KIDOTOA during a meeting held in the local school

Photo: IMS

In 2006, an NGO for the dolphin tourism was formed by the local community in Kizimkazi in collaboration with the researchers: the Kizimkazi Dolphin Tourism Operator Association (KIDOTOA).

KIDOTOA is considering establishing set prices for dolphin tours. In collaboration with other stakeholders they are hoping to increase the income for the dolphin tour operators as well as the contribution to the villages.

A visitors survey in Kizimkazi conducted during the MASMA project showed that tourists would be willing and able to pay more than they currently pay for dolphin tours.

The same survey showed that tourists would be willing to pay a higher user fee to Menai Bay Conservation Area. The current fee is three US dollars.

KIDOTOA is hoping to get funding to build a resource centre in the area. In the resource centre, training for tour operators could for example be conducted.

A resource centre could also be a first stop for visitors to Kizimkazi, where they could pay their park fees as well as getting brochures and information about dolphins and the code of conduct needed in the park to ensure the sustainability of the tourism activities.

So far, KIDOTOA has held training workshop for tour guides and given talks to students at the tourism school in Zanzibar. They are also providing some English language classes for local boatmen and others involved in the dolphin watching industry.

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Corals are growing smaller

A study that has measured the sizes of more than 21,000 corals over a 14-year period found that corals are growing smaller and these changes are associated with coral bleaching events and fishing.

The research was undertaken by employees of the Wildlife Conservation Society that have been measuring coral sizes in marine parks in Kenya where fishing is not allowed and comparing these findings with corals in nearby fishing grounds.

The researches studied 26 different types of coral and found that coral bleaching and fishing reduced the sizes of all of them. Coral bleaching was associated with warm waters, most notably during the 1998 El Niño, when corals all over the world were reported to have lost their color and many died.

The researchers noted that this effect is often caused because corals live in colonies and that only a portion of the colony dies when bleaching or damage from fishing occurs and this leads to smaller individuals.



Photo: Tim McClanahan



Photo: Tim McClanahan

This gives the coral some chances of surviving disturbances, but the researchers noted that these smaller corals are expected to reproduce less and this could result in poorer recovery from disturbances.

Previous studies had suggested that possibly the largest and oldest corals may be the hardiest survivors in reefs with these disturbances, but the researchers found that these old were often broken up into smaller colonies, so they may still be old but smaller.

READ THE FULL ARTICLE:

Long-term changes in coral colony size distributions on Kenyan reefs under different management regimes and across the 1998 bleaching event

Author(s): T. R. McClanahan, M. Atewerberhan, J. Omukoto

URL: <http://springer.r.delivery.net/r/r?2.1.Ee.2Tp.1aVymV.Bw9oVY..T.Eaha.2wXa.TEQFBN00>

Development of UNEP Operational Guidelines on Survey and Monitoring of Marine Litter

One of the significant barriers to addressing marine litter is the absence of adequate science-based monitoring and assessment programmes that provide useful information, from which one can determine the most critical impacts of ML, on national, regional and global scales.

In order to confront this problem the Regional Seas Programme of UNEP launched, within UNEP's Global Initiative on Marine Litter, and in full cooperation with UNESCO - Intergovernmental Oceanographic Commission (IOC), a project on developing global and harmonized guidelines for the 'standardisation' of survey and monitoring of marine litter worldwide.

A Technical Working Group (TWG) was assembled and comprised experts and scientists from Australia, Canada, Japan, the Netherlands, Republic of Korea, Sweden, United Kingdom, USA, India, Israel, Barbados, Thailand, Mozambique, UNEP, IOC, IMO, FAO, six Regional Seas Programmes, and other international organizations, under the team leadership of Prof. Anthony Cheshire, an Australian expert with extensive experience as a marine environmental scientist.

The TWG terms of reference included: (i) the collection of information from around the world on existing experience and methods for the monitoring and assessment of marine litter (drawing on information already compiled by UNEP and the Australian Department of the Environment and Waters Resources); (ii) undertake a comparative analysis of global methodologies of marine litter survey and monitoring (including reporting protocols and forms); and (iii) development of practical and operational guidelines



Group photo of the participants of the workshop

Prof. Anthony Cheshire explaining the various litter categories during the field trial of the methodology

on survey and monitoring of Marine Litter that is floating, on shore, and at the sea floor for consistent application worldwide.

The UNEP/IOC guidelines shall incorporate advice on assessment of monitoring results (statistical analyses, trend analyses etc), and consider as necessary, both: (i) comprehensive, regular type surveys and monitoring; and (ii) less comprehensive, ad hoc, country and community-based surveys and monitoring.

After a few months of work, the TWG gathered in a workshop with the main objective of developing and finalizing the operational guidelines for the survey and monitoring of marine litter worldwide. These will assist policy makers and efforts by regions, countries, Regional Seas Programmes and other relevant organizations to address the problem of monitoring and assessment of marine litter.

Fifteen participants attended the workshop held at the Cape Panwa Hotel in Phuket, Thailand, from 1-3 May 2008. Several countries, international organizations, UNEP Regional Seas Programmes were represented and contributed to the success of the workshop. The workshop conducted in an informal,

open and highly participatory fashion, comprised discussion sessions, relevant thematic presentations by experts on the various marine litter programmes and a field trial of the methodology.

The guidelines will be finalized in July 2008 and hopefully be used by many countries and regional programmes worldwide in order to contribute to address the serious and widespread issue of marine litter.

FOR MORE INFORMATION PLEASE CONTACT:

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WIO-MAGNET - Aiding the Design of MPAs

By collecting data on genetic connectivity in the WIO, the MASMA project WIO-MAGNET aims to compile a technical report to advice on the design and management of a network of Marine Protected Areas in the Western Indian Ocean. In March, the research group met in Zanzibar to compile their initial results.

“It is all about aiding the design of MPAs and to restock unprotected areas outside no-take zones. For example, if the fish is depleted in Tanzania, how could it be restored again?”, says Dr Mats Grahn from Södertörn University College in Sweden who is co-investigator in the project.

So far, the conclusion is the recruitment is on the scale of tens of kilometres, which means that a very close network of MPAs is needed.

“That is actually a much smaller scale than we expected”, says Dr Grahn.

WIO-MAGNET researchers have so far collected results from Kenya, Tanzania and Mauritius, and are hoping to cover also Rodriguez and Madagascar. It is hoped that WIO-MAGNET will provide an unbroken study into the population genetics of several



Photo: Oskar Henriksson

The WIO-MAGNET group at the workshop

key species at selected sites along the Western Indian Ocean coast.

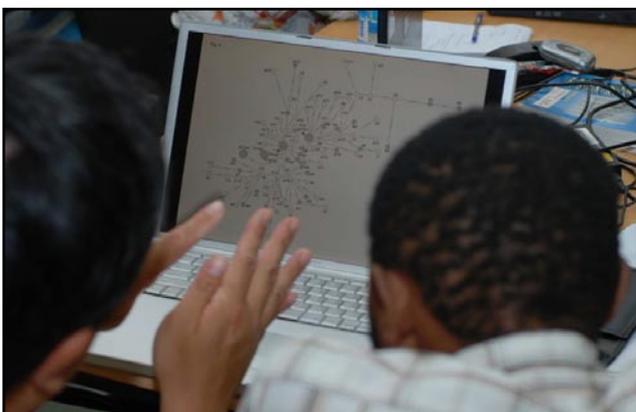
“We have looked at the blue barred parrotfish, white spotted rabbitfish and the coral *Pocillopora damicornis*. Now the question is whether we should continue sampling the same species or look at other species to see if the same pattern is reoccurring”, says Dr Grahn.

Workshops discussing suitable studies and projects have been held in Mom-

basa and in Zanzibar, and labs have been set up and tested. Samples have been collected and DNA have been extracted and analysed in the Mombasa lab. In March 2008, a lab was also set up at the Institute of Marine Sciences in Zanzibar.

The Western Indian Ocean marine genetics network (WIO-magnet) project is a recently initiated MASMA project bringing together scientists from Sweden, Taiwan, Kenya, Tanzania and Mauritius. It is a genetic connectivity project which also has a capacity building aspect to it.

“It is an advanced molecular biology project, but most of the work can be performed in simple laboratories. There are two components to the project: To collect data that are important to the management of MPAs, and to build knowledge and methods that can be used regionally”, says Dr Grahn.



Mapping genetics at the workshop

Photo: Oskar Henriksson

Preannouncement: 6th WIOMSA Scientific Symposium to be held in la Reunion

The next WIOMSA Scientific Symposium will be held in La Reunion. The proposed dates are 24-29 August 2009 at the University of La Reunion.

The WIOMSA Board of Trustees met on 1 March 2008 and discussed the two bids submitted to host the Sixth WIOMSA Scientific Symposium. The other bid came from the Kenya Marine and Fisheries Research Institute (KMFRI).

The bid that was finally decided upon by the board had been put forward by

a consortium of the following organisations in la Reunion:

the University of La Réunion Island (ECOMAR laboratory), the Institut pour la Recherche et le Développement (IRD, UR CoRéUs, US ESPACE) and the Institut Français pour la Recherche et l'Exploitation de la Mer (IFREMER Laboratoire Ressources Halieutiques (RH) La Réunion))

The island Réunion is, besides being the home of around 60 WIOMSA members, in the words of the organizers:

“a fascinating and impressive volcanic island (one third of its surface being protected as a National Park), with lots of interesting places to visit like one of the most active volcano in the world, the primary forests (lots of endemic plants and animals), the coral reefs, inland traditional villages, ...” The list is endless.

The language of the Symposium will be English. Any speeches and presentations that are delivered in French will have simultaneous interpretation into English.

Approved MARG III Projects Jan-Apr 2008

MARG III - Grantees and Workshops

Training/Seminar for Coastal Engineering, Quilimane, Mozambique, 1st to 15th March 2008

1 Alfonse Muhunira Dubi, IMS, Zanzibar, Tanzania

WIOMAGNET - MASMA Project Workshop on Genetic Connectivity in East Africa, Zanzibar, Tanzania, 10th to 23rd March, 2008

2 Angus Macdonald, ORI, Durban, South Africa

BES Tropical Ecology Group (BESTEG) Early Career Researcher Meeting , Oxford, United Kingdom, 18th to 19th March, 2008

3 Nsajigwa Mbiye Emmanuel, SUA, Morogoro, Tanzania

Indian Ocean Seabird Conference – Christmas Island, Australia from 19th to 22nd April, 2008

4 James Russel, Marine Ecology Laboratory, La Reunion

5 Vikash R. V. Tataya, Wildlife Foundation, Mauritius

6 Patrick Pinnet, Marine Ecology Laboratory, La Reunion

Approved MARG III Projects January – April 2008

During the first quarter of 2008, WIOMSA received and processed 17 applications for travel grants from across the region.

Out of these, a total of six applications from Mauritius, La Reunion, South Africa and Tanzania were successful in obtaining some financial support through MARG III. Tabulated on the left is information on the successful applicants' names, affiliation and details of the meeting attended.



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