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Director's Note

How many marine aquarium fish collectors will die before the marine aquarium trade becomes safe and sustainable?

In September another fish collector in Bali was killed while working to support his family with the meager earnings from his difficult and dangerous work.

In this case, Bacok and a fellow collector were diving near their village at depths of 30-40m to collect yellowlined anthias (*Pseudanthias luzonensis*), squarespot anthias (*Pseudanthias pleurotaenia*) and two color dottyback (*Pseudochromis paccagnellae*). As is usually the case in Indonesia and many other poor countries, the collectors had no dive watches or depth gauges. Rough weather caused the anchor to drag. A big wave caught the drifting boat and the divers were yanked abruptly to the surface by the air hoses attached to the tire compressor on board. Bacok was dead when he reached the surface, with burst lungs, leaving behind a wife and two young children. The other collector survived.

Bacok was only one of several collectors who die or are maimed each year while trying to fill their orders. Most of these deaths and other work-related injuries of collectors go unrecorded. The collectors are poor and may be among the few people in the village with work. Their death or incapacitation generally has catastrophic impacts on the family and friends who depend on their income, as social welfare support systems are limited or non-existent.

Yes, diving is inherently dangerous - but could this accident have been prevented? Bacok was an experienced collector diving at significant depths. What factors oblige these ill-equipped collectors to take such risks?

Unfortunately the relatively low prices paid for most shallow-water species create a strong incentive for collectors to seek out the rarer, more expensive species, many of which inhabit in greater depths. The industry and hobby need to be aware of the risks collectors take to hunt down species that occur at great depths and make more informed choices about the animals they buy. Support from the industry and hobby for adequate equipment and training as the norm for marine aquarium fisheries in all countries would certainly help to make collection practices safer. Improved prices for fish caught under safe conditions would act as an incentive to collect in shallower water - with the added benefit of creating a 'depth refuge' for the deeper reef habitat and stocks.

We should all ask ourselves, especially those buying marine ornamentals, whether industry member or hobbyist: What can I do to help prevent this kind of tragedy and help ensure dignity, decent earnings, and safer working conditions for the collectors who make possible my livelihood or hobby?

NORTH AMERICA UPDATE

Over Seventy (70) Species of MAC Certified Fish Available in North America

The variety of MAC Certified fish coming into North America continues to grow, with over seventy (70) species available for retailers as of September 2006. All of the MAC Certified retailers in North America are stocking a good selection of MAC Certified species. In addition to the highly desirable species mentioned in the 2nd Quarter MAC News, other noteworthy MAC Certified fish include Majestic Angelfish (*Pomacanthus navarchus*), Lyretail Anthias (*Pseudanthias squamipinnis*), Psychedelic Mandarinfish (*Synchiropus splendidus*), Bicolor Foxface (*Siganus uspi*) and Exquisite Fairy Wrasse (*Cirrhilabrus exquisitus*).

North American hobbyists also have the opportunity to acquire MAC Certified cultured species, with cultured False Percula Clownfish (*Amphiprion ocellaris*) being offered at MAC Certified retailers. Producers of these cultured marine ornamentals became MAC Certified in January 2005 for their facility's compliance with the international Mariculture and Aquaculture Management (MAM) Standard.

PHILIPPINES UPDATE

Collectors and Exporters Make Digital Traceability in the Marine Aquarium Fishery Work

Under the "Identity Preservation and Traceability" project funded by the United States Agency for International Development (USAID) through the Academy for Educational Development (AED), MAC worked with collectors and exporters to undertake pilot scale development and implementation of a prototype integrated, real-time, web-based information technology (IT) system for traceability. This system covers collector to exporter interactions in the Philippines, and facilitates compliance with MAC international Standards, with a focus on electronically documenting and tracking shipments to enhance supplier-buyer relations and improve the Philippines' marine aquarium trade.

In developing this "IT traceability system", MAC worked extensively with marine aquarium ornamentals' MAC Certified collectors groups and their coordinators in seven (7) municipalities in the Provinces of Cebu, Bohol and Palawan and with two MAC Certified exporters. The participating collectors, coordinators and exporters were able to understand and use the system with the hardware (computers, printers, and personal digital assistants), software, and training available through the project. MAC, in association with AED, leveraged a unique public-private partnership to facilitate the design and development of this technology for the marine aquarium trade, which was demonstrated to a multi-stakeholders audience, and resulted in the acceptance of the technology at the local community level. Among the principal partners is the *Microsoft Corporation*, which provided a major software grant as part of the project.

By electronically monitoring the movement of marine aquarium fish through the supply chain, traceability and value can be preserved to promote better return for collectors, and improve efficiency, quality and sustainability for a better managed and documented trade.

For marine ornamental collectors and coordinators the traceability IT system presents several advantages:

- eliminating unreliable and burdensome paper-based documentation,
- enabling coordinators to receive quicker feedback on shipment results and payment details,
- calculating the catch per unit effort (CPUE) per species to avoid over-harvesting,
- enhancing business processes, and
- strengthening presentation and marketing efforts in relations with exporters.

This system can also become a very useful tool for exporters, importers and retailers, by:

- allowing automation of their inventory capability and other core business functions,
- informing better potential buyers of stock availability and organizing shipments that require stocks from multiple sources,
- reducing costs, and time needed to collect, track and verify the data,
- streamlining the overall business processes, and
- encouraging a "collect to order" process and ethos that will reduce pressure on stocks.

While this demonstration project of the prototype IT traceability system and accompanying equipment have been readily accepted by users, there remain many challenges to promoting digital inclusion in the marine aquarium fishery. At the level of coordinators and communities, there is a need for solid IT and communications infrastructure, reliable electricity, access to supply inputs (and related financing), and computer skills upgrading. Moreover, the system will need to be extended to importers and retailers so that "end to end" transactional capability is established. MAC is working to develop project possibilities to continue this work that can improve the efficiency, quality and sustainability of the marine aquarium trade.

MAC Certified Exporter Highlighted by Online Magazine

The online media, *About Saltwater Aquariums*, recently highlighted MAC Certified exporter *Cebu Mactan Quality Marine Aquarium Fish*, located in the Cebu City, due to its dedication to excellence in the husbandry of the marine ornamentals in its care; which is a solid base for marine aquarium organisms moving through the chain of custody from "reef to retail". The owner, Peter Boserio, emphasizes proper care and handling of the marine ornamentals arriving at his facility by minimizing stress- one of the key factors to maintaining fish in optimal health all along the chain of custody, in particular when extensive travel is scheduled from the Philippines to North America or Europe.

This company and other MAC Certified exporters strive to provide excellent facilities, best practices and superior products that are validated as such through compliance with the MAC Standard on

Handling, Husbandry and Transport. The press coverage of this MAC Certified exporter confirms the role that MAC Certified companies play in leading the industry to internationally recognized and verified quality and sustainability.

Read the full article at http://saltaquarium.about.com/library/blank/bl_chuckcollectorreport.htm.

INDONESIA UPDATE

“South-South” Capacity Building: Indonesia Collectors Learn Responsible Collecting Techniques from Skilled Philippines’ Fisherman

Marine ornamental harvesting in Pulau Seribu, Indonesia started around 1960, with the majority of collectors coming from Panggang Island. Many collectors still only use masks, without snorkels or fins. Around 1970, cyanide was unfortunately introduced to the area by others in the marine aquarium industry.

As a result of recently increased enforcement of laws prohibiting cyanide use, and the rapidly rising price of cyanide, collectors and suppliers have committed to alternative techniques for collecting fish. In July 2004, a marine ornamental collectors’ group PERNITAS (*Perhimpunan Nelayan Ikan Hias dan Karang Hias*), was formed in Pulau Panggang. MAC trainers and TERANGI (*Indonesia Coral Reef Foundation*), a local reef conservation and management organization, have trained the collectors in best practices for collecting and handling to ensure that the fishery is sustainable. However, more specialized training was needed for responsible collecting of some species.

In August 2006, the PERNITAS collectors group received training from Regenito Gador, a Filipino trainer, on techniques for collecting difficult species, such as the Green Mandarin (*Synchiropus splendidus*) and Comet or Marine Betta (*Callopleysiops altivelis*). The collectors were taught how to make collecting equipment, such as push nets and traps and were shown better post-harvest handling and holding techniques. Regenito was accompanied by Made Partiana: an Indonesian trainer from Les Village in Bali, who also learned the collecting techniques. After the Pulau Seribu efforts, both trainers travelled to Bali, where they trained collectors from Sumber Kima and Pejarakan in the use of the responsible methods. This peer-to-peer training by Made Partiana will continue in other Indonesia villages, where more collectors are interested in learning these techniques.

Jakarta District Government Supports Collectors Training in Pulau Seribu

Ensuring Indonesia collectors use best practices in collecting and post harvest handling to achieve sustainable fisheries has become a priority for some district governments where marine ornamentals are collected. This includes Pulau Seribu, Jakarta Bay, where the District Head fully supports the implementation of sustainable practices to achieve MAC Certification. In September 2006, the Pulau Seribu District government supported the training for ornamental fish collectors from Pulau Panggang provided by MAC and others.

The local marine ornamental collectors and suppliers association (PERNITAS) received nets and basic snorkeling gear for its members. Seventy (70) collectors attended the training which addressed, among other things, post harvest methods, dive health and safety, sustainable fishing practices, reef conservation and management and simple business skills.

UPDATE ON CERTIFICATION

Marketing Benefits of Being MAC Certified

“I was so surprised to receive sudden orders from Europe for the first time, after the publication, in several European magazines, of articles which mentioned our recent MAC Certification”, says Walter Ritte, owner of MAC Certified *Hawaii Live Rock*, amazed by the press coverage his facility has received.

MAC Certified industry operators can and do benefit directly, as has *Hawaii Live Rock*, from the public relations that result from obtaining MAC Certification, and from MAC marketing efforts to build brand value and recognition for MAC Certified companies and products.

MAC collaborates with several major trade and hobbyist magazines in Europe and North America. These media leaders in the industry provide regular space for information from MAC on issues related to responsibility and sustainability in the marine aquarium trade. The articles report on MAC efforts and progress in issues of interest to the readers - evidence from these magazines of real support and commitment for a sustainable trade and the role of MAC in achieving this. For example, in the German magazine *Koralle*, readers can learn about the life of fishers in Indonesia that are learning how to use net collecting techniques. In the US magazine *Tropical Fish Hobbyist* a recent article highlighted collectors' efforts to learn how to better manage their business operations, including training through an innovative "Business Game" for fisher communities. *Tropical Fish Hobbyist* also provides a quarterly one page full color MAC ad highlighting the support for MAC from leaders in the marine aquarium world, such as Bruce Carlson, Svein Fosså, and Charlie Veron among others.

These public relations and marketing efforts are reinforced by MAC participation in trade shows and hobbyist conferences as a speaker or an exhibitor. Assistance from the organizers of these events, e.g. complimentary booth space, organizing MAC seminars, are additional ways in which the industry and hobby are providing concrete support for MAC efforts to raise industry and consumer awareness, create demand for MAC Certification and MAC Certified marine ornamentals.

This press coverage and trade show support are an important contribution to promoting MAC Certified collectors and companies committed to quality, sustainability and the future of the industry and hobby.

From the time companies get MAC Certified they receive strong marketing and public relations support as part of the growing network of MAC Certified operations that are increasingly recognized and in demand around the world.

MAC OUTREACH AND COMMUNICATIONS

More Public Aquariums Signal Support for MAC

The list of public aquariums around the world showing support for MAC continues to grow. Most recently, the *Bristol Zoo and Garden* in the UK did so by signing the MAC "Declaration of Support". Director of the *Bristol Zoo and Garden*, Dr. Jo Gippes states: "*Our institution actively supports the work of the Marine Aquarium Council and is committed towards assisting and aiding them in their mission to conserve coral reefs and other marine ecosystems by achieving sustainable sourcing of animals for both the hobbyist and professional aquarium trade*". North American institutions, such as the *El Paso Zoo*, Texas, have also signed the Declaration.

Aquariums and zoos concerned about the future of coral reefs and interested in ensuring the marine aquarium trade is a force for reef conservation, responsible fisheries and sustainable livelihoods are invited to sign on.

To receive a copy of this Declaration of Support in English or French, please contact MAC at info@aquariumcouncil.org.

MAC in the NEWS

"Weltpremiere: Erste MAC Zertifizierte Farmgezogene Wirbellose". Paul Holthus and Nathalie Gamain. *Koralle*. N°39. June - July: 11. [In German].

"Healthy Reefs, Healthy Fish, Healthy Hobby". Bruce Carlson. (MAC advertisement). *Tropical Fish Hobbyist*. July 2006: 30.

"Saving Nemo". Diego Andres Garcia. *Asian Diver*. October- November 2006: 32-34.

"First MAC Certified Cultured Species Available To The Market". Nathalie Gamain and John Brandt. *Tropical Fish Hobbyist*. September 2006: 80-82.

"Interview: Koralle Im Gespräch Mit Paul Holthus (MAC)". Daniel Knop and Paul Holthus. *Koralle*. N°40. August- September 2006: 7-11. [In German].

"The Role Of Aquariums To Enhance A Sustainable And Responsible Marine Ornamental Trade".
Nathalie Gamain. *Pets International*. Volume 18.N°5. September 2006: 96-97.

"MAC Certified Cultured Organisms Available". John Brandt. *Reef Art*. [In Italian].

"Review Of "Cebu Mactan Quality Marine Fish" In The Philippines Islands "Off To A Good Start".
Charles Raabe. *About Saltwater Aquariums* (online). September 28, 2006.
http://saltaquarium.about.com/library/blank/bl_chuckcollectorreport.htm

UPCOMING EVENTS

October 6-10: 40th Annual Backer Pet Industry Christmas Trade Show (Chicago, Illinois - USA).

October 24-28: 16th United States Coral Reef Task Force Meeting (St. Thomas, US Virgin Islands).

November 29- December 3: Zoosphere 2006 (St. Petersburg, Russia).