

# AQUACULTURE WITHOUT FRONTIERS: EMPOWERING AND GIVING HOPE THROUGH AQUACULTURE

Aquaculture without Frontiers (AwF) was the brainchild of one person following a career spent in researching, travelling and being a part of developing the aquaculture industry as we know it today. AwF roots lay strongly within the World Aquaculture Society family as the concept was formulated by this individual on the back of a presentation and paper delivered at World Aquaculture 2003 in Salvador, Brazil. The person is, of course, Michael New OBE, CBiol, FSB, BSc, ARCS, FIFST; Past-President of WAS and EAS, and current Chairman for AQUA 2012 in Prague.

Back at that 2003 meeting Michael said “The NGOs that are involved in aquaculture development for the poor are sometimes religious, sometimes lay; sometimes branches of international organizations, often national or local. However, it is clear that they need help to utilize the potential of aquaculture efficiently and, as individuals, I feel that we should be ready to assist. However, the aquaculture sector does not have any NGO that appeals directly to the public (our consumers), nor do we raise any funds for aquaculture development from the public. We may sometimes wonder where are our ‘Friends of Aquaculture’, our ‘BluePeace’, our ‘World Aquaculture Fund’, our ‘Aquaculture Defense Fund.’ I think it is most unlikely that we could persuade the public to support a lobbying organization for aquaculture, especially as we have suffered so much criticism (fair and unfair) from aquaculture’ movement would be perceived simply as a defensive negative reaction to criticism. However, I believe that there is a niche for an aquaculture NGO.”

From that point Michael registered AwF (UK) in the UK and AwF in the USA and launched the organization at the WAS conference in Hawaii in 2004. The plan was outlined and he set about the process of putting into action what he truly believed. Along the journey he has been assisted by friends, colleagues, family, volunteers and a range of donors who have supported the cause and seen their generosity turn into projects which have empowered and given hope to the poor in many countries.

Recently the trustees of AwF (UK) decided to close the charity in Great Britain in order to consolidate all the activities of the not-for-profit organization within the international AwF. All remaining funds of AwF (UK) were transferred to AwF in June 2012. Michael New remains the Founder and Patron of AwF, which is managed by a fifteen-member international board of directors.

The projects continue. We update two of them here; one in Kenya and one in Haiti.

Firstly ‘The Holy Will Women Group: Scaling-up Fish Farming to Mitigate Poverty among Smallholders in Homa Bay County of Kenya’ is a three-year arrangement that works with families ravaged with HIV/AIDS in implementing a food-security initiative that aims to scale up fish farming to mitigate poverty among smallholders.

It is anticipated that upon successful implementation of this project, the following tangible results will be realized:

- Effectively strengthen the capacities of 24 members of the group with appropriate skills on semi-intensive fish farming for onward cascading, the same, to at least 800 small holders every year;
- Fully establish and maintain a semi-intensive model fish farm for training, production and demonstration on semi-intensive fish farming as viable venture in producing adequate nutritious food and creating sustainable incomes among small holders and youth in South Rachuonyo District;
- Produce over 16,000 high quality tilapia and catfish annually for members’ consumption and income creation;
- Increase average annual income of at least 824 small holders and youth that practice fish farming in South Rachuonyo District from USD 330 to USD 1,006 in one year.

The Haiti project had buttons pushed after the 2010 devastating earthquake killed over 300,000 people and made homeless well over a million people. Of course the resources of AwF are limited but, by working with other organizations, AwF have jointly established a project. Our major partners in this are Marine Biological Laboratory at Woods Hole (MBL) and Novus International. The Haitian partners at the newly completed Aquaculture Learning Center (ALC) in Marigot, Haiti recently began their first harvest of tilapia.

The system has been in operation since November 2011 and all of the feeding, water quality management and maintenance to date has been done by the team of newly trained Haitian “teknisyen pwason” (fish technicians) and their students. Prior to harvest, fish were taste tested to ensure there were no issues with off-flavor.

Producing sufficient protein and a business opportunity for a family of four on a small piece of land using a simple fish rearing system is a noble goal worth pursuing. The operating and cost criteria for such a system are stringent, i.e. they cannot exceed the resources available, human or otherwise, but progress is being made. Currently the working model is producing fish and, with refinement in pumping and filtration techniques to reduce power requirements, the goal of developing a system that will operate on <45 watts of power and produce sufficient protein for a family of four is within reach.

MBL have completed some fabulous work on fish feed trials, using only ingredients available in Haiti (no fishmeal). Many months have been spent tweaking diets and trying to balance amino acids, digestibility and palatability. Four diets were tested against a 32% crude protein Purina™ floating feed and results exceeded expectations. The new diet even outperformed a soy-based diet! Feed conversion ratios were 1.30 for the control diet and 1.45 for the best experimental diet and specific growth rates were almost identical 2.0 and 1.9 %/d, respectively. These results represent a milestone in our efforts to bolster sustainable fish production in Haiti and have ramifications that should be recognized internationally and help

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## PRESIDENT'S COLUMN, CONTINUED FROM PAGE 3

our Society's support for student members. Under the leadership of Chris Green and the Student Affairs Committee, we will continue to work with WAS students to determine how we can help them move into professional positions in academia, research and the private sector. These students will play an important role in the development of technologies to produce the seafood resources needed to feed the world and restore our oceans' declining fisheries.

I want to take this opportunity to acknowledge the hard work and dedication of our retiring Board members and to thank them for their years of service. Special thanks to Jay Parsons who will complete his term as Immediate Past President in Prague. Jay deserves special recognition for his 12 years of service on the WAS Board as our President, President Elect, four terms as Treasurer, and as Director. Of course, we could not convene the outstanding WAS conferences and provide valuable services our membership without our Executive Director, John Cooksey, and the home office staff,

Carol Mendoza and Judy Andrasko.

In 2013, we will hold our Triennial meeting in a new venue to the World Aquaculture Society - Nashville, Tennessee. At this meeting, WAS will partner with the National Shellfisheries Association and the Fish Culture Section of the American Fisheries Society in what promises to be the largest aquaculture conference in the world. As we continue to move our annual meetings around the globe, we will once again meet in Australia in 2014 and Korea in 2015. The Board is already planning our first meeting on the African continent, which will take place in 2017 in Durban, South Africa.

Finally I want you to know that I look forward to working with you to continue to grow our organization and provide the services you are looking for from the World Aquaculture Society. Please contact me at [KMain@Mote.org](mailto:KMain@Mote.org) and let me know how you would like to get involved. Let me know how we can help you, and let's work together to improve our professional society and make it what you what it to be.

— Kevan L. Main, President

## ASIA PACIFIC CHAPTER UPDATE, CONTINUED FROM PAGE 7

website ([www.was.org/APC](http://www.was.org/APC)). We know that processing the payment for WAS and APC membership can be difficult for some to accomplish. If that is the case, please contact your APC CA or EAC representative, who may be able to take a cash payment and process the membership for you. We continue to look forward to an eventful and exciting 2012 for WAS and the APC!

—Lukas Manomaitis, President

## BOOK REVIEW, CONTINUED FROM PAGE 8

well within reach of any modern hatchery with well-trained technicians. All-female culture has the potential to revolutionize prawn farming by allowing intensification and direct competition with marine shrimp in the market.

The prawn farming book has several other notable features. It includes eight pages of color plates illustrating prawn larval stages, sexual dimorphism, and prawn aquaculture in Thailand, India, and the USA. The book is otherwise richly illustrated with graphs, tables, and other figures, although the quality of some of these is a bit marginal. The chapter on prawn marketing includes five pages of prawn recipes. The topic of mushiness, one of my pet peeves with prawns, is addressed forthrightly. Even chapters on somewhat generic topics, such as site selection, water quality, and economics, are of excellent quality. Each chapter concludes with a comprehensive listing of essential references. The book

has a 14-page, well-constructed index. The book is physically heavy and dense, typical for Wiley publications, with an artful cover of green prawn outlines on a blue background.

This book will have the greatest appeal to prawn aquaculture scientists (most of whom contributed to this book) and other scientists interested in crustacean aquaculture and biology. The book is also of interest to aquaculture generalists, with abundant specific information on various topics with reference to prawns. It could be used as the text for a graduate-level course on prawn aquaculture. Certainly it has a place on the shelves of any university library with a collection of aquaculture reference works. This book is likely to stand for at least a decade as representative of the state of the science and art of prawn farming around the world.

<sup>1</sup>Editor-in-Chief, *World Aquaculture* magazine

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reduce the demand for fishmeal globally.

For some last comments regarding AwF, we refer again to Michael New who said back in 2003, "It is difficult to imagine that the idea of long-term environmental responsibility could be attractive to someone who is wondering where the next meal will come from and whether the family can be fed next week or next month, let alone next year." Thoughts of environmental and generational sustainability have to be way below the priorities of current survival. Those of us who have not yet

had the privilege of working in developing countries may not understand this. Oscar Wilde noted that: "There is only one class in the community that thinks more about money than the rich, and that is the poor. The poor can think of nothing else. That is the misery of being poor."

If you would like to donate or get involved with AwF in any way then please contact us through [www.aquaculturewithoutfrontiers.org](http://www.aquaculturewithoutfrontiers.org).

— Roy Palmer, Director, AwF