ANNUAL REPORT: CELEBRATING 25 YEARS OF MAP HISTORY

FY 2016
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2016 has been a year of transitions for both MAP and myself. Sharing the position of Executive Director with Sara Lavenhar has allowed me to begin aligning my time and energy for MAP more in the direction of support for MAP’s existing and potential programs, while leaving more of the administrative functions of MAP in Sara’s and the board’s capable hands. While we move towards a July 26th full transition to where Sara becomes the Executive Director for MAP and I take on the role of MAP’s International Program Director, both Sara and I have been sharing the administrative work attempting to build up MAP’s infrastructure and plan for the next decade of our work ahead.

In July of 2017, MAP will celebrate our 25th anniversary, commemorating the many years since our humble start in March 1992 when Pisit Charnsnoh, Ian Baird and I co-founded the global network Mangrove Action Project. MAP was meant at first to function as network only, exchanging ideas, sharing contacts and information, and identifying hotspots where mangroves were threatened, and pointing out those threats in order to counter them. From the start, MAP became a strong advocate for the mangroves, attracting many NGOs and individuals to the cause. A main target of our work aimed to counter the destructive and rapid expansion of shrimp farming in the mangrove areas of Asia, Africa and Latin America. We took on a strong advocacy role, becoming the first international NGO devoted to issues affecting mangroves. In those early years our network grew rapidly, as did our reputation, especially among community-based NGOs in the Global South where the threats to the mangroves and mangrove communities were greatest.

To meet the growing challenges that presented themselves to us, we had to expand our focus to ensure a more pro-active role in mangrove conservation issues, expanding our networking and advocacy mission to include actual mangrove conservation and restoration measures aimed at halting further losses and actually bringing degraded or lost mangrove areas back into productive forests. To accomplish this expanded mission, we thus included two vital programs, which today stand as the mainstay of MAP’s work—the Marvelous Mangrove Curriculum (MMC) and Community-Based Ecological Mangrove Restoration (CBEMR). These two tools along with our original roles of promoting local community resource tenure rights, advocacy, networking and information sharing form the basis for MAP’s ongoing efforts to save the mangroves.

Meanwhile, the challenges to save the mangroves are many, while the imperative for working to conserve and restore these unique coastal rainforests is growing in prominence as the world widens its knowledge and awareness as to the many important services and products the mangrove wetlands provide our planet.

Yes, finally, mangroves are getting the international recognition they so urgently deserve. There is growing awareness of their importance to combat climate change through carbon sequestration, and to mitigate the
adverse effects of rising sea levels, tsunamis, hurricanes and coastal flooding and erosion. Mangroves also
serve as nurseries for innumerable marine species, protecting coral reefs and sea grass beds from
sedimentation, present vital nesting sites and flyways for millions of migratory birds and habitat for
endangered species, while providing livelihoods and sustenance for thousands of coastal communities - all
of these and more are functions and services mangroves provide.

In my 25 years of service for the mangroves and mangrove communities, it has been both a pleasure and a
privilege to work to save our planet’s last stands of mangrove forests and all these mangroves stand for. Yet,
to paraphrase the great Nigerian activist Ken Saro Wiwa, “the struggle continues.” Now it is time for the
next generation to help us carry this torch and light the way towards a sustainable future with mangroves!

Alfredo Quarto, Co-Executive Director
MAP is about to reach its 25th year, and since I am the same age as MAP it is a little intimidating taking over as the new Executive Director. I have had a whole other life history to learn, and in fact, I am still learning new things almost every day. What I see over and over again as I dive into the work MAP and its staff have done over the past quarter-century is a relentless dedication to a globally-important ecosystem; and more importantly to a global community of people who rely on and live in that ecosystem. I am honored and humbled to be in this position.

I would like to take a brief step back to how I got here, because I think my own journey with MAP demonstrates the importance of the passion and strength that has kept this organization going despite fighting uphill battles from the word ‘go’.

When I was at Columbia University, I focused my studies on sustainable agriculture and food systems. So imagine my excitement when I saw ‘Food Sustainability Internship’ on a volunteer website! The position was to work on MAP’s Question Your Shrimp campaign. Now, I like to think of myself as an educated person, but I was shocked to learn that shrimp farming is the number one cause of mangrove deforestation. I was horrified to learn about the usage of slave labor, the usage of toxic chemicals, and the utter failure of governments that have known about this problem for decades – and have done little or nothing.

What was perhaps more shocking than all of that? I had no idea mangroves were so important. I had no idea that they provide food and fuel to over 210 million people; people who are also protected from storm surges and tsunamis by these incredible trees. I had no idea that they were home to dozens of endangered and unique species. I had no idea that they are the base of a food chain, and support coastal fisheries worldwide. I had no idea that they sequester up to 5 times as much carbon per area than any other forest type – including the rainforest. Mangroves account for less than 1% of all forest area, and yet they account for up to 10% of global deforestation emissions.

In fact, I hardly knew that mangroves existed. It was a stunning realization. I had been educated about coral reefs and the rainforest from the age of six, and I did not learn about one of the most critical – and most threatened – ecosystems on the planet until I was twenty.

In many ways, this is one of the greatest challenges that MAP faces as an organization: the lack of understanding that mangroves exist, and that they are vitally important to every single person on this planet. You can show a stranger on the street a picture of a tiger, and they understand that they are endangered and need saving. Show them a picture of a tree, and most will probably give you a blank stare. Here in Seattle, there are no mangroves, but these ecosystems impact us no matter where we are, and we impact them. We are all part of a global mangrove community, whether we know it or not. Most of us do not know it. Quite simply, there is a lack of education.
Education is something that MAP offers in many different ways and to many different audiences; from local mangrove communities to large foundations. What we offer is a practical, proven, scientific solution to the mangrove crisis we face. MAP has remained small in size and small in ego throughout its history: we have never desired to grow and balloon to the point where our values are compromised. Most importantly, we do not want mangrove communities to rely on us long-term for success. That means what resources we do have go into the programs, and it is really quite astonishing what MAP has managed to accomplish with very little.

In the end, all that matters is that we are here. Margaret Mead once said, “Don’t ever forget that a small group of thoughtful people can change the world. It’s the only thing that ever has.” And here we are, a small group of thoughtful people, about to write the next chapter in MAP’s history. This is the first line, the first paragraph of that chapter – building community in Seattle and around the world.

There is a lot of work to do – a lot of editing and revision and fervent writing done at two in the morning because we just have to get that idea on paper now. This chapter and those beyond it will not be full of fluff and filler – they will tell of our struggles and our successes, and how those things go hand in hand. With your help, we will take on challenges far bigger than any before, and we will show the governments and communities of this world that mangroves are worth saving - and in the same breath teach them how to do it.

As I take on this new role, I would like to thank everyone who has supported me throughout the process. Alfredo has a long legacy with MAP, and I am stepping into very large shoes. It is my hope that I can perform just as admirably and with just as much passion as he and the rest of our staff has. My job as a leader is to serve others, not myself – to serve our supporters and our staff, to serve the communities we work in, and to serve the mangrove forests.

Thank you for joining us on this incredible journey, and for all of your continued support.

Sara Lavenhar, Co-Executive Director
Marvellous Mangroves Curriculum

A busy year saw MAP’s Marvellous Mangroves (MM) Curriculum making the big time in Asia, South America, and the Caribbean, with preparation for at least two more countries in the coming year. The year began with a visit to Shenzhen in Mainland China. Working in conjunction with the Chinese Mangrove Conservation Network (CMCN) the Youyun Ecological Education Studio and the Yantian Foreign Languages School’s Ecological Education Centre, MAP’s education director, Martin Keeley, together with veteran environmental education teachers Steven Chen and Ms. Mabel Yo, ran several workshops and activities for teachers and students alike. Highlight of the trip was a special event in Shenzhen’s Sunset Park celebrating the life of the threatened Black-faced Spoonbill, which is being adopted as Shenzhen’s “official” bird.

Following the Chinese training programs, Mr. Keeley’s next workshop – one that has become an annual event - was held in Freeport, the Bahamas, in conjunction with EARTHCARE led by Gail Woon, where students from her Eco-kids group together with adults took part in a series of activities. Several schools also participated in exploratory workshops followed by a field trip to Lucayan National Park. Many programs were also conducted in the “home” of Marvellous Mangroves – the Cayman Islands.
MARVELLOUS MANGROVES CURRICULUM

1) Students studying microscopic life in mangrove water samples
2) Leaf stick test at the Coronie workshop
3) Water quality testing at the Coronie workshop
4) Presentation of a light-source microscope for use with schools at the Coronie Mangrove Education Centre
5) Eco-tour guides group
6) Eco-tour guides checking out mangrove roots
7) Microscopic analysis of water at the Coronie workshop
The highlight of the summer was the introduction of the Dutch version of *Marvellous Mangroves* to Suriname. Working in conjunction with our NGO partner, SORTS, led by the indomitable Loes Trustfull, a three-day workshop was held in Coronie complete with more than 40 teachers and the same number of students, plus gamekeepers from nearby Nickerie. Several students from the Botany Department of the Anton de Kon University, Ellen-Rose Kambel of the Rutu Foundation, and Errol Geziues, the interpreter and eco-tour guide, also played a vital role in the success of the workshop. After the workshop, a light-source microscope was presented to the Mangrove Education Centre in Coronie. The following week, Mr. Keeley ran a full-day workshop for a dozen eco-tour guides who are expanding their tourist trips from the jungle to the mangroves. Such workshops are now an integral part of the MM program. More Suriname workshops are planned for the new year together with an expanded eco-tourism component and the addition of a science lab for regional schools to use.

Two exciting new additions to the MM stable of offerings came out in the fall. The first is a book of *Mangrove Myths & Legends*, collected by Martin Keeley during his international travels. These enchanting stories from around the world of mangroves bring you the magic of goddesses, guardians, lost boys and ghosts, with wonderful illustrations by Daniella Christian. A copy can be ordered online from Pisgah Press. We will shortly be launching our multi-lingual interactive website for teachers and students throughout the mangrove world. You will soon be able to sign up and post your experiences and questions at [www.marvellousmangroves.org](http://www.marvellousmangroves.org).

Last but by no means least, Mr. Keeley gave a presentation at the international MMM4 conference held in St. Augustine in July. His theme was *Nature Deficit Disorder*, which is afflicting millions of young people around the world, and focused on how MM can alleviate – and even cure – the problem.

Since the inception of *Marvellous Mangroves* in the Cayman Islands, MAP’s mangrove curriculum has now been translated, adapted and introduced to thirteen countries worldwide, with more than 2,500 teachers and over 250,000 students taking part in this invaluable education program. Three countries – including India – are on the schedule for completion in the coming year. Funding From the Disney Worldwide Conservation Fund, the Singing Field Foundation and out associates the Mangrove & Reef Education Association, has been critical in the completion of both adaptations and translations this year. However, we still need more funding if we are to continue helping teachers, students and their communities change the way they think about mangroves.
MARVELLOUS MANGROVES CURRICULUM

NATURE DEFICIT DISORDER

Human beings, especially children, are spending much less time outdoors

Children are losing contact with nature at a “dramatic” rate

Attention disorders and depression may develop

Marvellous Mangroves

AN INTEGRATED CURRICULUM CONNECTING YOUNG PEOPLE TO THE NATURAL WORLD

Children LEARN MORE and BEHAVE BETTER during outdoor lessons

Chapter 1: ALL ABOUT MANGROVES

>2,000 teachers

>250,000 students

Chapter 2: MANGROVES AS HABITAT

China

Bangladesh

Sri Lanka

Indonesia

Australia

Chapter 3: EXPLORING MANGROVES

Chapter 4: HUMAN IMPACTS

Chapter 5: MAKING CHANGE

ENVIRONMENTAL EDUCATION

Students & Teachers EMPOWERED

HAPPIER // HEALTHIER LIFESTYLES

Symptoms of children diagnosed with ADHD improve when they are exposed to nature

100% OF STUDENTS HAVE CHANGED THE WAY THEY THINK ABOUT THEIR MANGROVES

The Marvellous Mangroves curriculum is an in-depth, hands-on, science-based conservation education program aimed at primary and secondary school children. It educates them on the importance of mangroves and their ecological functions and teaches them about modern challenges to and mechanisms for sustainability. Integrated with local and national curricula, it encourages and facilitates students to spend time in mangrove forests, including participation in field studies, research, and conservation. The Marvellous Mangroves curriculum is already used in 13 countries by 250,000 students and 2,000 teachers.

www.marvellousmangroves.org
Community-Based Ecological Mangrove Restoration and Sustainable Alternative Community Development

MAP-ASIA

Apiculture

The successful honey project, which started in Nai Nang, in Krabi province in Thailand, has now expanded to Ta-Sanook, Phang-Nga province. The project started four years ago in Nai Nang when MAP implemented a mangrove restoration site with the support of the German Ministry of Economic Cooperation and Development (BMZ) and the Global Nature Fund (GNF). In order to secure the long-term protection of the restoration efforts, MAP decided to help the community develop their apiculture activity as an alternative livelihood.

Most of the income and jobs around Nai Nang village are based on palm oil, rubber and fishing. The people asked themselves, “How can we make an income besides farming and fishing?” That’s when the idea of honeybees came up, as several community members had already built bee boxes, which had been colonized by the wild bee, *Apis cerana*. This is not only good for the environment, but also a great potential source of income and excellent for mangrove pollination.

The honey is partly produced from mangrove flowers. Nai Nang villagers had already been involved in apiculture for some time but MAP helped provide material, technical training, develop labels, marketing and equipment support to take this project to the next level. Apiculture workshops and value-add honey product training seminars were held for the local community members to learn how to produce hand soap, shampoo and conditioner to build capacity and market village produced products. The hives were incredibly successful, and the community sold 270 kiles of honey in 2015! A village Conservation Fund was established with 10% of all honey and honey product sales.

Part of MAP’s involvement has been providing packaging and marketing support, and things are looking good for Nai Nang! The Conservation Group at Nai Nang received a visit from Ms. Kanokwan Homchaaim (Nok), Marriott Thailand’s Field Coordinator for IUCN, and Mr. Sean Panton, Director of Corporate Social Responsibility at Marriott Hotels Thailand. He is responsible for the development of internal and external community and environmental programs and initiatives. Sean brought two chefs from Marriott Hotels in Phuket to taste test the honey. They liked it very much for the original salty-sweet taste, and developed a partnership to purchase all natural raw Nai Nang honey to supply their hotels in Thailand. The honey will be in the welcome drinks in Marriott Phuket and during the breakfast buffet in all the other Marriott branches.

At the beginning of this year, another MAP restoration site, funded by DAIMLER AG’s, the "Mangrove Conservation in Asia" project also managed by GNF in Ta-Sanook village in Phang-Nga showed keen interest...
COMMUNITY-BASED ECOLOGICAL MANGROVE RESTORATION AND SUSTAINABLE ALTERNATIVE COMMUNITY DEVELOPMENT

to develop apiculture as an alternative livelihood. Ta-Sanook village is a relatively close to Nai-Nang village; it became evident that something exciting could begin here. The knowledge gathered by locals from Nai-Nang village from several years of producing honey products is now being shared directly with Ta-Sanook villagers.

Early March 2016, 16 villagers from Ta-Sanook undertook a day-long training under the supervision of the experienced leaders from Nai-Nang village. They demonstrated bee-keeping techniques, shared beehive construction methods and gave important recommendations for producing honey. In addition, a second training session has been planned for the women of Nai Nang to teach their sisters at Ta Sanook the craft of making value added products such as shampoo, conditioner and hand soap.

This form of knowledge transfer is extremely thrilling and promising for community empowerment in the future.

The story doesn’t end there! Ta-Sanook is only at the beginning of the journey. The next step is building the wooden bee-boxes so that wild bees can colonize. MAP will provide the wood working tools throughout the project; however, the community has been encouraged to use recycled wood for the construction of the hives because the bees only require a dry clean home, nothing fancy. The aim is that the twinned communities are able to support each other in their apiculture enterprise.

As part of the project, the village also constructed a 70m Mangrove Interpretative Nature Trail, which will be a great asset for the environmental education program taking place in the local school. In December, after months of planning, building and organizing, the Mangrove Nature Trail and the Learning Center was officially opened at a special ceremony and finally ready to receive visitors!

This project brought together people from different villages, creating a place to discuss mangrove conservation and restoration ideas within each other, and most importantly encouraging people to work together and create long-term successful projects. The Learning Center is a place to

Speakers and villagers gather at the opening ceremony for the Mangrove Nature Trail and Learning Center
support mangrove environmental education of local schools, so children - as the future representatives of these communities - are not only learning inside the classroom but also outside in the middle of real mangrove environments.
COMMUNITY-BASED ECOLOGICAL MANGROVE RESTORATION AND SUSTAINABLE ALTERNATIVE COMMUNITY DEVELOPMENT

1) Chefs from Marriott Hotels in Phuket taste-test honey
2) Sean and Nok sample the honey
3) Nai Nang honey in three jar sizes
4) Nai Nang honeycomb
5) Knowledge transfer between Nai Nand and Ta-Sanook villagers
6) Exposing a hive at Nai Nang.
EPIC
In December 2015, Leo Thom, MAP visual communication consultant, and Tim Plowden, a professional photographer based in Singapore joined MAP-Asia staff, Jim & Ning in the field early December for 6 days in Krabi capturing film and photos for the production of the Ecosystems Protecting Infrastructure & Communities (EPIC) project’s short video.

IUCN's EPIC project taking place in 6 countries produced short videos to spread the message that healthy ecosystems are critical to reducing the impacts of future disasters, known as Ecosystem Based Disaster Risk Reduction or Eco-DRR for short. Nature-based solutions are an important strategy to deal with climate-change-intensified disasters. Mangroves act as critical coastal bio shields, which are able to self-repair following tropical storms, unlike fabricated hard infrastructure. They also slow the process of coastal erosion, which is accelerated by sea-level rise and more frequent and intense storms.

The team shot video of the two EPIC mangrove restoration demonstration sites on Klang Island in the Krabi River Estuary Ramsar Site, as well as the project advisory committee meeting, site monitoring, hydrological improvement work, Project Abroad volunteers engaged in restoration site maintenance and they interviewed key project stakeholders. Healthy mangroves ecosystems were filmed to illustrate the many goods and services obtained from mangroves, especially fishery based livelihoods.

Since its release, the video, entitled Mangroves: Reducing the Risk of Disaster through Nature-Based Solutions, has been shown in ten countries around the world. It was displayed in the reception area of the IUCN headquarters in Gland, Switzerland; screened at the IUCN World Conservation Congress in Hawaii; selected and screened at the International Festival of Sustainable Development Films - Ekotopfilm 2016 in the Czech Republic; and received the Nominee's Award by the China Science Film and Video Association.

View the film here: https://youtu.be/Ub0Z9x7NUYA.
INTERNATIONAL ADVOCACY AND OUTREACH

International Advocacy and Outreach

In 2016, MAP helped support important and urgent campaigns around the world via our global network including: opposing construction of the coal mining site at Rampal, Bangladesh; urging the government of Cancun to permanently stop the devastation of the mangrove swamp at Malecón Tajamar; and calling for an end to the destructive dredging of rivers and coastal areas of Cambodia and Singapore.

IUCN WORLD CONSERVATION CONGRESS

Alfredo Quarto and Jaruwan (Ning) Enright attended the IUCN Conservation Congress in September. Alfredo had the opportunity to organize and participate in a side event, titled Moving Towards a Sustainable Mangrove Economy. The purpose of this workshop was to show how "profitable" mangrove protection is, and how much modern societies could gain on an economic, social and ecological level if they replaced currently widespread unsustainable practices with sustainable and high added value practices, within a climate change context that will deeply affect mangroves in the years to come.

Ning participated in a session with EPIC on Eco-Disaster Risk Reduction (Eco-DRR). The session was designed for a broad audience, and featured contributions by scientists and practitioners alike. Ning presented a case study on MAP’s CBEMR work in Thailand, and engaged in group discussions about how science can inform practical implementation.
Along with Gaëlle Vandersarren of Conservatoire du Littoral, Alfredo engaged with IUCN attendees at a shared booth. He brought with him some of the honey and soap produced at Nai Nang, and presented three new posters on mangrove products, services, and apiculture.

MANGROVE ACTION DAY
Since 1998, the 26th of July has been called the "International Day of Mangroves" or "Mangrove Action Day," commemorating the Greenpeace activist Hayhow Daniel Nanoto, who died of a heart attack while involved in a massive protest action in Ecuador led by the environmental organizations FUNDECOL (Ecuador) and the crew from the Greenpeace flagship Rainbow Warrior.

Last year, Mangrove Action Day was officially recognized and celebrated by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) as the International Day for the Conservation of the Mangrove Ecosystem.

MAP has celebrated Mangrove Action Day from the beginning, joining with other organizations around the world to highlight these incredible ecosystems and the people that rely on them.

We ran our second annual mangrove.is photo gallery campaign to raise awareness of the connections people have with mangrove forests by creating a global photography exhibition. We received submissions from 19 different countries, demonstrating the wide range of these amazing trees, as well as the people who care about them.
We also put on our first fundraising event for Mangrove Action Day in Seattle, WA, at the Graham Visitors Center at the Washington Park Arboretum. One of the most common questions we are asked is ‘why are you in Seattle? There are no mangroves here.’ The answer we usually give is that mangroves affect us no matter where we are in the world, and we affect them.

For this event, we decided to ‘bring mangroves to Seattle’ to demonstrate that we are all part of a mangrove community, no matter where we live.

Using photos from the 2015 Mangrove Action Day photo gallery campaign and photos of endangered species that live in mangrove forests, along with some images of mangrove flowers, roots, and fruits, we decorated parts of the event space to bring mangrove forests into the sphere of Seattle.

BIWEEKLY MAP NEWS

MAP published its 406th edition of the MAP News at year’s end.

This newsletter is lauded in mangrove circles, including both NGOs and mangrove ecologists, who often commend MAP for its longstanding biweekly electronic newsletter. After almost 20 years of publishing the newsletter, MAP continues to share information globally sending out urgent action alerts, continuing as a key vehicle for MAP’s networking and advocacy work to defend the world’s mangroves.
Children’s Mangrove Art Calendar

Each year, MAP invites teachers and their students from around the globe to participate in an international contest. They learn through their participation about the incredible beauty and biodiversity of the mangroves, and the students’ attempts to depict through their art what they have experienced on field trips to mangroves and in classroom studies. Children from 12 nations entered our contest by answering a simple, but intriguing question: “What do the mangroves mean to my community and myself?”

This year, we commemorate those efforts via this edition of inspiring children’s art in MAP’s 16th annual Children’s Mangrove Art Contest Calendar for 2017.

As usual, it was difficult to choose from among the beautifully crafted works of children’s art. Around 3000 children participated from a multitude of schools located in nations containing mangroves. Through the publication and distribution of these beautiful calendars, MAP recognizes the great accomplishment of these young artists. We wish to thank each child, their teachers and the associate non-governmental organizations that participated and promoted the project in schools during 2016. Their good work and dedicated efforts have helped produce yet another attractive calendar for yet another “Mangrove Year!”
MAP would like to thank the following funders for providing support needed to run our programs:

**FOUNDATIONS**
Anonymous (2)
Charities Aid Foundation
The Body Shop Foundation
Disney Worldwide Conservation Fund
German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety's International Climate Initiative (BMU-ICI)
German Ministry for Economic Cooperation and Development (BMZ)
International Union for Conservation of Nature (IUCN)
McKnight Foundation
Singing Field Foundation
Synchronicity Earth

**MAJOR DONORS**
Molly Bang
Lee and Peter Lockwood
Thomas and Jackie Quarto
Stephanie Ross
Arnold Schouten
Margaret Stewart
Anonymous
## Financial Summary

### OPERATING REVENUE 2016

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<td>Grants/Foundations</td>
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### OPERATING EXPENSES 2016

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**Total 2016 Revenue & Balance Forward** $209,880

**Balance Forward 2016** $60,387

### Revenue Breakdown

- Grants/Foundations: 81%
- Individual/Major Donors: 19%

### Expenses Breakdown

- Programs: 77%
- Administration: 16%
- Fundraising: 7%
- Other Programs: 39%
- MAP-Asia Programs: 8%
- MAP-Curriculum Programs: 30%
MAP Staff and Board of Directors

MAP – USA

**Alfredo Quarto, Co-Executive Director and Co-founder**
Alfredo is a veteran campaigner with over 35 years of experience in organizing and writing on the environment and human rights issues. Formerly an aerospace engineer, his experiences range over many countries and several environmental organizations, with a long-term focus on forestry, indigenous cultures, and human rights. Alfredo has published numerous popular articles, book chapters, and conference papers on mangrove forest ecology, community-managed sustainable development, and shrimp aquaculture. He lives on a small, organic farm in Port Angeles, Washington and is conversant in Spanish.

**Sara Lavenhar, Co-Executive Director**
Sara Lavenhar is a recent graduate of Columbia University with a degree in environmental science and sustainable development. Introduced to MAP as an intern in 2013, Sara has been responsible for a wide range of duties from website development to volunteer and office management. Currently, she works in Seattle where she oversees fundraising, outreach, and operations for the Mangrove Action Project. As co-director, she is responsible for guiding MAP’s transition and helping to set the framework for the future, improving program delivery and strengthening outreach efforts.

**Monica Gutierrez-Quarto, Children’s Mangrove Art Calendar Coordinator**
Monica is a Chilean artist and printmaker who has helped coordinate the MAP International Children’s Art Calendar contest for the last 15 years. These beautiful calendars are gaining in popularity with each year. Monica also assists with database entry. She lives in Port Angeles, Washington with her husband Alfredo.

**Sam Nugent, MAP News Editor**
Sam is a graphic designer and editor. He also manages the graphic arts department for several small newspapers in the region around Port Angeles, WA where he is based. Sam was formerly the MAP Office Administrator and now currently compiles the bi-weekly MAP Newsletter.

**Leslie Hill, Accounting/Bookkeeping**
Leslie has worked since 2003 with MAP managing MAP’s financial records and IRS reporting essential for keeping MAP’s books and 501(c)3 non-profit status updated. She lives in Port Angeles, WA.

MAP – ASIA (THAILAND)

**Jim Enright, MAP – Asia Coordinator**
Jim oversees MAP’s office in Thailand which includes 5 Thai staff (3 full-time and 2 part-time) plus an international volunteer intern. Presently he oversees two German government funded CBEMR and livelihood field projects in southern Thailand and in Cambodia a partnership project with Participatory Management of Coastal Resources (PMCR) for over a decade. Before joining MAP in 2000, he spent 7 years working with coastal resource issues in Thailand, as a national park interpreter in Khao Sam Roi Yot,
Thailand’s first coastal national park, and with the Thai NGO, Yadfon Association, which promotes community-based coastal resource management (CBCRM) with coastal fishing communities in Trang. Jim has an honors degree in Environment Resource Studies with a specialty in international development. He is responsible for the MAP-Asia office based in Trang, southern Thailand, and speaks conversational Thai.

**Jaruwan Kaewmahanin (Ning), Field Project Manager**
Ning oversees MAP’s EMR and livelihood field program. Ning joined MAP in 2006 and came with 4 years’ experience in project management and coordination of action research related to mangrove for the Regional Community Forestry Training Center for Asia and Pacific (RECOFTC). She has 13 years in project management and coordination of action research related to mangrove and community-based natural resource management and networking among communities at the provincial, regional and international levels. She also has 5 years’ experience in participatory mapping and Geographic Information Systems (GIS) for natural resource management, including field application, training curriculum development and training of trainers while with Greenpeace she was involved in environmental education for children.

**Udomsak Pariwatpan (Em), Field Project Officer**
Em is MAP-Asia’s Project Field Officer and holds a Bachelor of Science (Technology for Marine and Coastal Resources Management) from Walailak University, Nakhon Si Thammarat. He has 6 years experiences working with Seub Nivasathien Foundation as a Geographic Information System (GIS) officer and has worked with the Environmental Research Institute, Chulalongkorn University for 8 months. He also has skills on computer systems and basic computer graphic design. Em joined MAP-Asia as a field officer in August 2015.

**Pimaaksara Chalermwon (Pick)**
Pick is MAP-Asia’s first Officer Administrator as of Jan. 2016. She joined MAP in Oct. 2015 as Project Officer Thailand to manage the Community-Based Ecological Mangrove Restoration (CBEMR) project funded by Global Nature Fund (GNF) Germany. She has six years freelance experience with local communities and has worked for The Institute of Research and Development (IRD) at Walailak University focusing on community-based research with villagers in Nakhon Sri Thammarat. Pick has been involved in a project called “Trang River Research” with The Thailand Research Fund. She also has journalism experience and has strong skills in southern Thai culture.

**EDUCATION PROGRAM**

**Martin Keeley, Education Director**
Martin brings 17 years of experience as a teacher and over 25 years in environmental education to his work developing and implementing MAP’s Mangrove Curriculum with teachers, NGOs, and Education Ministries worldwide. Before joining MAP, Martin was the founder and Executive Director of a wetland education project called the Friends of Boundary Bay/Fraser River for Life Communications Society – based on the border of BC, Canada and Washington state- for 8 years. With more than 45 years of experience in communications and education, he has developed extensive and award-winning environmental education programs on wetlands. Martin lives in the Cayman Islands.
MAP STAFF AND BOARD OF DIRECTORS

MAP – INTERNATIONAL PLAYERS

Leo Thom, MAP Visual Communications
Leo gained a first class degree and then a diploma in Landscape Architecture and went onto teach Landscape Architecture for 4 years at Kingston University London whilst always focusing and experimenting with different forms of visual communication including moving image. Having co-founded an award winning design studio, Room60, he now spends most time working on a variety of environmental projects around the tropics. Leo currently lives in London.

BOARD OF DIRECTORS

Roger de Freitas, President
Roger is a British philanthropist who often works directly with local NGOs to develop their capacity to deal with a broad range of challenges. Before joining the Open Spaces Society, a British conservation group, as a Vice-President, Roger was the chairman of the BTCV, the UK’s largest practical conservation charity, and the 2010 UK charity of the year. He is also a Board Advisor of Global Nature Fund, the project holder of an Asia regional mangrove restoration project involving MAP-Asia.

Fiona Wilmot, Vice President
Fiona Wilmot ran Keys Connectivity, Inc. St. Petersburg, Florida, USA which provides support services for stakeholder groups engaged in marine conservation and social justice. She has worked primarily for the National Marine Sanctuary Program in the Florida Keys and also provides assistance to the Gulf and Caribbean Fisheries Institute. She recently completed her doctorate at Texas A&M University focusing on political ecology working with select coastal communities in El Salvador with a view to see how they adapt to environmental, economic and political change.

Meryl Redisch, Secretary
Since retiring as the executive director of Portland Audubon, Meryl Redisch is spending a lot more time enjoying Oregon’s natural beauty. When she is not skiing, hiking, or traveling, she works to advance policies related to urban and community forestry including; as chair of Portland’s Urban Forestry Commission. Meryl grew up in New York City and secured her first job as an Urban Park Ranger in Central Park. She graduated from Skidmore College with a degree in Environmental Science and Forestry. After leaving Brooklyn to go west in 1994, she ran TreeUtah, an urban forestry and community building organization. There, she finally learned to ski powder and picked up another Bachelor’s degree in Geography from the University of Utah.

Roan Blacker, Treasurer
Roan Blacker has been financially advising, raising capital and monitoring finances for nonprofit corporations and government organizations for nearly 30 years. As Treasurer, Roan oversees MAP’s finances and monitors the corporation’s reporting and fiscal policies. Over his career he has raised more than a billion dollars of capital for his client’s causes. Roan is a graduate in Economics and Latin American Studies from UCLA, and earned his MBA from the Columbia University. Currently he is President of Blacker
F/CS, a financial consulting firm for nonprofit and government entities, and is a professor of accounting at Olympic College.

**John Cowan, Board Member**

John Cowan is an experienced program development leader with a record of developing and implementing strategic planning that leads to sustained success. Skilled at developing people centered programs and helping them to build effective teams that contribute to a sustainable development, he has worked with such organizations as the UNDP, NZODA, and the Asian Development Bank. He currently works at NuAlchemy, a consulting practice specialized in technology commercialization, reclaimed water systems development, and strategic planning for business growth both organic and through strategic mergers and partnerships.

**Gary Voerman, Board Member**

From 2007-2015 Garrett Voerman, served as Science Policy Manager in the Environmental Affairs Division of Seattle City Light (one of the nation’s greenest utilities) providing management and leadership direction for the Science Policy Unit and department wide programs including Climate Research and Adaptation, Greenhouse Gas Mitigation, Endangered Species Act Protection and Adaptation Programs. He oversaw significant scientific research programs in both climate science and fish protection. He assisted in the development of policies and procedures regarding issues such as Climate Change and Carbon neutrality and the monitoring and recovery of Endangered Species Act (ESA)-listed species potentially affected by City Light hydroelectric projects. He also oversaw a funding program that generated significant revenue for the ESA program by successfully securing grants and matching funds for aquatic habitat protection and restoration.

Garrett has a B.S. in Biology from the University of Pennsylvania and a Masters Degree in Public Health from the University of North Carolina. He is a founding member of the Northwest Chapter of the Society of Wetland Scientists.

**Graham Andrews, Board Member**

Graham Andrews recently graduated from the Evans School of Public Policy & Governance with a Masters of Public Administration and has 8 years combined experience in scientific programming and software project management. Formerly a software designer and program manager for Microsoft, Graham has had success in roles in software development, project management and team organization. Since joining the board, Graham has brought his talents to considering MAP’s financial situation, designing a framework for evaluation of the CBEMR program, and connected MAP to the Evan’s School for networking and internship opportunities.