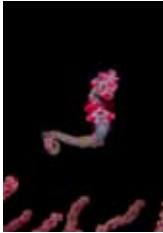


A DECADE ADVANCING MARINE CONSERVATION

Project  Seahorse

AT
10

WINNING ENTRIES FROM THE 2005 GUYLIAN CHOCOLATES “SEAHORSES OF THE WORLD” PHOTO CONTEST



THIRD: *HIPPOCAMPUS BARGIBANTI*
BY ALEX MUSTARD



THIRD: *ZEEPAARDJE 1*
BY IRENE LOOTS



THIRD: SPRING GATHERING
BY FREDERIC MAXANT



THIRD: I'M ONLY A BABY
BY MELISSA RUSHBY



THIRD: PUNK SEAHORSE
BY DAVID HARASTI



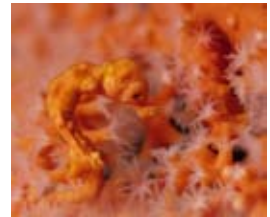
THIRD: SEAHORSE ON NET 2
BY GREG MIDDLETON



THIRD: *HIPPOCAMPUS ERECTUS*
BY NING NING GONG



GRAND PRIZE: THE GOLDEN COUPLE
BY SAM TAYLOR



THIRD: WHITE ANGEL
BY STELLA COVRE



THIRD: BY DALIA MAHMOUJD



SECOND: PRETTY IN PINK
BY MELISSA RUSHBY



SPECIAL MERIT: PRINCESS
BY TAH SIN CEYLAN



HONORABLE MENTION:
HISTRIX ON SEA PEN
BY ANTIDIO ROSSI



HONORABLE MENTION:
THE GOLDEN ONE
BY MELISSA RUSHBY



HONORABLE MENTION:
COMES ON SPONGE
BY ANTIDIO ROSSI



HONORABLE MENTION:
HIPPOCAMPUS BARGIBANTI
BY MASSIMO BOYER



HONORABLE MENTION:
HONEY, WE'RE PREGNANT
BY STEWART SY



HONORABLE MENTION:
YELLOW FELLOW
ON HIS SPONGE
BY MARTINA FUCHSBERGER



HONORABLE MENTION:
YELLOW SEAHORSE
BY PETER RYNGAERT



HONORABLE MENTION:
HAIRY SEAHORSE
BY ERIC RIESCH



HONORABLE MENTION:
RED EYE SEAHORSE
BY PETER RYNGAERT



HONORABLE MENTION:
HIPPOCAMPUS HISTRIX
BY MASSIMO BOYER



HONORABLE MENTION:
BY LOIS HAESLER

A DECADE

On the cover:
A marine protected area at Bilangbilangan (North) on the Philippines' Danajon Bank



From the Directors

As the Project Seahorse marine conservation team reaches its tenth anniversary, it is important that we pause and reflect on our accomplishments to date. Our team was born out of a passion for marine life, and continues to thrive on a commitment to the oceans. From the very beginning, we agreed that, when faced with a difficult choice in priorities, we would always choose the option that was most likely to lead to conservation gain. Such a perspective was unusual in both the academic and public aquarium circles where the team originated, but it has served us well.

Project Seahorse now goes proudly into its second decade, with an ongoing commitment to conservation gain driven by sound research. This perspective translates into catalysing bold action even while acknowledging and addressing uncertainty, and while standing ready to adapt as new information emerges. The choice is, after all, between imperfect advice or none at all. And our ocean life and coastal communities are far too valuable and vulnerable to be left without support. Thanks to tremendous enduring support from our many colleagues, friends, partners and donors, we are ready to go forward with renewed energy.



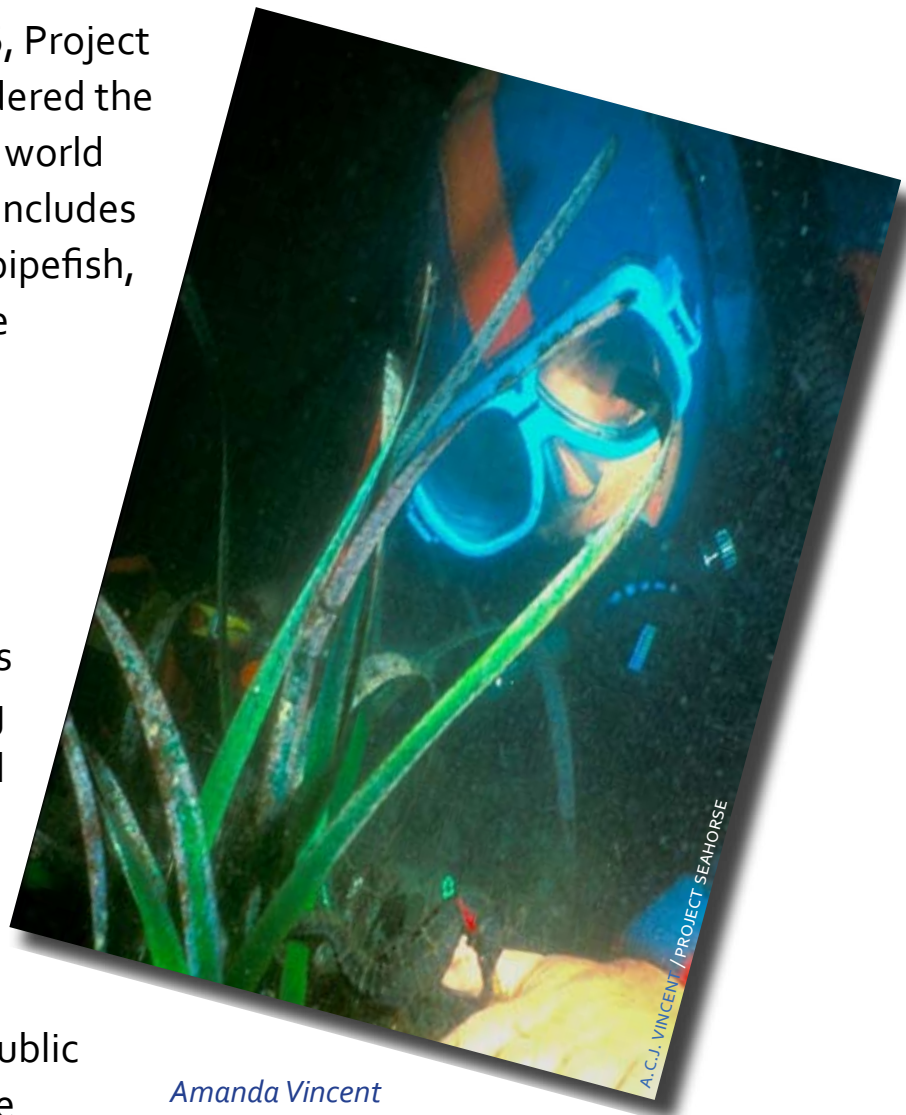
Amanda Vincent,
Director



Heather Koldewey,
Associate Director

Project Seahorse has made significant contributions to marine conservation in general, and to seahorse conservation in particular. Its vision is a world with healthy and well-managed marine coastal ecosystems. This interdisciplinary and international organization is committed to conservation and sustainable use of the world's coastal marine ecosystems. The group engages in connected research and management at scales ranging from community initiatives to international accords. Collaborating with stakeholders and partners, it uses the charismatic seahorses to focus human efforts in finding marine conservation solutions.

Since its founding in 1996, Project Seahorse has been considered the foremost authority in the world on the family of fish that includes 300 species of seahorse, pipefish, seadragon, and pipehorse (Syngnathidae). Project Seahorse has produced a large proportion of the world's research on these fishes, approved global conservation assessments (IUCN), chaired a working group for an international trade accord (CITES), provided input to the definitive fish database on the web (FishBase), and advised public aquarium and aquaculture ventures internationally.



*Amanda Vincent
observing a tagged seahorse
in Australia.*



In 1996, the world knew nothing of the conservation threats to seahorses, and little about seahorses themselves. Project Seahorse and its Director, Dr. Amanda Vincent, were the first to study seahorses underwater, the first to discover their huge trade, the first to identify the threatened status of seahorses, and the first to launch seahorse conservation measures.

Ten years on, Project Seahorse and its partners can take credit for a new reality: 169 countries are bound to constrain seahorse exports to sustainable levels; tens of millions of people have heard of the fragile state of seahorse populations; hundreds of professionals are engaged in studying and caring for these fish; seahorse biology and identification have been well analysed ... and remedial measures to conserve seahorses are emerging around the world.



Villagers and the Project Seahorse team discuss placement of a marine reserve at Busalian, Talibon, Bohol.

Handumon lantern-fishers prepare for a night's work



A.C.J. VINCENT / PROJECT SEAHORSE

True to Project Seahorse intent, our gains for seahorses represent gains for many other marine species and systems: innovative management measures for multiple species are now recommended internationally; 28 marine reserves have emerged, protecting all species therein; an alliance of 800 fishing families has found a voice for coastal resource management; traditional Chinese medicine practitioners in Hong Kong are adjusting purchases of marine species; incidental capture in shrimp trawl must be monitored ... and marine conservation has a new charisma.

Project Seahorse is now active in managing small-scale fisheries, reducing bycatch, sustaining marine reserves, empowering women, minimizing risks from aquaculture, advising on sustainable trade, analysing options for syngnathid conservation, and sharing vital information with a wide array of stakeholders. This document begins by providing indicators of the team's success before turning to evidence of its effectiveness.



Recognition of Project Seahorse Contributions

Project Seahorse is proud to have achieved conservation gains that received awards:

- Conservation Hero award from Disney World Conservation Fund in 2006, for the alliance of subsistence fishers (KAMADA) we fostered in the Philippines.
- Chevron Conservation Award 2005, to Amanda Vincent.
- Award for Excellence in 2004, from the Coastal Conservation and Education Foundation (CCEF) and University of the Philippines-Marine Science Institute, to the Project Seahorse Foundation for Marine Conservation.
- AZA Significant Achievement Award for international conservation, in 2001, to the Project Seahorse/John G. Shedd Aquarium partnership.
- Pew Fellowship in Marine Conservation in 2000, the world's pre-eminent accolade in this field, to Amanda Vincent.
- Rolex Award for Enterprise in 1998, for empowering fishers to conserve and manage seahorses, to Amanda Vincent.
- Grand Prix International pour l'Environnement Marin from the Confédération Mondiale des Activités Subaquatiques (CMAS) in 1997, to Amanda Vincent.



Hippocampus bargibanti

Examples of Project Seahorse work, innovation & success

Contributions are presented through concentric rings of influence on the persistence of species themselves, in what might be termed an “onion world.”



SPECIES RESEARCH

- Conducted field research on syngnathids in 12 countries across six continents.
- Undertook surveys with fishers and traders in 29 countries across all continents.



Hippocampus breviceps (and a winner of the 'Seahorses of the World' photo contest)



H. denise

- Tagged and tracked nearly 3000 individual seahorses in Australia, Philippines, Portugal, and South Africa as well as surveying populations.
- Discovered that many seahorse species form permanent faithful pairs.
- Found a new species of pygmy seahorse, *Hippocampus denise*, one of the smallest fishes in the world, with adults the size of a baby fingernail.
- Published the first seahorse identification guide in 1999, which has become the standard for conservation and management action.



- Published the first synthesis and analysis of seahorse life history in 2004.
- Created a reference collection of seahorse specimens with representatives of most species.
- Compiled a comprehensive library on syngnathid conservation and management and used it to advise colleagues around the world.
- Engaged in the only long-term monitoring of syngnathid populations in Australia, Philippines and Portugal.
- Obtained the first estimates of growth and survival rates in the wild for any seahorse species, from Portugal and Australia.
- Completed many other novel research projects, as summarized in the “discoveries” document.

MARINE RESERVE ESTABLISHMENT

- Catalyzed the creation of 22 no-take reserves in the Philippines and supported development of another 6, for a total of 28 reserves.
- Facilitated construction of seven guardhouses for reserves and the acquisition of three patrol boats and sets of communication equipment.
- Since 1998, monitored ecological change around no-take reserves in Danajon Bank, Bohol, Philippines, for a current total of 8 reserves and 5 distant water reference sites.
- Published reports of fish population recovery in and near reserves we catalyzed.



An early marine reserve guardhouse

ENGAGING STAKEHOLDERS

- Mentored creation and development of an alliance of small-scale fishers, KAMADA, on Danajon Bank in the Philippines; it includes more than 800 families, has chapters in 21 communities, and is leading in establishment of marine reserves and enforcement against illegal fishing.
- Funded 33 children of Filipino fishing families to complete high school, in exchange for participating as marine conservation apprentices.
- Facilitated the formation and strengthening of four grassroots or people's organizations (PO) and one island-wide coalition in the Philippines; assisted one of these to build a guest house and two training centres.
- Engendered research and management cooperation from the Hong Kong Chinese Medicine Merchants Association and other industry groups.
- Assisted four traditional Chinese medicine business groups to develop a voluntary code of conduct for seahorse imports to Hong Kong, including constraints on trade in pregnant males.



Amanda and team member Samuel Lee Kwok Hung (right) with Mr. Fok and Mr. Tsang, our colleagues with the Hong Kong Chinese Medicine Merchants Association. Our seahorse conservation posters hang in their meeting room.

- Held a national conference-workshop on the conservation and management of seahorses in Cebu, Philippines.
- Created a network of 130 researchers in 28 countries to exchange ideas on syngnathid biology and conservation.
- Fostered the development of the National Alliance of Communities Managing Marine Protected Areas (PAMANA KA sa Filipinas).

TRADE ASSESSMENT

- Discovered the global trade in seahorses, through extensive field surveys, and published this landmark report in 1996.
- Recorded an annual trade of an estimated 24 million animals in 32 countries by 1995.
- Renewed trade work revealing the annual trade around the year 2000 likely included 20 species moving among nearly 80 countries.
- Collected data and monitored changes in the international seahorse trade in 28 countries.
- Published papers that, for the first time, assessed the seahorse trade in Australia, East Africa, Latin America, and Viet Nam.
- Through cooperation with UK Customs agents, accepted and found homes for more than 400 confiscated live seahorses (from 6 species) since 2004.

Dried seahorses are traded around the world as medicines and curiosities.



AQUARIUM COLLECTIONS AND AQUACULTURE SUPPORT

- Held the first workshop on husbandry, management and conservation of seahorses at the Shedd Aquarium, Chicago, USA.
- Established and co-ordinated the European zoo and aquarium breeding program for seahorses.
- Completed the first regional collection plan for zoos and aquariums for a marine fish, starting with seahorses.
- Produced the first compilation of knowledge on seahorse husbandry in public aquariums, drawing on zoos and aquariums from around the world.
- Undertook first international review of seahorse aquaculture, representing work underway in 27 research and commercial facilities globally.
- Initiated a network for professional aquarists interested in syngnathids, which now includes 293 members in 82 institutions in 17 countries.
- Hosted an international workshop on the management and culture of marine species used in traditional medicines, where different constituencies planned a way forward.
- Wrote the first paper on seahorse aquaculture in a developing country, from Viet Nam.



An aquarist feeds a tank of seahorses at the London Zoo.



FISHERIES MANAGEMENT

- In response to concerns about pipehorse populations, motivated Queensland (Australia) to set up its first Fisheries Observer system to track incidental capture in shrimp trawl nets, and developed guidelines for boat captains to avoid catching such species.
- Produced novel reports on the trade in marine life for curiosities, leather, bioprospecting, research and teaching, aquarium use, and traditional medicine.
- Did the research that led the University of British Columbia (Canada) to adopt a sustainable approach to seafood purchases, reducing the ecological footprint of 50,000 people.
- Wrote the first studies of seahorse capture in trawl fishing gear, from surveys in Florida (USA) and Viet Nam.
- Undertook syngnathid risk assessments for the Southeast Trawl Fishery for the Australian government.



Hookah fishers take to sea in the Philippines.

CONSERVATION AND MANAGEMENT RECOMMENDATIONS

- Undertook the first global conservation assessments for seahorse species, for the IUCN Red List of Threatened Species (www.redlist.org).
- Continued as the Red List Authority for all seahorses, helping decide which species get listed as threatened.
- Created the momentum and provided the technical knowledge to establish the first controls on the international trade in marine fish of commercial importance – under a global Convention called CITES – with seahorses as the case study.
- Devised a universal minimum size limit for seahorses in trade, now officially recommended for use in 169 countries.
- Completed the first impact assessment of human activities on the marine environment along the Pacific coast of Canada.
- Provided global assessments of conservation status of all syngnathids: 9 of 34 species are threatened, while lack of information means the risk for the others cannot be assessed.
- Identified means for countries to improve the sustainability of their seahorse exports, particularly through two CITES technical workshops.
- Advised governments around the world on how to regulate seahorse trade such that it does not imperil wild populations.



Protecting seahorses means protecting their habitats, such as coral reefs.

POLICY PROGRESS

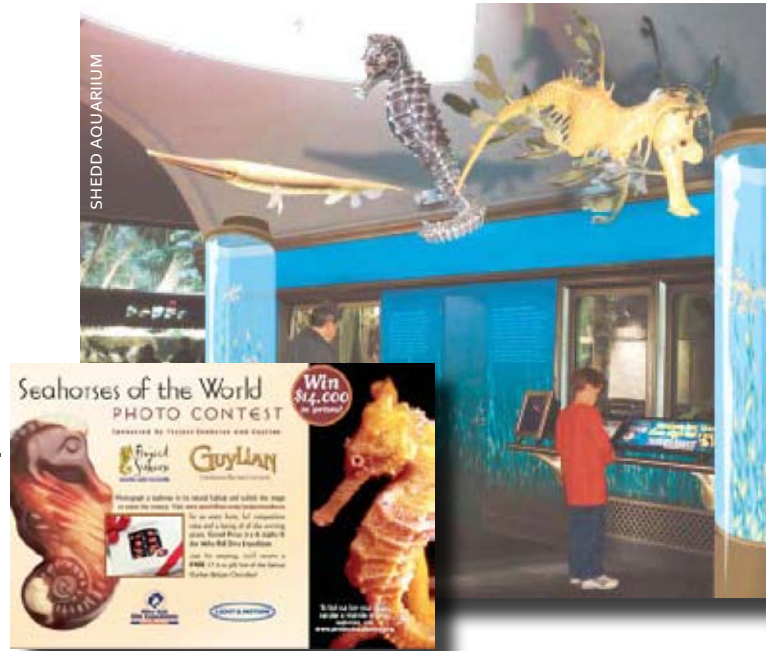
- Motivated the first listing of marine fish on the Australian Wildlife Protection Act, requiring that all seahorses come from a sustainably managed source.
- Prompted inclusion of seahorses on a list that required all European Union countries to document their trade.
- Provoked Hong Kong to begin documenting all trade in syngnathids.
- Involved in obtaining full protection for all syngnathids in four Australian states.
- Prompted Philippines' initiatives to amend the national Fishery Code to allow ongoing sustainable use of marine species whose trade is regulated by CITES, as intended by this international body.
- Facilitated the creation of a national seahorse conservation technical working group in Philippines, under the auspices of the government.



Weedy seadragons, like all syngnathids, are now protected in Australian waters.

OUTREACH ACHIEVEMENTS

- Published 42 peer-reviewed articles, 13 conference proceedings, 3 book chapters, and many other policy briefings, bulletins, and publications.
- Met more than 200 requests for assistance with seahorse identification.
- Served as syngnathid focal point for FishBase global information tool, a classic website.
- Reached approximately 7000 people per month with our website and/or our newsletter.
- Informed exhibits on Project Seahorse work in seahorse biology and conservation in at least 18 major public aquariums reaching far more than 10 million visitors per annum.
- Supported creation of the Seahorse Symphony special exhibit at the John G. Shedd Aquarium, Chicago, USA, which won the American Association of Zoos and Aquariums award for the best exhibit, running for nearly six years.
- Engaged 16,000 visitors in seahorse conservation activities at the John G. Shedd Aquarium's Seahorse Celebration weekend.
- Responded to thousands of public letters and emails, from children, fish hobbyists, divers, travellers and animal lovers.
- Co-hosted with Guylian Chocolates an international syngnathid photographic competition to obtain outstanding images for use in conservation ventures, and established displays in public aquariums.



An international photo contest, and an award-winning display at the Shedd Aquarium.

MEDIA COMMUNICATIONS

- Subject of six full-length TV documentaries around the world, by the BBC (UK), Nova (USA), Discovery (Canada), Discovery (Portugal), Channel FR3 (France), Asahi (Japan).
- Featured in over 26 television news programs in Asia, Australia, Europe, and North America.
- Interviewed on at least 44 radio programs.
- Appeared in at least 260 news stories and 200 magazine features.

ORGANIZATIONAL DEVELOPMENT

- Founded the Project Seahorse Foundation for Marine Conservation, a non-profit conservation organization based in the Philippines that leads our national initiatives.
- Worked in formal research partnership with 18 groups and institutions, including indigenous peoples in Canada, resource management bodies in the Philippines, universities in Asia, and zoos and aquariums in Europe and North America.
- Engaged about 94 professional team members, including anthropologists, biologists, community organizers, communication specialists, and lawyers.
- Supervised 18 Ph.D. students, 3 M.Sc. students, and 23 undergraduate projects.
- Employed 34 local villagers from the Philippines.
- Trained more than 50 international volunteers in surveying response of marine reserves to protection in coral reefs.



Workshop participants, 1998

Project Seahorse

ADVANCING MARINE CONSERVATION

For more information of our achievements, or any of our current programs, please contact:

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www.projectseahorse.org/donors.html





On the back:
A Filipino lantern fisher surfaces with a seahorse. Photo by Tom Bertelsen

