Batangas Field Project: Focusing on participation of community members of Barangay Sto. Tomas in coastal management

Sulu Fund is making progress in raising people’s awareness for marine conservation in Sto. Tomas, Batangas. The community is formulating actions to address issues on fisheries, coral reef conservation, tourism, alternative livelihood and the environment in general. The ultimate goal is to establish a well-managed marine reserve.

Community leaders, local government representatives join Study Tour on Coastal Resource Management

A study tour to San Salvador Island, Masinloc, Zambales and Bolinao, Pangasinan was conducted for representatives of Barangay Sto. Tomas and Isla Verde on February 11-14, 2000.

Organized by Sulu Fund in coordination with the Municipality of Masinloc, Bolinao project members and staff and the Haribon Foundation, the tour has paved the way for Sulu Fund to further its work in the area. Their first-hand exposure to other communities that have become actively involved successfully in managing a protected area, alternative livelihood projects, and the conservation of endangered giant clams has inspired in participants greater confidence in the coastal resource management process.

Local officials and leaders have long decried the lack of unity for non-social activities among residents of Barangay Sto. Tomas. Sulu Fund is promoting improved community organization as the key to the sustainable development of the barangay’s coastal resources.
Editorial

CLIMATE CHANGE AND EFFECTS ON PHILIPPINE CORAL REEFS IN 2050—ANOTHER GOOD REASON TO PROTECT OUR REEFS NOW!

It is projected that air temperature will warm by as much as 0.9 degrees Centigrade in the Philippines by the year 2050 and there will be an increase in rainfall of up to 0.4 mm per day. This may not seem large but they could cause significant changes in the way certain ecosystems function in this tropical part of the world.

Let us look at those organisms that live near the upper range of their tolerance for heat. The first group that comes to mind is coral animals and their associates. Depending on the species, corals can only live in water of up to 32 degrees Centigrade. When this temperature is reached, the microscopic algae or zooxanthellae that live inside the coral polyp and provide food for the animal and color to its appearance die or become “bleached”. Once this happens, the coral animal eventually dies. This is what happened during the 1998 “El Nino” event when tropical sea surface temperatures rose to 33-35 degrees centigrade in many tropical areas including the Philippines. In 1998 about 20 percent of living coral in southern Philippines died.

What are the implications of this and is this likely to become more frequent by the year 2050?

Yes, it is highly probable that sea surface temperatures will rise in the Philippines over the next 50 years and, as more “El Ninos” occur, more stony corals and many related animals such as sea anemones and soft corals and those directly dependent on these for food and habitat will be impacted or die. This phenomenon of corals dying will decrease reef growth, causing significant changes in large areas of nearshore and offshore coral reefs known to be the single most productive marine ecosystem on earth.

What will this mean to a typical coastal area and human community in the Philippines? A few significant and probable impacts will be that:

- Coral reefs will have more algal growth and less coral growth;
- Fish communities will change in favor of herbivores;
- Fish species such as parrotfish and butterflyfish will become fewer in number and selected species could become extinct, at least locally;
- The table and branching coral genus, Acropora sp., will be hard hit and almost disappear from many reefs;
- The very common butterflyfish species Chaetodon trifascialis that only feeds on Acropora sp. table corals will totally lose its habitat and become very rare;
- Dead corals will erode with wave action and the natural shoreline protection from reef structures will decline, causing coastal erosion during storms and high tides;
- The abundance of fish living and captured on a healthy coral reef will decline, thus affecting food and economic security of coastal communities;
- The coral reef will become less attractive for scuba divers and tourists, who bring significant revenues to topical communities; and,
- Coastal communities will be forced to change to livelihoods that at present do not exist.

In summary, coral reefs will suffer and become less of a “coral reef” and more of a “rocky reef” with algae. Although this sounds pessimistic, we can use this information, even if hypothetical, as a wakeup call for people to protect their coral reefs. There is hope: if the events described above do occur, reefs are resilient and can survive if people give them a chance through good management. In light of this, we need many more well managed marine sanctuaries, one of the main concerns of the Sulu Fund! Let’s act now!

Alan T. White

SULU FUND Exhibit in St. Francis of Assisi Parish Malate, Manila

With an invitation from Greenpeace and Environmental supporter Beau, Sulu Fund held an exhibit at the St. Francis of Assisi Parish, Malate last October 1, 2000. The same exhibit presented in Sto. Tomas was used in this activity.

During the exhibit, Sulu Fund showed samples of SULPA, a container made of bamboo used by Sto. Tomas fishers as a waterproof handicraft container. SULPA could be used for various purposes. Danny believes that the material is going to be a handicraft product of Sto. Tomas in the future.

Leadership Training to be held in October

Gigie Cruz, our new full-time volunteer, will conduct a leadership training and education program for members of Barangay Sto. Tomas.

We would like to welcome Ms. Gigie Cruz as part of Sulu Fund, and we hope to obtain more financial support to fully hire her. Gigi will focus on projects concerning the women sector. Presently, she is discussing projects for sewing and handicraft making.
Education Seminar for the Youth

In May, a Basic Environmental Education Seminar for younger members of the community was conducted. This was one of the activities identified during the study tour and was a means to echo the knowledge gained during the trip. Topics focused on the status of the Philippine environment, especially the marine environment, and workshops were conducted to demonstrate important relationships in nature and the value of each organism. More than 60 youth members of the community attended. At the end of the seminar, the participants, ranging in age from 4 to 20+ years old, also made a pledge for the environment and identified possible activities they could participate in.

Baseline Information Gathering

A barangay-wide baseline information gathering activity was conducted and echoed during the organisation formation seminar in July. Relevant information covering more than 50% of the households gathered included primary livelihood sources, opinions on relevant issues such as marine sanctuaries and tourism, and possible alternative livelihoods. Thanks are due to the volunteers namely, Gigie Cruz, Maan Mayo, Dhitz Bisenio, Paeng Lopez, Steven Sy, Rey Panaligan and John-B Ongsiapco who made this meeting a success.

A temporary set of officers was elected during the seminar. These officers are now doing the paperwork required to formalize the organization. They are also looking at possibilities of organizing a cooperative that could address the issue of livelihood. As in the case of most projects dealing with conservation, alternative livelihood sources need to be explored since people are more willing to conserve resources if they have other means of supporting their basic needs.

Palata Newsletter

A community newsletter called PALATA (the local collective term for damselfishes) is now in production. If you wish to receive a copy, please contact Sulu Fund in Cebu or Danny Ocampo directly.

PALATA is in Tagalog.

Coral Reef Monitoring Expedition to Tubbataha Reef National Marine Park, Sulu Sea, May 2000

Sulu Fund in coordination with the Coastal Resource Management Project (CRMP) of DENR with support from the United States Agency for International Development, conducted a Coral Reef Monitoring Expedition to Tubbataha Reef National Marine Park, last May 20-31, 2000. It was supported by 12 excellent scuba diver volunteers (see list of volunteers) from the United States, United Kingdom and Switzerland.

The project monitored the condition of coral reefs in Tubbataha Marine Park to update past surveys conducted in 1984, 1989, 1992 and 1996. The team verified that the coral bleaching of 1998 reduced the living branching coral cover by about 23% as observed in most of the study sites. On the other hand, increased fish diversity and abundance as well as the presence of large marine life such as sharks and sea turtles indicates that the area is well protected and not affected by overfishing. The team recommends improved patrolling, education for the visitors and the general public and other management activities to further guard and protect the existing condition of the sanctuary.

On their first day, the volunteers honed their snorkeling and scuba diving skills, and then sat through a short briefing on the field project, and an orientation, presentation and discussion on Tubbataha. After that, they spent their days doing survey activities (after a morning briefing) and compiling the gathered data on their return to the base in the afternoon. In the evenings, after a night dive and an appetizing dinner, they watched presentations prepared by the staff.

The volunteers' participation in the reef survey was invaluable and has helped us tremendously to document the status of the reefs.
The survey expedition was very successful and the results indicate the benefits of an established sanctuary. The group had fun and worked hard with few mishaps. One exception was the day of the jellyfish stings, which left some people looking like they came down with the measles! The weather was ideal except during the last two days when there was some wind and lots of rain from a low-pressure area. The rough seas on the return voyage to Puerto Princesa left a few people a bit sick but spirits were still high from the trip. Some volunteers vowed to return on another Sulu Fund reef monitoring expedition.

For those interested to find out more about the trip results, please request a copy of the report: *Coral Reef Surveys for Conservation in Tubbataha Reef National Marine Park, Sulu Sea.*

Our warmest thanks to the following Volunteers:
1. Breckinridge Willcox (Maryland)
2. Brian Giles (Arizona)
3. Thomas Mueller, Ph. D (Little Deer Isle)
4. Edward Jones (Vietnam)
5. Thure Meyer (New York, USA)
6. Larry Chiang (Mountain View, USA)
7. Renae Franz (Arizona)
8. Deborah Zulliger (Switzerland)
9. Vittoria Annoscia-Thornley (UK)
10. Lynn Braitman (Santa Paula, USA)
11. Mary Julia Cichowski (Boston, USA)
12. Maria C. Meyer (New York, USA)

**Earthwatch Expedition**

**Saving Philippine Reefs**

**Coral Reef Conservation in Batangas is scheduled in April 2001**

We are glad to announce that the next research expedition will be in Mabini and Tingloy, Batangas. The project will continue and augment coral reef surveys and monitoring of coral reefs in the Batangas area that were started in the early 1980’s by researchers from the University of the Philippines and Dr. Alan White.

Dates are:
Team 1 April 6-15, 2001  
(supervision of Dr. Alan White as PI)

Team 2 April 16-25, 2001  
(supervision of Dr. Patrick Christie as co-PI)

We look forward to see the past and new volunteers! Any questions and suggestions about the expedition may be directed to Sulu Fund at sulufund@mozcom.com.

Or please contact:

Earthwatch Institute  
3 Clock Tower Place, Suite 100,  
Box 75, Maynard, MA 01754-0075  
Tel (978) 461-0081 ext 302

**Other News**

**Board Members for year 2000**

President Alan White  
Vice President Lori Tan (Publication Coordinator)  
Treasurer/Secretary Evangeline White  
Batangas Coordinator Albert Salamanca  
Palawan Coordinator Angelique Songco  
Journalism/Writer Yasmin Arquiza (Publication)  
Research Support Maria Carmel Meyer

And welcome also to our new research assistant Ms. Elline Cañares. Elline is a graduate of Marine Biology from Silliman University. She is replacing Gel Alvarado who recently moved to the University of Washington as a Fulbright scholar. Good luck to all past and present staff of Sulu Fund!

**Information Projects**

**New Philippine Coral Reef Book**

Finally, the book went to press in October! Our sincerest thanks to the staff of Sulu Fund and friends who helped our author Alan White finish the book!!! We will let you know when the book is out in the market.

The book has 623 underwater photos donated by excellent photographers. Thank you all--we will return the borrowed slides when we get them back from the printer.

**China Workshop Regional Workshop on Coastal and Marine Environment**

GEC Global Environmental Consultants, Ltd. through the trust of Mr. Peter McNamee of Vancouver, B.C. Canada, requested Sulu Fund to provide them with technical services. Alan White went to China last March 6-8, 2000 to attend the workshop and present a paper he prepared with co-authors Sulu Fund board member Albert Salamanca and Catherine Courtney of the Coastal Resource Management Project.
Sulu Fund for Marine Conservation Foundation Books and Products

BOOKS

**Beneath Philippine Seas** 1997, Robert Yin, 135 pages, hardbound Pesos 1800; $US50 and softbound Pesos 1300; $US40 [A wonderful assortment of large underwater photos on each page by one of the most dedicated Filipino photographers residing in San Diego, CA]

**Philippine Coral Reefs in Watercolor** 1997, Rafael Cusi (artist), Bortles, L., White, A.T., and Cassey, C. (text), 128 pages, hardbound. Pesos 1800; $US50. [A stunning collection of watercolor paintings depicting Philippine coral reefs at their best in an extremely pleasing style. This unique book is enhanced by text which describes both the plight of coral reefs and the activities underway in the Philippines to conserve and manage this valuable resource.]

**Field Guide to the Common Mangroves, Seagrasses and Algae of the Philippines** 1997, Hilconida Calumpong and Ernani Menez, 197 pages, soft-cover. Pesos 600; $US20. [This is the first comprehensive and authoritative book on the common marine plants of Philippine shores and reefs. It facilitates identification to the species level with good, clear photographs.]


**Tales from Tubbataha: Natural History, Resource Use, and Conservation of the Tubbataha Reefs Palawan, Philippines** 2000, Yasmin Arquiza and Alan White, 136 pages, soft-cover. Pesos 595 US$15 [This is the only book which summarizes the status of Tubbataha Reef National Marine Park in a comprehensive and readable manner. It tracks the changes in the coral reef environment from the many impacts of people and in relation to political forces.]

**Philippine Coral Reefs, A Natural History Guide** 1987, Alan White, 223 pages, soft-cover, Pesos 600; $US20. [This is the most comprehensive guidebook to Philippine reefs in print with 240 photos and lists of the most common marine organisms with accurate descriptions.]


**Philippine Biodiversity** An assessment and action plan, 1997 Department of Environment and Natural Resources (DENR) and United Nations Environment Program (UNEP), Pesos 1500 US$50.


**Tropical Pacific Invertebrate Book** by Patrick L. Colin and Charles Arneson, Pesos 2350; $US60.

Anilao 2000 by Eduardo CuUnjieng, hard bound Pesos 3,700 (US$93)

OTHER PRODUCTS

**Save Philippine Reefs T-Shirt** Design with reef fish on front, Small, Medium or Large, Pesos 300; $US10.

VHS Tape of "Philippine Coral Reefs-Resource at Risk" Pesos 500; $US15

VHS Tape of “Quiet Places" Pesos 500; US$15 goes with “Ecotourism in the Philippines" Book Pesos 140; US$4

**Post cards** (various underwater designs) photo by R. Yin 12 pcs per pack for Pesos 100; US$3

**Map of Philippine Culture and Exosystems** Pesos 150; US$4

**Map, Decline of the Philippine Forest** 150; US$4

ORDERING AND PAYMENT

Please send orders to Sulu Fund in Cebu and enclose payment by check payable to Sulu Fund in Pesos or US$. For mailing within the Philippines, please add Pesos 100 $US3. For airmail outside of the Philippines please add Pesos 500 or $US13 to your order. Via Federal Express, please add US$40.

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