

Research and Education at Palk Bay Center: Mangroves and Seagrass

The Palk Bay Centre in South India is dedicated to environmental education aimed at both children and adolescents as well as adults. As a coastal research field station with appropriate training programs, the PBC is also counseling center for coastal ecology and socio-economy of the northern Palk Bay. On the agenda are trainings for disaster management or trainings for alternative sources of income, especially for women in the region.



A Report by Vedharajan Balaji

Mangrove Nursery and Plantation Work

1,500 Seedlings of terrestrial avenue and fruit yielding tree seedlings have been raised in at our nursery since last year. They were donated to villages adjacent to coastal areas. Since the establishment of our nursery Palk Bay Centre, about 15,000 seedlings were produced and distributed to local villages.

Volunteers for Nursery Field Work: Two final year school students Arnae and Thorge from Germany arrived to Palk Bay Centre as volunteers. They worked in mangrove and terrestrial nursery for planting seeds, preparing mud in nursery pockets and helping OMCAR field staffs in transporting nursery raised seedlings. They also helped to thatch coconut roofs for nursery.

Backyard Nursery: 1,500 Seedlings were grown in backyards of village homes by women self help members. The seedlings were transferred back to PBC nursery. This system involves local community in mangrove conservation by growing first three months of seedlings in their backyard, which share responsibility in mangrove conservation.

Construction of Mangrove Nursery: The mangrove nursery at Palk Bay Centre was reconstructed. It was damaged by strong wind and rain in previous month. The mangrove seedlings of this nursery were planted in December 2013 along the coast. A total number of 2800 seedlings (of which 1500 from women groups) were raised in our nursery in 2013.

Student Mangrove Plantation Event: Twenty nine students were participated in this event.

Importance of mangroves against natural disasters was explained to the students. Then, the students carried the mangrove seedlings to local coastal area and planted them in selected site.

Marine Awareness Events

School Seagrass-Dugong Awareness Events: Our team visited local schools to create awareness about Palk Bay seagrass beds and dugongs. 4654 students were participated in our educational events in 2013. The education includes



Local fishermen are involved in mapping and measuring the seagrass areas along the coast.



Nearly 600 students participated the marine awareness events at Palk Bay Center.



A huge number of seedlings were grown in backyards of village homes

displaying posters, class lectures, drawing and writing activities on dugong and its habitat conservation in Palk Bay.

Palk Bay Centre – Field marine education events for students: 31 students from Sambai-pattinam Govt. School and 33 students from Thokkalikadu Govt. School have participated Palk Bay Centre events on 28th Feb. 2013. They learned about marine planktons, seagrass beds, mangroves, and how the coastal ecosystems support fishery productivity. 56 Students from two schools and three teachers have participated on 8th July 2013 and 54 students and two teachers from two schools were participated on 17th July 2013 in our monthly marine awareness education event held at Palk Bay Centre. In October 32 students from Udaiyanadu School and 28 students from Azhagiyanayagipuram School visited to Palk Bay Centre to learn about Palk Bay marine ecosystems and its benefits.

Palk Bay Centre – Field marine education events for fishermen: In February 2013, About 35 fishers from Velivayal village have participated in this event held at Palk Bay Centre. Seagrass underwater video clips from local coast shown to fishers in order to explain the relationship between sustainable fishery and ecosystem health. Fishers have also added their opinion on which types of fishes living in different seagrass meadows and varying depths.

Palk Bay Centre – Sustainable fishery education for fisher woman: In addition to youths, Palk Bay Centre is conducting events for fisher woman. Local fisher woman self help groups were invited to attend one day sustainable fishery education event. A total number of 20 women were participated in this event. Most of them have not completed their primary education. They learned about marine food chain, local fishery methods and how woman can contribute to sustainable fishery practices by helping their husbands

Palk Bay Centre - Coastal Cleanup event: 28 students from Khadir Mohideen High School have participated in costal clean up event held at Velivayal beach on 27th February 2013. The stu-

dents joined with OMCAR staffs and volunteers for cleaning garbage accumulated in the coast. The local beach is polluted by visiting tourists. The students participated in this event as a part of their environmental education and field work through national green corps and eco-club.

Marine Awareness Camp: The objective of the camp is to raise awareness amongst 10 teachers and 40 students of coastal and marine biodiversity and ecosystems, the threats that they face and the efforts of the government and other institutions to protect our natural resources. The two day camp was held at OMCAR Palk Centre. In first day, students learned through LCD presentation, videos, demonstration of marine research equipments. In second day, students visited local mangrove forest by boat and learned about mangroves and its benefits.

Conservation Research in Palk Bay

Smooth Coated Otter Survey in Palk Bay: Otters thought to be locally extinct from Palk Bay. Our research identified a small population of otters in remote areas by the initiative of OMCAR Foundation. Further steps are being taken to ensure the habitat protection and conservation research of otters.

Handling Death of Humpback Dolphin: A humpback dolphin washed ashore in Palk Bay. OMCAR organized for necropsy with the support of local forest department. OMCAR organized for printing and tv media coverage to focus on conservation humpback dolphins of Palk Bay. Such systematic approach of handling and media coverage of dead marine mammal was organized in this region for the first time.

Acoustic Dugong Feeding Ground Survey: A total area of 110 square kilometers was surveyed by acoustic habitat mapping echo sounder between January and November. This study found continuous seagrass meadows of approximately 7278 hectares in the 110 square kilometer of study area. Further field work is planned for 2014 year.

Studying Mangrove Crab Density in Restored



A mikroskope offers new perspectives.



The new generator

Mangrove Sites: A crab population study was carried out in mangreen site. This study showed that the number of crab burrows were maximum (433) in mangrove area than non mangrove areas. This proved that mangrove crabs prefer to live and make burrow close to mangrove trees. Hence, our restored mangrove sites play key role providing economic and ecological benefits in Palk Bay.

Documentation of Palk Bay Fishes for Sustainable Fishing Awareness: 132 fishes species have been collected and photographed from local fish landing centre. These fishes are being displayed to local students to show the fish diversity and its commercial value to promote sustainable fishery in Palk Bay.

Dive Expedition for Filming Underwater Habitats of Palk Bay: We conducted dive expedition for filming of fishes, seagrass beds, sea cucumbers and artificial reefs. These videos have been shown to hundreds of school students who visit Palk Bay Centre monthly awareness events.

Community Work

Construction of Fisher Community Hall at Velivayal: A community hall was constructed for fishers in Velivayal village, as requested by the villagers. This simple hall is helpful for monthly women self help group meetings, family gatherings, resting and repairing net by local fisher families.

Palk Bay Centre Toilet Construction: A toilet was constructed at Palk Bay Centre for student visitors. It is helpful for visiting students.



A community hall was constructed in Velivayal village



When ever possible excursions through the mangroves were organized for the students.

Fisher Beach Volley Ball Event at Palk Bay Centre: We helped to organize this event with district sports department. In 2014, we are planning to raise awareness about dugongs and its habitat among fishing community by organizing fisher beach volley ball competition at Palk Bay Centre.

Period:

since June 2004

Funding 2013:

42.795 Euro

Project partner:

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