

The monthly newsletter of the Pakistan Wetlands Programme (PWP) is published to inform donors, scientists, academics, researchers, environmentalists and environmentally concerned individuals of all qualifications and ages about the Programme, its projects and upcoming events while giving insights and updates on research, education, and habitat management activities. The PWP's objective is to conserve the globally important wetlands biodiversity in Pakistan while alleviating poverty. It is a progressive initiative of the Federal Ministry of Environment and is being implemented by the World Wide Fund for Nature, Pakistan (WWF P). It is funded by a consortium of national and international donors including, the Global Environment Facility (GEF), United Nations Development Programme (UNDP), the Royal Netherlands Embassy (RNE), WWF Global Network and the Pakistan Poverty Alleviation Fund (PPAF).

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PWP's survey member steers the boat away from barrage gates.

Programme Updates

Expedition to Control Feral Cats and Ship Rats at Astola Island, Gwadar.

According to a research survey carried out by MCWC's site team, feral cats are a major threat to the endangered marine species of Astola Island. They not only attack the turtle hatchlings and feed on turtle eggs, but are also known to injure adult female turtles at the time of egg laying. In addition, feral cats threaten the migratory birds that visit the island.

To deal with this problem, a PWP team conducted an expedition to control the feral cats and ship rats at Astola Island. No rats were found either on the plateau or the beach. However, most of the wild and domesticated cats were captured.

Awareness-raising Workshop

The MCWC site office conducted an awareness-raising workshop for the fisher-folk of Astola Island on the importance of Coral Reefs. The workshop was attended by about 40 fishermen whose livelihood depends on the fish and lobsters found in the vicinity of Astola Island.

Abdul Rahim, Site Manager of MCWC explained the various components of a coral reef, its life cycle, diseases, threats, as well as the close relationship between coral well-being and dependent marine life including fish and lobster species. A recent survey shows that the coral reef has been significantly damaged due to careless fishing practices, use of inappropriate fishing gear and













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Fishermen discussing their concerns

anchoring. Rahim urged the fishermen to adopt sustainable fishing practices and protect the delicate ecosystem of Astola Island.

Survey of Fishing Crafts and Gear

The PWP has hired a consultant from the Pakistan Museum of Natural History to conduct a survey of the fishing crafts and fishing gear used off the Balochistan coast.



Local fishing boat coming into harbour.

In the first phase of this survey, the consultant, Shabbir, has completed his research from the areas of Pasni, Astola Island,

of engines used by fishing boats, methods of fishing and socio-economic condition of the fishermen.

The PWP plans to use this information to assess the fishing industry and suggest measures to improve fishing practices as well as make it more environment friendly.

Under Water Survey of Astola Island

An underwater survey of the coral reef at Astola Island was recently conducted by the MCWC site team. The purpose of the survey was to study the



Close-up of coral reef at Astola Island

different animal and plant species associated with the coral reef as well as determine if it faces any threats due to anthropogenic activities.

The survey showed that the coral reef was damaged in several areas due to both natural and

eating fish. However, greater damage to the reef was caused by human activities such as anchoring, walking on the coral bed, breaking coral pieces, disposing off broken pieces of fishing net near the reef.

Meeting with the Ishkoman Development Organisation

A meeting of PWP staff members and representatives from Proper Ishkoman Development Organisation (PIDO) was held at the NAWC. The purpose of the meeting was to strengthen the relationship between PIDO, the PWP and Saving Wetlands Sky High project of the WWF-P, as well as discuss areas of collaboration for the future.

The PIDO representative was of the view that to ensure greater success in the field of high altitude wetlands conservation, it is imperative to provide training on awareness-raising and communication to all concerned stakeholders including teachers NGO staff, government officials and community members.

Field visit to Skardu

Staff members and interns from the NAWC, Regional Operations Base Gilgit visited the Sadpara village in District Skardu to analyse livelihood improvement opportunities for the local community and collect data on alternative fuel sources.

Primary data collection was done using a simple questionnaire. Some informal interviews and group discussions were also conducted with representatives of the local community.

After the field visit, the research team met with the Divisional Forest Officer of Skardu District as well as with the Regional Programme Manager of Agha Khan Rural Support Programme, to solicit their views.

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Local fishermen out at sea.

Kalmat, Chandi, Kawari and He has collected Ormara. information about the existing condition of fishing crafts, types

human-induced causes. Natural causes include sedimentation, coral diseases and coral predation by coralContinued from page 2

Training on Basic Accounts and Record Keeping

The NAWC organised a three-day training in Chitral on Basic Accounts and Record Keeping to familiarise staff members of Community-based Organisations with the standard procedures of office management including maintenance of office records and accounts.

A total of nineteen participants, mostly finance and administration staff members from various organisations attended the training. These included Chianter Welfare Society Broghil (CWSB), Yarkhun Area Welfare, Development & Conservation Organisation (YAWDCO), Northern Chitral Community Board (NCCB), Shandoor Welfare Society (SWS),

Qarambar and Shandoor Area Development Organisation (QASADO) and Youth Advocacy Forum Laspur (YAF).

Mr. Imtiaz Hussain, Divisional Forest Officer Wildlife, Chitral was the Chief Guest at the closing ceremony. He praised the PWP for their efforts in capacity-building of community-based organisations and explained how such trainings would boost the performance and efficiency of these organisations.



Participants attending basic accounts training.

Public Event

International Conference on "Partnership/Networking for Promotion of Research and Knowledge in the Northern Areas"

Karakorum International University (KIU), Gilgit, established by the Higher Education Commission in 2002 as the only seat of higher learning in the Northern Areas, organised a three day international conference on "Partnership/Networking for the Promotion of Research and Knowledge in the Northern Areas" from 7-9 April, 2008 at its sprawling campus in Gilgit.

The main objective of this conference was to present the findings of national and international luminaries who are undertaking research in the social and physical sciences in the Northern Areas and to find ways and means of establishing KIU as a repository for past, present and

future research pertaining to the Northern Areas. About 50 researchers and visitors, both from Pakistan and Europe, attended the conference, in addition to local notables and selected university students. Some illustrious names in Northern Areas research such as Herman Kreutzmann and Dr. Hauptmann came all the way from Germany for this occasion. The Italian Ambassador in Islamabad also graced the occasion with his presence.

WWF-Pakistan and Pakistan Wetlands Programme were also invited by the Vice-Chancellor, Dr. Aziz Najam, to attend and to sponsor various aspects of the conference.



Opening day group Photograph.

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Ali Habib, Director General, WWF-P, addressing the conference delegates.

PWP offered four vehicles for the use of the participants including transport from Islamabad to Gilgit in case of flight cancellations, a session on wetlands and a contribution of Rs. 100,000 for publications of conference proceedings. WWF-Pakistan was represented by Ali Hassan Habib, Director General and Dr. Ejaz Ahmad, Deputy Director General. PWP was represented by Dr. Humaira Khan, Wetlands Specialist based at the Gilgit Regional Operations Base.

The first day consisted of presentations by researchers, especially in the field of natural and social sciences.

On the second day, participants were divided into a number of groups for brainstorming the establishment of a resource



Listening to various addresses by distinguished guest

centre at KIU. In the afternoon, the groups made their presentations and this part of the conference concluded with an open discussion between Dr. Najam and the participants. In the closing session, the presentation about PWP in which she explained the background of the programme, its objectives, wetlands concept and benefits, and the past, present and future activities of PWP in the Northern Areas. This gave PWP a wide coverage in front of national and international audience.

During the conference, Dr. Humaira also explored PWP research possibilities with Hermann Kreutzmann of the Free University of Berlin, Germany and Dr. Anna Bocci of the University of Siena, Italy.

On the third day, stalls were set up by numerous NGOs and government departments for the visit of the distinguished guests and other participants of the conference. PWP set up



Guests visiting an information stall during the conference.

Italian, German and Pakistani groups gave their remarks, followed by a vote of thanks by the Vice-Chancellor. In his thanks, the VC specifically mentioned the contribution of PWP to the conference.

Following the afternoon tea, Dr. Humaira Khan gave a a stall jointly with WWF-Pakistan and presented informational folders about PWP to the visitors. The conference ended after a successful cultural visit of the participants to the Hunza valley.

Technical Innovations ("Cool stuff")

"LR-24 Backpack Electro fisher"

Electro fishing is a common scientific survey method used to sample fish populations to determine abundance, density and species composition. The LR-24 backpack is the most



advanced electro fisher ever produced. Its design incorporates many new safety features to help protect both operating personnel and fish.

An immersion sensor automatically turns the output off if the bottom of the pack frame comes into contact with the water.

The anode-out-of-water detector automatically turns off the output if the anode ring is raised out of the water while the output is on.

The user interface has been completely redesigned to make the LR-24 quick and easy to use. With the quick setup feature that the LR-24 automatically sets output voltage, frequency



Survey members using electro fisher in Azad Jammu and Kashmir.

and duty cycle.

The LR-24 remembers the settings that were last used and powers up with these settings. There are 10 storage locations for different voltage, frequency and duty cycle setups for use at any time. The setups stored in these locations can be recalled

adjusted and other parameters are adjusted by default.

A new pack suspension system allows for maximum flexibility and comfort. The newer and finer control over the output helps reduce injuries to fish. Power limits mode allows the user to set a maximum output power level



quickly for use at different sites. The most appropriate voltage used is almost 280-300 volts while conductivity is reasonable, however voltage can be



Team members using the Electro Fisher.

that the LR-24 will not exceed. Dual output mode lets the user setup two different waveforms, voltages and switch from the first to the second in less than a second by simply pressing anode ON/OFF switch twice. The user can then switch back to the first waveform and voltage by releasing the anode pole switch for over a second then pressing it again. The LR-24 has better output regulation and allows greater user control of the output



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PWP's Zafar Ali testing the electro fisher.

than any electro fisher before. In all cases electro fishers should be set by observing fish behavior and recovery times, not by voltage or current measurement. "Rolling fish over" should be avoided when electro fishing. If the settings high enough to quickly knock fish out the rate of injury is higher than it should be. Ideally fish will swim into the net while following the anode. The recovery time should be zero and fish should be able to swim normally, when being placed in the holding tank. It should not take more than five seconds for a fish to recover after being placed in the holding tank.

The most experienced member of the electro fishing crew should be doing the netting. They know what to expect, what to look for, and where to look. The next most important member should be running the LR-24, looking for likely habitat. The next most experience crew member should take care of the collected fish.

By: Muhammad Faisal Khan, Wetlands Survey Programme.

Learning to Maximise our Potential

In Pakistan, bureaucrats and military leaders have always played a key role in the country's decision making. However, no formal Natural Resource Management (NRM) training is imparted to the civil servants or personnel of the three armed services while they complete their studies at various institutions. PWP identified these institutions and approached them to include training on NRM in their respective curricula. The Civil

Services Academy, Lahore, Headquarters Frontier Corps, Peshawar, and Cantonments Executive officers of Rawalpindi region are among the first who have agreed to teach the basic concepts of NRM as part of their environmental education.

In addition to the abovementioned institutions, the National Programme Manager of the PWP gave a presentation on the Biodiversity of Pakistan and Pakistan Wetlands Programme to the Commandant and staff members of National Defence University (NDU). NDU is one of the most reputable institutions in the country that imparts professional training to government officials, senior bureaucrats as well as selected officers from the international and Pakistan Armed Forces. The presentation was much appreciated and the management of the university agreed to liaise with the PWP to include NRM training in their syllabus.

By: Col Mushtaq Ahmed Khan (Retd), consultant training, PWP

I was first appointed as an intern

at the Pakistan Wetlands

Interns Corner

Programme, NAWC, Gilgit Operational Base, in March 2008 soon after completing my Masters degree in Business Administration from Karakoram International University, Gilgit. Since the last three months, I have been working on a project investigating livelihood improvement opportunities at two sites of the Northern Alpine Wetlands Complex, namely, Karambar and Sadpara Deosai. This assignment has helped me to understand the different natural resources that exist in our area, the benefits of conserving them and how they can be utilised by members of the local communities for sustainable income-generation.

I am grateful to PWP for giving me the opportunity to enhance my knowledge and skills. I would especially like to thank my supervisors, Dr. Humaira Khan and Tajdar Hussain without whose support, I would not have been able to complete the assigned tasks.

By: Shahana Kosar, PWP Intern, Regional Operations Base, Gilgit

World Wide Wetlands

Coral Reef Monitoring & Management Course

The PWP sponsored three candidates from the MCWC site office to attend a ten-day intensive course on Coral Reef Monitoring and Management held at Sharm el Sheikh, Egypt.



PWP members and their instructors.

The aim of the course was to familiarise participants with the importance of coral reefs, the threats being faced by them, and the techniques that can be used to survey, monitor and manage reef species. The measures introduced in various countries to conserve coral reefs and to ensure sustainable use of their resources were also discussed.

place inside the Ras Mohammad National Park and the associated marine protected areas that extend along the coast. The participants also examined two other marine habitats that are often closely associated with reefs: mangrove forests and sea grass beds.

Moving the Shared Knowledge is Best when Shared

The reputation of Cracid Breeding and Conservation Centre (CBCC) inspired PWP's Ahmad Khan, and he expressed the desire to train Pakistanis at CBCC with their Director, Dr. Geer Scheres. At their sixth meeting it was decided that two Pakistanis would get training from the experts at CBCC. Subsequently, M/S Khan Malook and Abdul Rahman were nominated by the NWFP Wildlife Department. The visa process at the Belgium Embassy took longer than anticipated and the trainees finally depart from Pakistan in late June, to catch up with the training. At CBCC, the trainees through practical training learnt techniques of crane husbandry, captive breeding, artificial insemination, chicks rearing, and diseases management. Upon their return to Pakistan, they spent a week at the NWFP Wildlife Department's International Crane Centre, established at Lakki. As a follow up to the training, the CBCC may donate pairs of cranes for the Lakki Crane Centre for display and education purposes. PWP considers the training as a foundation stone of a long-term partnership between Pakistan Wetlands Programme, NWFP Wildlife Department, and Cracid Breeding and Conservation Centre. This training could not have been successful without the personal interest of Mr. Geer Scheres and Mr. Luud Geerlings of CBCC, Dr. Muhammad Mumtaz Malik of NWFP Wildlife Department, Mr. Richard Garstang of Pakistan Wetlands Programme, and the Ambassador of Belgium to Pakistan, Islamabad.

Crossing the Barrage

The field work for the course took



A View of the Barrage gates.

A team from the PWP visited Guddu Barrage from 8th to 21st

April to determine whether or not dolphins can move through the

barrage during canal closure. This is part of a wider study to evaluate fragmentation of the



PWP members setting a recording T-POD.

Indus dolphin population. Water depth and velocity inside the barrage gates was measured and indicated that is physically possible for dolphins to move



Survey members taking velocity readings.



Guddu barrage stretching for 4302 feet.



Different water levels visible on barrage walls



PWP's member scans the water for dolphin.



Passing through the Guddu Barrage.

through the barrage (upstream or downstream) during canal closure. Visual surveys and acoustic data from the T-PODs (underwater acoustic recorders) show that dolphins are often observed within 200m of the barrage when the gates are open. High velocity, especially upstream, means that the area in

the vicinity of the barrage is not favoured habitat during canal closure and although dolphins occur in the area, they are not present in large numbers. Based on our field visit, it is concluded that while dolphins can move through the barrage during canal closure, the total number of dolphins that move

after the gates have been opened for several weeks is likely to be small. However, as our team arrived after initial opening of the gates on April 1st, it is possible that larger numbers of dolphins moved through the gates around this time.

by: Gill Braulik.

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