PHILIPPINE ENDEMIC SPECIES CONSERVATION PROJECT

(PESCP)

Fifteenth Annual Report

January 2009

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In tight cooperation with

Aklan State University (Philippines)
Department of Environment and Natural Resources (Philippines)
Frankfurt Zoological Society (Germany)
Ruhr-University Bochum (Germany)
GTZ / CIM (Germany)



Events in 2008 – a mixed Blessing

Front cover anti-clockwise

Upper left: **Devastation on national road between Pandan and Libertad after typhoon** 'Frank' of 20 June 2008. Courtesy A. D. Demegillo

Similar, more massive destruction along street in Kalibo, Aklan Province, with piles of mud from flash flood ravaging the town belly high. Courtesy A. D. Demegillo

Primary forest tree with buttressing roots, a still pristine ecosystem near PESCP's Research Station 'Sibaliw', home to the Panay Shrew (next picture). Courtesy I. Frank

Panay Shrew (*Crocidura panayensis*), a new mammal and Panay endemite, from primary forest in the upland of the NW Panay Peninsula (see App. 5). Courtesy E. Curio

Art work by Helga Schulze, Bochum

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Pandan and Bochum, January 2009

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Fifteenth Annual Report 2009

An Update and Thorough Revision of the ,Fourteenth Annual Report' 2008

Title of Project and Time Period:

Philippine Endemic Species Conservation Project (PESCP); the time period covered is the year 2008.

The project's work is formalised under the aegis of a Memorandum of Agreement between the DENR and Ruhr-University Bochum, renewed in 2006, and a collecting permit, covering collecting (blood, plants, ectoparasites), the realised and potential prey of the Marine Toad or Cane Toad (Bufo marinus, locally known also as 'Hawaiian Frog'), and accidentally obtained specimens (e.g. road kills) that represent new species or new distributional records. Links with many environmentally concerned agencies/ institutions are continuing to thrive and many others are developing: Asian Institute for Lithurgy and Music, Pres. Dr. F. Feliciano and CEO Lillibeth Nacion-Puyot (Quezon City), BII (Birds International Inc., Quezon City), Erwin-Warth-Stiftung, Pres. Hilde Stühlinger (Stuttgart, Germany), Green Forum - Western Visayas (Iloilo, Panay), the GTZ and CIM (German Agency for Technical Assistance, Eschborn; Centre for Internatl. Migration and Development, Frankfurt/M.), the Negros Forest and Ecological Foundation, Inc., Pres. G. Ledesma (Bacolod, Negros), North of England Zoological Society, CEO Roger Wilkinson (Chester, UK), both CENTROP and SUAKCREM at Silliman University (Dumaguete, Negros), the Philippine National Museum (Manila), Radio Station DWWW, President Roberto N. Bacsal, the Philippine Working Group (Manila), 'Save the Rainforest' (Hamburg, Germany), and UP Diliman (Dr. P. Ong). Internationally, PESCP is thankfully supported by a number of sponsors too numerous to mention (see page of Acknowledgment above).

The most significant link forged with Aklan State University (ASU) since 2003 continued to prosper. Accordingly, joint endeavours in the field of community-based development and conservation of both ASU and PESCP saw their outreach work in Aklan province expanding and solidifying, carrying on from an EU/ UNDP-funded project (CoFoPa); this joint endeavour in reforestation and various agro-forestry and husbandry livelihood measures will go some way toward protection of tropical forests of Panay (see Manager's Report and Technical Consultant's Report). A cornerstone of this cooperation was the continuing co-financing of the position of an Environment Program Coordinator by ASU through the Frankfurt Zoological Society (FZS) and the German Government (GTZ/CIM). The people in charge are ASU's President Dr. B. Palma in conjunction with Prof. R. Felizardo (ASU) and PESCP's Technical Consultant Thomas Künzel who thereby has been assigned a double role (see Reports 2004 to 2008). Recently, ASU supported the research of Ms. Lisa Querhammer, Fachhochschule Eberswalde, a German master's student of forestry.

The most significant development in terms of future prospects of PESCP and, hence, conservation plus development in Panay, was a step toward 'nationalisation' of the project. Ultimately, it is the Philippine nation that is expected to carry on with the uniquely important agenda initiated by PESCP. Accordingly the Filipinisation made progress by solidifying of the Manager's work, namely of Ms. Maria Teresa Ibabao, who had taken the helm of PESCP's previous Manager Mr. Thomas Künzel in 2007, and Prof. Dr. E. Curio, the Project Director, both of whom had stepped down from their offices and had become Technical Consultant and Scientific Adviser, respectively (**App. 1**). This development had met with great acclaim from many LGUs the DENR included and our partner ASU.

A similar development occurred in the Board of Directors (= Incorporators) of the NGO Philippine Association for Conservation and Development, Inc. (PhilConserve) that PESCP

erected in 2005 (see Update of 15th Report, PESCP 2008). Here, all official offices of PhilConserve's BOD have been taken over by Filipino nationals.

As before, PESCP's Research Station 'Sibaliw' accommodated a number of visitors from various ways of life, most of them practical students supervised by E. Curio, research guests, nature photographers, the film team of Channel GMA-7, 'Born to be wild' Show, under the leadership of Dr. Ferdz Recio, and our Forest Rangers during 'foot operations' (**App. 2**).

Sad to say, BioCon, an NGO and earlier outgrowth of PESCP, failed all along with its mandate of strengthening PESCP financially since its erection seven years ago. Accordingly the founding of a new NGO PhilConserve by concerned citizens in 2005 laid the ground for fostering the hope for effective biodiversity conservation in Panay; preparations toward fund-raising have been promoted by members of the BOD. For further details on within-country support, especially of Gov. Salvacion Z. Perez of Antique, Congressman Hon. Exequiel B. Javier, Antique, and the DBM (Manila), see the Manager's Report (chap. 1.1).

PESCP gratefully acknowledges again the factual and moral support received from the LGU of Pandan. I take this opportunity to extend my deep-felt gratitude to Hon. Plaridel Sanchez VI, Municipal Mayor of Pandan, and the Head of the Pandan Department of Agriculture, Mr. Ronald S. Sanchez, for their great understanding and perspicacity of giving leeway to their staff in assisting PESCP tremendously in its zeal of pushing its and the municipality's environment agenda. Accordingly I am pleased to mention the assistance of Mr. Arnold Demegillo, Pandan's MENRO and Agricultural Technologist, who took pains in advising PESCP in community liaison matters while introducing to this tricky business Ms. Maria Ibabao who was serving with great commitment as a project Liaison Officer and Chief of Forest Rangers all along prior to becoming Manager. Congressman Javier has been amenable to the idea of supporting PESCP financially in the year to come; the latter co-financed, along with PESCP, important community development agenda and pledged to do so in 2009, too. Most importantly, President Dr. B. Palma of ASU gave unstinting support to the campus based work of Ms. Ann-Marie Hartmann working on energy flow (Fachhochschule Trier, Campus Birkenfeld), and of Ms. Lisa Querhammer (Fachhochschule Eberswalde) delving into community based reforestation work under the supervision of Mr. John Espiritu, PESCP's forester (chap. 1.5).

As before, Prof. Dr. E. Schneider, President of the German 'Bird Protection Committee' (Göttingen), was circumspectly funding our *ex situ* work focused on the rehabilitation and release of wildlife, specially endangered birds. And Mr. Reinhard Behrend, President of 'Save the Rainforest' (Hamburg), assisted PESCP in its ranger-based forest protection that recently expanded its agenda by actively embarking on humanitarian, i. e. search and rescue operations in our areas of activity (see Manager's Report, 14th Report, PESCP 2008).

To all these people and institutions we are deeply grateful and hope that they will support the cause of both PESCP and its umbrella NGO PhilConserve also in the future.

Editorial

"Placing the mining industry directly under the supervision of the President (Inquirer, 7/27/07) is like opening the floodgates to more environmental destruction and allowing the displacement of more communities."

Like logging of natural grown forests, mining is one of the two most prominent drivers of environmental destruction. Even where it comes under the guise of the harmless sounding term

¹ R. A. Calfoforo, national coordinator, Alyansa Tigil Mina (ATM), in 'Greater threat to nature', Philippine Daily Inquirer, 9 August 2007.

'surface mining' it usually implies the clear felling of priceless forest. Aside from this ill-effect of mining there are two more. Mining potentially poisons the environment through solvents when metal quarrying is at stake, sometimes with whole communities becoming flooded by the poisonous off-fall as happened on Marinduque Isld. Second, in violence-prone clashes between the guards of mining companies and their local protesters the latter may get slain. There was an outcry through the nation when Armin Marin, protesting the mining operations on biodiversity-rich Sibuyan by dubious, foreign-funded dummy corporations, was shot dead (see Editorial, 14th Report, PESCP). In other places environmentalists were more fortunate. Triumphantly, they achieved the closure of three mining companies in Tubay, Agusan del Norte, in clear opposition to the President's 10-Point Agenda with mining as one of her priority investment areas (Philipp. Daily Inquirer, 9 Aug 07).

The other driver of environmental destruction and destitution is still illegal and legal logging, a fact that has been highlighted time and again in previous reports of PESCP. By conducting lawenforcement via confiscating illegal timber and illegal chainsaws in cooperation with the PNP, PESCP is at the fore front of the battle against this most destructive of all events promoting the demise of the country's natural heritage. PESCP's Forest Ranger squads hat exposed to an astonished public the enormous amount of illegal logging in NW Panay. However, these routine discoveries were dwarfed when in August 2008 a huge amount of 11 million board feet of illegally cut logs were discovered by helicopter rides in the Northern Sierra Madre Natural Park. The logs would have filled 830 ten-wheel trucks reaching 6 km (!) long to transport. The public (government?) was shocked, and as a consequence various agencies mounted nationally and internationally manned discussions. The illegalists, when asked by the DENR to haul down from the mountains the cut logs for further processing, declined; something like an unwritten honour code among thieves prevented the recruitment of work force, that is of some 12,000 (!) families involved (Inquirer, 17 Sep 08). This massive timber poaching in a Protected Area occurred right under the noses of the DENR, i. e. both local (PENRO of Isabéla Province) and Central Offices (Quezon City); moreover, it happened on Luzon Isld., home to the Palace (Metro Manila). With so many watchdogs around and so many people involved, the disgusting crime cannot have gone unnoticed. Taken together these facts should convince the last sceptic that for the country's forest remnants to survive more than the issuance of laws and the arrangement of discussions are to be put to the ground. Flanked by livelihood alternatives, a massive increase of the number of Forest Rangers, modelled after the PESCP's practice, would be the most important step needed.

Such ranger-operated forest monitoring is working best when under the command of politically independent bodies, e. g. an experienced NGO. Though laudably, some PNP officers (see contribution by Geylord Loyola, chap. 1.2) and DENR officials go after the illegalists with great determination, e. g. in Quezon National Forest Park (Inquirer, 2 Mar 08) and at a personal risk (Inquirer, 24 Jul 06). On the down side, one must deplore that other DENR officials connive with the illegalists and are facing probes and raps (Inquirer, 17 and 29 Mar 08). Sadly, also the Central Office grants cutting permits to mining companies in conversation-sensitive areas. This is aggravated by the permits entailing threatened species (!) like yakal and apitong (both high-value dipterocarp timber trees) (Inquirer, 10 Oct 07). Or, local log bans are ordered but not reinforced (Inquirer, 14 Aug 07). What is even more disturbing than corruption and lax issuance of permits is that the Palace is backing time and again loggers in the Sierra Madre, in places different from the aforesaid large-scale timber poaching in Isabéla Province. This backing takes the form of 'forest management contracts' covering considerable areas of, e. g., 37,000 has (Inquirer, 19 Oct 06).

Thus, the priceless forest remnants are doubly under assault, both from the illegalists and the permit-equipped logging companies. To turn the tide in favour of forest maintenance in the Philippines *all* mining and cutting licenses should be revoked and Forest Ranger based task forces be installed in all areas of conservation concern. An additional invaluable tool may build on the new Wildlife Act stipulating that an area can be set aside for protection if it harbours (an) endangered species. Such is the case, for example, with the Central Panay Mountain Range that the DENR Central Office has recently identified as 'Critical Habitat' to be protected. In the

process PESCP has proudly accepted the Secretary's invitation to assist the DENR of Region VI in the erection of the said PA.

As explained elsewhere (Editorial, 14th Report, PESCP) the single most important cause driving environmental demise is overpopulation and poverty, its ugly bedfellow. Overpopulation can only be overcome by a reduction in per capita birth rate. There is much potential at the grass roots for this to become true; as polls have revealed a staggering 44% of all pregnancies in the country are *unwanted*, and the poor want to access effective means of birth control (Inquirer, 14 Aug 08). From this it follows that there is much good will to down-size the number of children but that the tool box for doing so is under developed. Yet hope is dawning. A Reproductive Health bill (RH bill) or House Bill No.16, is hotly being discussed in Congress. The bill goes for artificial means of contraception, aside from less effective, e. g. natural means. The Catholic Church is staunchly against any birth control measures except for the natural one. It is also against sex education in schools. In its zeal to knock out the RH bill the Church, in a poll of its Radio Veritas, called up 177 congressmen, from among their target of all 235 to be thus interviewed, to find out their position on the bill. As a result over half of all solons interviewed (111) were against the bill that the Church defamatorily dubbed 'anti-life'. Subsequently the names of the interviewees along with their stances re the bill were posted on the sender's website (Inquirer, 6 Oct 08). This ruthless pillory of the bill's supporters reminds one inescapably of the inquisitional, inhumane persecution by the Catholic Church of its critics in the Middle Ages. This stance is epitomized by Cardinal J. F. Stafford, head of the Apostolic Penitentiary of the Holy See in the US, lecturing that '...the future under President-elect Obama [as dominated by anti-life policy]. Criticizing Obama as "aggressive, disruptive and apocalyptic,"...',

(http://www.catholicnewsagency.com/new.php?n=14355),

thus seeding hatred thought to derail liberal family planning. - In spite of the campaign of intimidation mounted by the Catholic bishops in Manila the number of supporters of the counterpart bill on reproductive health in the House of Representatives has grown over time (Inquirer, 12 Aug 08). Additionally, in a position paper 26 economists of the University of the Philippines stressed the beneficial consequences of a small family, namely a substantial reduction of the rampant maternal mortality and a better nutrition plus education of fewer children rather than many (Inquirer, 14 Aug 08). In turn, better education would upgrade family planning and thereby foster a decent life of future generations. For all who can think rationally and want the country steer clear of ecological disaster and human misery the message is clear: Campaigning and materially supporting family planning must come from the grass roots and their betterorganised NGOs if the Palace plus Congress continue to bow to the bishops' intimidation.

This having said I want to end on a more enjoyable note fuelling perhaps the conservation thinking of interested environmentalists and by-standers alike. Panay Isld. has a new mammal. In the upland of the NW Panay peninsula, the Panay Shrew (*Crocidura panayensis*, sp. nov.) has been formally described as a new species from primary forest near Station 'Sibaliw' (Hutterer 2007, **App. 5**, see also frontispiece). There it had been collected by station staff and myself. With mammals being one of the best researched animal groups, the new find is yet another pointer to Panay's stunning biodiversity and a reminder of many more — non-mammalian — organisms to become discovered if only we allow them to survive by simply leaving intact their natural habitat.

Executive Summary

Conservation, Education, Livelihoods, Rehabilitation

1. To bolster PESCP's ambitious forest protection scheme alongside long-standing livelihood support and law enforcement, two of the five main pillars (chap. 1.1, 1.3), made progress at two levels. First, there has been financial support from various government sources thus amplifying the project's lean backbone budget of the FZS. Second, the project could recruit

the able assistance of Police Sen. Officer, Gaylord B. Loyola, of Aklan Province, who took on the multi-faceted task of becoming PESCP's Security-Intelligence Consultant/ Liaison Officer (see chap. 1.2). Being staunchly conservation-minded he is fearlessly tackling the sometimes delicate challenges coming our way during law enforcement activities. Similarly various agencies could be enlisted to support the project's conservation cause.

- 2. PhilConserve-PESCP is proud of reporting the invitation by the DENR central office to join hands with this conservation lead agency in establishing the CPMR straddling all four provinces of Panay as Critical Habitat which will afford protection of their last forests and its wildlife. From its inception, the PESCP had lobbied for this noble endeavour now coming to fruition under the umbrella of its NGO PhilConserve. The area at stake is defined by the occurrence of critically endangered species inhabiting the CPMR. One of the five wildlife species, the Dulungan (Hornbill), and the project's knowledge on its breeding grounds (see 4. below), will facilitate greatly the upcoming delineation of the PA. The first stakeholder meetings toward endearing the participants to the idea of a PA in the CPMR and preparing the necessary legislative activities have already taken place and will still be ongoing in 2009. On the ground, PESCP will continue to contribute its manpower and other resources toward both the sympathy-winning livelihood schemes and the less popular forest monitoring curbing the illegal destruction of the CPMR's natural resources.
- 3. Education of communities with whom PESCP has struck conservation agreements underlying the project's livelihood support is ongoing; it aims at a environmentally friendly use of natural resources, thus averting further damage to the forest. On a wider scale, the Manila-based TV company GMA featured the project's wildlife rehabilitation and release work. Similarly, going international and upon invitation, the Project Manager Ms. Maria Ibabao attended in the FZS headquarters in Frankfurt, Germany, society's venue toward celebrating the 150th anniversary of the FZS. There she could strike a good number of personal relationships to the benefit of the project and absorbed best practice lessons from the society's global conservation agenda.
- 4. As in previous years, extending the search for active Dulungan (*Aceros waldeni*) nest holes south of the areas monitored in 2007 made increase the number of holes to at least 1018, translating into an increase by 33%. This encouraging result could only be achieved by recruitiing even more nest guards than before, i. e. a total of 156. This puts new strains on PESCP's annual budget for which donors are still sought. Importantly, the extended guarding activities do have beneficial though unquantified side-effects on other endangered co-occurring wildlife species. -
 - The community-based nursery and rainforestation project was spatially extended by out planting of native rainforest trees from four nursery sites in the Province of Antique (40,000 seedlings) and one in the Province of Aklan (12,000 seedlings). Since 2005 one nursery site has been in operation on the Campus of PESCP's partner ASU in Castillo, Makato. Details on the species composition and the sites themselves can be gleaned from the table in chap. 1.5. Collectively, these activities flanked in welcome ways the DENR-driven Green Philippines Program in public forest land.
- 5. As in previous years there have been admissions of many wildlife species and individuals (mammals, birds, Reticulated Python) to PESCP's rehabilitation facilities in Mag-aba and Bulanao (Pandan and Libertad Municipalities, respectively). Following their rehabilitation the animals were released in appropriate localities, mostly their capture sites, or in the case of hornbills from Research Station 'Sibaliw' (App. 4).

Conservation Research

6. A new mammal species, the Panay Shrew (*Crocidura panayensis*), has been described from the NW Panay Peninsula low elevation primary forest. Beside the Panay Cloud Rat it is the second Panay Island mammalian endemite. - Along with the new shrew came yet another

though not closely related, the tiny Batak Shrew (Crocidura batakorum) from Palawan Island.

The first breeding on Panay of the Philippine Hanging Parrot, the Colasisi (*Loriculus philippensis*), is reported along with details of its breeding phenology and habits (lining of the nest hole with fresh leaves), clutch and egg sizes.

7. Herps were monitored in various places of Panay including a number of herp-rich mangrove areas with a new island record of a gecko (*Lepidodactylus lugubris*), a similarly rich area near Libertad Municipality and Station 'Sibaliw'. In the latter site, intense observations revealed new facts of the biology including parental care of offspring in an as yet not safely identified Narrow-mouthed Frog (*Kaloula kalingensis*?) and of the Gliding Tree Frog (*Rhacophorus pardalis*). The first account of the juvenile colour pattern of Panay's King Cobra (*Ophiophagus hannah*) has been detailed in colour.

In its new Australian habitat the Marine Toad (*Bufo marinus*), a highly destructive alien invasor from South America, displays toe waving as a tactic to lure prey close enough for capture, thereby mimicking a prey of the deceived larger prey of the toad. When tested with prey eliciting this guise in Australia 82 free roaming toads in the NW Panay Peninsula were shown to not display the lure. Hence, the invasor seems to have lost the guise in its likewise new Philippine area of occurrence, thus inspiring an agenda of micro-evolutionary research targeting this geographical behaviour difference.

8. The four taxa of Gymnosperms (better known as an assemblage of conifers) extant on Panay (*Agathis dammara*, *Dacrycarpus cumingii*, *Falcatifolium gruezoi*, *Nageia wallichiana*) were investigated in terms of their true taxonomic status and their diagnostic anatomy. To these could be added a fifth species (*Podocarpus neriifolius*) that was known already from another three Philippine islands. None of the species mentioned being a Panay endemite.

Basic Research

- Bicoloured fruit displays consisting of the genuine fruit and an auxiliary structure of a different colour, mostly in pairwise combinations of red and black, raise the question of their adaptive value as compared to unicoloured fruit displays, i. e. stand-alone fruits of one colour. The 'detectability hypothesis' posits that bicoloured displays are more easily detected by whilst the 'profitability hypothesis' predicts these displays advertise to their consumers a higher nutritional value. In cafeteria choice experiments with both species of Visayan hornbills (5 Tarictics, 3 Dulungans) freely visible artificial fruits of either black + red colouration, or, entirely black or red colouration were offered pairwise, thus mimicking bicoloured fruit displays in both possible orientations (black distal, red proximal, and vice versa), and unicoloured displays (pairs of either red or black fruits). It turned out that the birds had no overall preference for bicolouredness, with initially pronounced individual Since fruits were variation that was gradually replaced with indifference to colour. nutritionally identical this result supports indirectly the 'detectability hypothesis' by virtue of excluding the 'profitability hypothesis'. However, more direct tests of the former are required.
- 10. Committing the 'Concorde Fallacy' is a non-adaptive decision by which an organism gears its efforts toward reaching a goal to its past investment rather than to its future prospects of attaining the goal. Humans rather than animals tend to commit the 'Concorde Fallacy' when, for example, unfortunately conservation efforts toward preserving a species or a habitat are maintained even though it has become apparent that another conservation goal has become more pressing, i. e. yields greater benefits with the same or less costs incurred. Clinging to the previous, less-rewarding goal is falsely based on the fact of heavy investment in the past which would allegedly force the decision-maker to persevere with this investment in the future. The wise, i. e. rational decision would dictate 'cutting the losses' and invest into the conservation goal of higher priority (= reward) without any delay.

11. In a critical examination of the efficacy of Barber pitfall traps, capture prospects were maximised by combining features that previously had been applied in isolation. In spite of this, overall capture success of terricoline (i. e. forest floor inhabiting) invertebrates in both primary and secondary forest was shown to be only 21% of all animals contacting or entering the opening of the trap. Some species were not represented at all by those trapped. This sobering result applies to both the species diversity and the absolute abundance of species. The broad array of taxa thus captured highlights the low efficacy of pitfall traps that are widely used in faunistic and ecological studies of the soil fauna.

1. Conservation, Education, Livelihoods, Rehabilitation

1.1 Manager's Report

by Maria T. Ibabao

1.1.1 Introduction

The year 2008 has been the second year of my term as PESCP's Manager after I have been serving as PESCP's Chief of FRs, and I am more than happy to put on paper what transpired this year. It has been a year full of new experiences and colourful learning processes. I can proudly say that I have grown matured in perception and judgment. Although far from perfect I am sure the challenges I am exposed to in that position will contribute to my becoming a better person and a leader at the same time – it is a very successful example for learning by doing. Additionally, this experience is helping me to serve the purpose and goal of making Panay, and later some other areas in the country, into a better place for the people.

Being the Manager of PESCP is not an easy road to take. Every day is faced with challenges and trials. It is an established fact that a lot of people appreciate the effort that PHILCONSERVE-PESCP is executing for the maintenance of the last forests here, but, there are also some people who have been disturbed by our campaign on "Conservation and Forest Protection" / "Environmental Law Enforcement Program" we have been executing not only in the 12,000 ha of the Northwest Panay Peninsula Protected Area (NWPP PA) but also in the 40,000 ha forests of the Central Panay Mountain Range (CPMR) which straddles the border of the four provinces of Panay Island in the Western Visayas.

The year opened for me full with challenges that I took as my baptism of fire. In the early part of January 2008 the FRs were unduly influenced by outside players (illegalists and/or their supporters) who tried to destroy the effective and harmonious working relationship between the Management and the important working machinery of PESCP, its FR team. The FRs have been misguided by detractors who did not anticipate/expect the full support Thomas Kuenzel (PESCP's Technical Consultant and Project Coordinator of the Frankfurt Zoological Society) gave to me for my consequent law enforcement activities as PESCP's new Manager and its Chief of FRs. These outsiders had not expected that their plans to destabilize PESCP's law enforcement program would backfire at them and instead propel PESCP into the limelight of recognition even more.

It might sound self praising but I am proud of the developments I have brought into the PHILCONSERVE-PESCP as characterized by the recognition and support extended by various government agencies. Very fruitful contacts have been established with decision makers at the highest government levels here in the Province of Antique and in Manila. This is proven by the commitment of the Provincial Government to start in 2009 to donate to us per annum a 200,000 P financial aid to be used for livelihoods to be given to the upland communities that would enable the forest dependent villagers gradually to refrain from the unsustainable use of forest resources. It is also worth mentioning that the Provincial Government has been the channel for the PhilConserve-PESCP to receive the 300,000 P financial aid from the Department of Budget and Management on the decision of its Secretary Hon. Rolando Andaya; he, in his concern, for the conservation of the remaining natural resources and its importance for the future generations was so generous to release the said amount to be used in extending sustainable

livelihood to the upland villages and executing forest monitoring in the area where PhilConserve-PESCP is active.

The Hon. Congressman Exequiel B. Javier of Antique counter parted the amount of 600,000 P for executing forest monitoring and sustainable livelihood programs in communities here in Antique focused on the forest dependent villagers to gradually wean themselves from misusing forest resources with unsustainable practices.

It is not just one time that my working style together with Frankfurt Zoological Society's representative in PESCP, Thomas Kuenzel, been described has controversial by supporters and critics alike but I take it as a feather in my cap by being consistent in terms of fearless apprehensions illegally possessed and used chainsaws and illegally acquired forest products in both the NWPP PA and CPMR. Doing the often dangerous jobs is the core part of disturbing the money making activities of illegalists who are sometimes supported 28 Jan 09, courtesy M. Ibabao by influential people.



Fig. 1 Police Captn. Gaylord Loyola, PESCP Liaison and Security Officer, presiding over invocation at stakeholder meeting, Sebaste, Antique. 28 Jan 09, courtesy M. Ibabao

We, as PhilConserve-PESCP, have established a very positive reputation in the field of Environmental Law Enforcement, and we do not allow ourselves to be dictated by misguided politicians or misguided other influential people when it comes to reconsidering decisions done in connection with violation of the Environmental Law especially violations of the R.A. 9147 (WA). The PhilConserve-PESCP FRs of whom I am the Chief and which are deputized by the DENR as WEO (Wildlife Enforcement Officer) are determined to enforce the law without fear from or favour to anybody.

That means that PhilConserve-PESCP has been earning a reputation as one of the best NGOs regarding Environmental Law Enforcement since I have been the Manager and Chief of FRs, which of course was only possible with the very much valued help and advice from many friends and colleagues as from my mentor and good colleague Thomas Kuenzel (PESCP's Project Coordinator), as from the equally priceless expertise and advice of PESCP's Scientific Consultant, Prof. Dr. Eberhard Curio from Ruhr-University in Germany, and from the most competent assistance of Gaylord B. Loyola (Police Cptn. and Chief Operations Officer, Branch of Aklan Provincial Police Office, Fig.1) who since joining the PhilConserve-PESCP officially in January 2008 on volunteer status as Security-Intelligence Consultant /Liaison Officer, made the team even stronger and opened easily the doors to the otherwise difficult to penetrate military and police units in the area of our operations here in Panay, which is very helpful for our FR activities (see his contribution, chap. 1.2).

1.1.2 Main Report



Fig. 2 Apprehension of illegally cut timber from CPMR by PESCP staff. 28 Sep 09. Courtesy M. Ibabao.

In the following I am writing as much as possible in chronological order about the accomplishments and events that transpired this year with the purpose of bringing much closer to any interested reader and observer what PhilConserve-PESCP is about and what are the intentions of us who are giving all that we have in terms of personal commitment to the cause of conservation and uplifting of people's way of life especially to those who are living in far away forest areas and who are depending on the further existence of these forests.

In January 2008 as I have mentioned above some outsiders who have been busy to give wrong advice to the FRs did not succeed to destroy the strong working relationship of all

who are involved in the PESCP Management. There were some individuals who did not like to have the PESCP Manager go to see and check on their field activities and thereby expose their anomalies. Therefore one staffer decided to resign on January 16, 2008, and tried to bring down the management even last year; this has been resolved by the ever effective communication and problem solving capacities of the Technical Consultant, Thomas Kuenzel, who is always supportive of me because he knows that I am giving my 150% to the job. Being the Project Manager for PESCP is for me a fulltime job for 24 hours per day in 7 days per week - as I decided it to be. At least for me, but also for most of the FRs, we don't choose days to work. We

ready and are to move to do our Environmental Protection and Enforcement duty any time of the day or night during any day of the week for that matter. Our most successful apprehensions are mostly done during unholy hours like 02:00 a.m. in the morning usually over weekends. It is during these times that most illegalists feel safe to do their transport activities without realizing that we are purposely also out there, and this often results in a successful apprehension activity (Fig. 2). One of our

most successful apprehensions for this year is Fig. 3 Confiscation of 4 illegally produced and of four pieces of Narra doors illegally transported doors from narra wood by PESCP FRs, produced altogether valueing to 130,000 P. 7 Feb 08. Courtesy M. Ibabao.

We had apprehended it at 2:00 a.m. along the national highway in the vicinity of Brgy Nauring, Pandan, Antique (Fig. 3). It was illegally transported by a tricycle allegedly to be delivered to a foreigner who had it ordered for his house somewhere outside Pandan. The apprehension was so effective that it changed the illegalist's image to people who knew him as "Commander Narra" because for almost 20 years allegedly he has been dealing with such contrabands. This man is now simply called by his name without the additional nickname because it was nullified psychologically in the people's mind by that apprehension.

The main pillars of PhilConserve and PESCP have been and still are as listed here in a sort of ranking:

- (1) FR based habitat protection and Environmental Law Enforcement
- (2) Community based protection of critically endangered wildlife

- (3) Livelihood based community development
- (4) Rehabilitation and release of captive wildlife
- (5) Conservation research and education



Fig .4 Material help given by PESCP staffers to a wounded wife of one of the project's hornbill nest guards. 10 Aug 08 Courtesv PESCP's FRs

Additional to that, since I started my term as Project Manager, we became also active in humanitarian help activities like searching and retrieving elderly people who got lost in the mountains, and who had been missed by their families who called us for help.

In 2008 we have extended a lot of special livelihood activities as aid to people from different communities mainly in the Province of Antique but also in the Provinces of Aklan and Iloilo. As examples for special help to poor people, we took over medical expenses for a wife of one of our Dulungan nest hole owners from Alegre, Sebaste, Antique, wherein I personally took her to San Jose, Antique, for medical

attention as well as the PESCP spending for her hospitalization and medication cost (Fig. 4). PhilConserve-PESCP even gave them a variety store to help them augment their income. There is the wife of another Dulungan nest hole owner living in the upland village of Calinog, Province of Iloilo, who had wounded her knee with a bolo and was liable of being crippled. I have personally made sure that she got proper medical attention by having her sent down from her mountainous place in a hammock and even carried by her husband on his back walking about 4 hours until they reached the nearest dirt road accessible by motorbike which would take them down to the municipality of Calinog, Iloilo, after 2.5 hours of driving along very dangerous and very bad dirt trails. Riding on such motorbikes being driven by men who smelled quiet strange and are using their feet along with the wheels are experiences that you don't want to miss. Sometimes it makes me smile at myself for having survived such rides and of course make me feel more grateful to the BIG GUY upstairs for keeping me safe. Having received such help from the PhilConserve-PESCP made these people more willing to do their share of protecting the environment especially by making sure that the baby Dulungans are safe in their nest holes and can successfully fledge having spent nearly 3 months in the nest hole, but it has been also reported that even the Spotted Deer has been gradually less hunted.

After having settled the small problem of being wrongly guided by outside influence in the early part of 2008, the FRs have been doing a very good job of Environmental Law Enforcement not only in NWPP but also in the CPMR. There are now 22 FRs in force and with the exception of few newly hired ones, most are already deputized by the DENR as WEOs.

We are also working on our deputation by the Land Transportation Office through the LTO Regional Director whom I have personally paid a visit in his office. After having made him aware of what has been accomplished by us in terms of environmental protection and law enforcement, the Regional Technical Director, Mr. Gerard M. Camina, CESO VI, indicated his commitment for deputation upon receiving our request, if duly endorsed by the DENR RED, Madam Lormelyn Estrada Claudio, with whom I have a very good working relationship. Madam RED is fully supportive of the PhilConserve-PESCP efforts, and its FRs will be deputized as LTO ENFORCERS as soon as possible. This development will also be a big reinforcement for LTO Traffic Enforcers having the full support of our FRs when LTO operates in Antique and Aklan in terms of checking vehicles loaded with illegally transported forest products.

In the same context I have been discussing with the DENR RED herself that she could task us to work with the Philippine Coast Guard based in the ship port Caticlan, Malay, Province of Aklan, to check on the rampant illegal transport of wildlife through the Roll On-Roll Off buses traveling through the ports which Madam RED appreciated. She told me that she would also endorse us to

be deputized by the Philippine Coast Guard. That upcoming deputation would be in addition to our existing deputation as WEO authorized in the whole Island of Panay. I am proudly mentioning here that we are the only organisation with such a scope of deputation in the whole island and it is in the pipeline for us to extend our FR activities even to Negros in 2009 as requested from DENR.

This year the activities of PhilConserve-PESCP have been more in public focus because the television company GMA under its BORN TO BE WILD SERIES, hosted by Vet. Med. Dr. Ferdz and Romi Garduce (the first Filipino to be up on Mount Everest) have been covering our activities twice already and broadcasting it in national television. Both, the rehabilitation and research side as well as the FR activities have been shown in TV.

In May 2008 I was in the DENR Headquarters in Manila for a meeting about the consolidation of proposals presented to DENR by a number of NGOs to access the GEF (World Bank) funding for environmental conservation activities in the Philippines, which was in connection with our proposal submitted already in 1997 by Prof. Dr. E. Curio on behalf of PhilConserve. In June 2008 we have been informed by the DENR Headquarter that PhilConserve will be responsible for the conservation and development of the CPMR within the scope of the funding being expected from GEF – now we are waiting for a hopefully positive outcome.

It is with pride and worth reporting that the National Headquarters of DENR through PAWB Director Theresa Mundita Lim sent me a personal letter in April 2008 citing the appreciation they have for the job I have been doing here and at the same time tasking the PhilConserve-PESCP to collaborate with the DENR Regional VI Office in the goal of having the forest of the CPMR to be declared as a Critical Habitat Area as requested by us in our annual reports. This is the area where a variety of critically endangered wildlife species are to be found including the Dulungan (*Aceros waldeni*) and the Spotted Deer (*Cervus alfredi*), both flagship species protected by PESCP, with the bulk of funding coming from the Frankfurt Zoological Society, but also from the Zoo of Ohio (USA), and the North of England Zoological Society.

On June 21, 2008, one of the worst typhoons ever experienced here hit Panay and gravely affected the whole Region VI from Iloilo to the north end of Panay which is where Pandan is located. The PESCP office was flooded with waters submerging the ground floor and through the ceiling caving in the upstairs office of Thomas Kuenzel and the Manager, thus damaging valuable receipts, computers and other equipment. Even the old rusty refrigerator was swimming chest high inside the office and was just rescued by FRs Freddie Fernandez and Cerwin Ibanes; they had to swim in middle of the road to reach our office, which road had turned into a river because of long lasting very heavy rains.

The typhoon was so strong that it sank a big Cargo ship along the shores of Culasi 30 km south from Pandan which resulted in 189 container vans loaded with foodstuffs swept ashore by strong waves - provided the people from Culasi to Pandan with enough food to last even after the typhoon but also with the sad fact that a lot of people lost their lives on sea after such accidents. The unfortunate event also directly affected some of PhilConserve- PESCP nest hole owners who are living in upland villages like Maria Cristina, Madalag, Province of Aklan. The raging river overflowed and damaged the small farm that they were working on after which they come to the office for help, and the Management did the best by providing them with rice, some money and medications. One nest hole owner had his hut taken away by the strong flood and his wife along with it, her body has been found a week later; this man received also some financial assistance from PhilConserve-PESCP. Almost everybody in Pandan has been in one way or another negatively affected by the typhoon "Frank", and the Management of PESCP had to move its office to a different location. We are now in Rm. 5, 2nd floor of the E. Dionela Building, Centro Norte, Pandan, Antique. That move of office has been positive for all of us by making the PhilConserve-PESCP more visible and accessible to the public and definitely it is a more

A week after the typhoon "Frank" I attended a Protected Area Management Board Meeting (PAMB) held in Malay, Aklan, which was chaired by the Hon. Mayor Norberto P. Raymundo of Libertad. In this meeting he publicly thanked PhilConserve-PESCP, especially its FRs, for the effort of protecting the remaining forest resources of the NWPP PA and added that therefore the area was not so badly devastated in comparison to some other municipalities in Panay. I also personally thanked Mayor Raymundo for his active support of the PhilConserve-PESCP – among

presentable place to work.

other supportive moves he even instructed all barangay officials of Libertad to cooperate fully with PhilConserve-PESCP whenever we might come to any of those Barangays for environmental protection and Law Enforcement activities by sending Tanods with us in their forest whenever we would need such assistance.

In November/December PhilConserve-PESCP implemented some livelihood activities in three barangays within the NWPP, namely goat husbandry in Barangays Barusbos in Libertad, potable water supply in Luhod-Bayang, and high school scholarship to children of poor people in two villages of Antique Province. These special projects from PhilConserve-PESCP is one way of showing our appreciation for the cooperation the people extended to us in the installation of our telemetry antennas in the mountain areas of these three barangays.

Much time throughout the whole year I had to spend travelling on behalf of different activities to sites like Calinog, Iloilo, to meet with barangay captains from 13 upland barangays – which travelling yielded a very positive result. The officials of these brgys organised themselves into an organization called the ATMB (Association of Thirteen Mountaineous Barangays) wherein they have committed to be more vigilant in protecting the remaining wildlife species in their area and at the same time to monitor the livelihood grants that have been given out to the nest hole owners in their area.

During this period I made also a courtesy call to the 47th Infantry Battalion based in Calinog wherein I have made the acquaintance of Captain Antonio Tumnog who is from Pandan. We had an initial talk regarding the collaboration between the Philippine Army and PhilConserve-PESCP in terms of extending livelihoods to upland villagers and at the same time helping insurgents return to normal unarmed way of life in the civil society. A few weeks later I met also the Battalion Commander Lt. Col. Tynie Passion who is enthusiastic about the idea of working with us for the above mentioned purpose. During the latter meeting I received a letter of request from them for one unit computer they need for the Camp. I have seen that they are very short on much needed equipment and it would of course make it easier for them to help us if we could also help them. During this month the MOA with the PNP CALINOG under the leadership of PSINP Jerry Caspillo has been signed. I am taking this opportunity to personally thank Captain Jerry Caspillo for his support of our effort and also by being very accommodating in terms of time and resources in his Police Station including many times where he provided their patrol car for my travelling in the area. He also expressed his full support for our conservation effort – and he admitted that he together with his friend PSI Gaylord Loyola (who is our Security Advisor) of Aklan Provincial Police Office is a staunch conservationist and that being connected with PhilConserve-PESCP gives them the proper venue to extend their support to such a noble undertaking. This is a very fortunate development for PhilConserve-PESCP because we have been active in the area for almost seven years and such a MOA was never done earlier. This development means that we are more secure and accepted in the municipality and would show the locals that we have good intentions because of our being accepted by government agencies. I am proud to mention here that PhilConserve is now registered with the Department of Social

Welfare and Development. I am also working on an accreditation with our MOA Partner, DENR. In September I have been blessed to be sponsored by the Frankfurt Zoological Society (FZS), our main funding agency, to fly to Frankfurt, Germany, to attend its 150th anniversary - it has been a very interesting adventure for me. I left Manila on September 24, 10:00 a.m., and had my first stopover in Amsterdam at 6 p.m.. It was a beautiful feeling for me to breathe the cool autumn evening breeze in Europe again - I was in Austria in the 1990ies for about 5 years where I worked as a caregiver/nurse and I have come back to the Philippines in June 1995. When in Frankfurt I first stepped on the tarmac from the plane that September 24, 2008, I said a prayer of thanksgiving for meeting Thomas Kuenzel who really had changed my life for better when hiring me for PESCP in 2004, first as Liaison Officer for PESCP's UNDP Project, later as PESCP's Chief of FRs, and after recognizing my potential for leadership he entrusted me with the highly challenging job of PESCP's Manager. (I have a professional medical background and went through some years of studying psychology in the Far Eastern University of Manila, but never in my life I thought of becoming a forest ranger not to talk about becoming the Manager of this very noble organization PESCP of which I am very proud of.)

After my first night in Frankfurt I met a group of friendly Africans who were also project leaders and they invited me to go with them for breakfast. I will never forget JOE OLE KUWAI (Project

Director Africa Regional Office), a very friendly man, who made me feel so comfortable and at home. The whole five days of the conference he always greeted me good day and asked if I am fine. It is a pity that he died so soon after being back to his project site but I would always have a good memory of him even though I just had known him during that venue.

The first day of the event was scheduled for the presentation of very interesting projects from Africa and other places. It made me also to lift up my hat to these other project leaders who are doing a really impressive job especially in the turbulent peace and order situation in places like Congo among others. There were a lot of friendly professionals during that event and it was an honour of meeting them, exchanging of ideas and by listening to them learning more on how to do an even more effective job on my own.

There were a lot of new things to hear and learn and digest while listening to other project leaders from the different project sites of the FZS. Honestly, one day was not enough to learn about the other projects. I look back to all of these days as an adventure and a learning experience, it is always a pleasure to meet other people and talk to them and listen to what they have to say and then finding lessons in what was said and using it for improving oneself.

I am also particularly proud in having been interviewed by the Frankfurter Neue Presse, a Frankfurt based newspaper. The PESCP is the project farthest from Frankfurt sponsored by the FZS in Germany. I took this opportunity to explain to the Frankfurter Neue Presse that working with and for PESCP is a job which demands your attention 24 hours/day for 7 days a week. This

is something that I think should be internalized not just by the Management alone but by all of us who are getting our bread and butter from this organisation. I believe that once you are connected with the PhilConserve-PESCP it is something to be carried with pride and love and a deep sense of responsibility. A person PhilConserve-PESCP with somebody special and has an elevated reputation in town and therefore should be careful and concerned about his/her actions and overall conduct. Being connected with PhilConserve-PESCP is a door opener to all the good and positive opportunities that could come your way. It is for me a personal conviction that it is not just a job, but PhilConserve-PESCP should be a way of life.



Fig. 5 PESCP Manager Maria Ibabao (middle) with key staff of FZS on the occasion of the 150th anniversary of the FZS in Frankfurt, Germany. Sep 08. Courtesy Anonymus.

While in Frankfurt I was able to meet Christoph Nowicki, Head of International Forest Management (B.Sc), Faculty of Forest and Environment, University of Applied Sciences, Eberswalde, Germany. His student, Lisa Querhammer, came to PESCP last September and is working with two of our foresters and, thus, working with us in our community-based reforestation activities based on five nurseries operated by PESCP. Also during my stay in Frankfurt I was able to meet some of the other project peaders like Grant John C. Hopcraft, Project Leader Serengeti GIS, Africa Regional Office. I met also Dr. Anouska Kinahan, Science, Research and Development TA Bale Mountain Conservation Project (FZS-BMCP) who gave me some very valuable information regarding her carbon fixing activities.

I particularly wish to extend my warmest gratitude to the staff of the FZS for really being so helpful and accommodating (Fig. 5). Not withstanding their extremely tight schedule, they have managed to make everything so comfortable for all of us. I especially want to thank Nina from the FZS Headquarters who really gave me of her valuable time by walking with me to the place where all of the participants of the 150th anniversary were welcomed to Frankfurt officially by Dr. Christof Schenck, FZS Executive Director, the Project Supervisor for South America and

Southeast Asia, Dr. Antje Müllner (Fig. 6), and also Sigrid Keiser who spent a lot of time arranging everything for me to get my visa in time.

The second day in Frankfurt was devoted to the presentation of project activities from the different parts of Africa and Europe which was held in the Frankfurt Zoo building where the FZS has its headquarters. The succeeding days have been spent listening to some more presentations, hen there was an excursion to an apple orchard and winery followed by a barbecue party. It was great fun but very cold to be out in the field. The fundraising and the Gala Dinner were the highlight of the celebration only that it was a bit difficult to speak with the next person because the table was so big and round and the music was so loud but at the same time I consider myself privileged by being able to sit on the same table with the who made me feel very much welcomed and encouraged me to do my job as Project Manager of PESCP.

After being back in the Philippines PESCP received funding aid from the Ohio Zoo, Columbus, U.S.A, for which our grateful thanks go to Rebecca Rose for helping us to conserve Spotted Deer and the Dulungan. From the Department of Budget and Management based on the very persistent effort of Prof. Curio in explaining to the then Sec. Rolando Andaya the importance of the conservation effort of the PhilConserve-PESCP we received 300,000 P funding for livelihoods and forest monitoring. This money has been finally facilitated through the Provincial

Government of Antique, and I would like to express my thankfulness to Eric Otayde, Head of the Provincial Information Agency of the Government of Antique, for his effort.

In November we got 30% out of the 600,000 P counter part from Congressman Exequiel Javier for our conservation and livelihood activities executed here in Antique. Then before the year ended the rest of 420,000 P had been released.

At the same time I proudly announce here that the Honourable Congressman Javier committed that he is willing to counterpart with



Fig. 6 PESCP Manager Maria Ibabao flanked by Dr. Christof Schenck, CEO of the FZS, and Dr. Antje Muellner, Supervisor of FZS's Asia and South America projects, celebrating the 150th anniversary of the FZS in Frankfurt, Germany. Sep 08. Courtesy Anonymus

PhilConserve-PESCP for 2009 the amount of 2 million P for which we would be counter parting 3 million P (from FZS funding) for extending the conservation and livelihood effort in the area.

In the early weeks of December 2008 I met the Honourable Calixto "Cali "Zaldivar, nephew of the Honourable Governor Sally Z. Perez; he is a Board Member for the Province of Antique and during our conversation he told me that he would counterpart with the PhilConserve-PESCP initially the amount of 20,000 Pesos to be used for a livelihood project in any barangay in Pandan. He also said that that is the initial counter parting amount he could come up with but hopefully would be able to increase it later.

I have then tasked our senior livelihood staff to enter into discussion with Brgy Botbot to plan with the officials on what would be best done for the area especially with the counter parting money from the SP Calixto Zaldivar.

As another positive development I received reliable information that SP Member Errol Santillan, who is a resident of Pandan, is willing to counterpart 200,000 P from his own funding source for Environmental Protection and Resource Conservation for livelihood projects.

I am also happy to add here that (although it may sound like more of a personal journal) I have met a relative of mine, Dr. Florentino Ibabao who is based in California, USA, together with his physician wife Lilia. The couple was so impressed by the conservation effort done by PESCP for the last years as evidenced by the population increase in the Dulungan and other endangered wildlife we have been protecting, that they promised to talk with their friends about the PhilConserve-PESCP efforts when they are back in California and try to find some contributions for the cause we are championing – this could be the beginning of a fundraising campaign in USA.

Before coming to the end I will not forget to mention again the help from some good friends and colleagues of mine as there are: (1) The unequalled support and belief on my potential and capabilities of the most amazing men I had the opportunity to meet: Prof. Curio (Scientific Consultant) who in 1995 started PESCP and who has been PESCP's Director until mid 2007 - there are still a million things to be learned from him, (2) Thomas Kuenzel (Technical Consultant, FZS Representative to PESCP) who is a very good friend who always brings me back to the ground when I am getting a little bit carried away by my tasks but gives me all the backup whenever I need it, and last but not least PSINP Cptn. Gaylord B. Loyola (Aklan Provincial Police Office, Kalibo, Aklan) who is our Security Consultant and PNP Liaison Officer for PhilConserve-PESCP who unselfishly gives me his time and advice as well as moral support (see his report, chap. 1.2).

I take also this chance to thank all other friends and critics together - thank you for everything that you have contributed to this year's activities. It is a personal challenge and inspiration for me to do even better not just as a Project Manager but as a multifaceted person - first and foremost to be the best single parent to my children EMBER, VIENTZ MARI, and MARIUS VINCENT, and to be the best, amazing grandparent to my first grand daughter, MARIJA DENISSE (Ember's baby) who is more like me than her mother. I also hope and try very much to be a good citizen of my community who might inspire other women especially such who are a single parent as myself and encouraging them to do the best they can for their children regardless of what the outside world says.

The last months of 2008 have seen the PhilConserve-PESCP starting the collaboration with the DENR on the initiative of declaring the CPMR as Critical Habitat (see above). With the deepest sense of responsibility I take it as crusade to do the job required from me and give my best 150% for it as my colleague and mentor Thomas Kuenzel always does and is expecting from me, too. Last but not least I wish to express my sincere thanks to all the political leaders and government agency heads and staff for recognizing and understanding that PhilConserve-PESCP is here as an unselfish partner in working towards the common goal of conserving what is left of our forest for the future generations, adding, that by working closely together with transparency and honesty we make the otherwise daunting tasks ahead of us easier and lighter. More Power to all of us. Godspeed.

1.2 Fulfilment beyond Mandate

By Police Senior Inspector Geylord Loyola

This contribution is dedicated to the effort and success in environmental conservation made by two organisations - the Philippine Endangered Species Conservation Project (PESCP), and the NGO Philippine Association for Conservation and Development (PhilConserve) - and their various local and foreign sponsoring agencies as the Frankfurt Zoological Society (FZS). As the principle funding agency over the last 13 years did it make PESCP's helpful existence in the

Philippines possible. A success which would not have been possible without the enthusiastic behaviour, and the highly motivated quality leadership and effective management displayed by PESCP Manager Maria Theresa C. Ibabao as well as by Mr. Thomas Kuenzel who is the Project Consultant on behalf of Aklan State University, Philippines, and the German organisations FZS and GTZ/CIM. When telling about the progress of PESCP also Prof. Dr. Eberhard Curio must be mentioned who founded PESCP in 1995, was its Director till June 2007, and volunteers now as its Scientific Adviser.

Before I go on further I would like to introduce myself as Police Senior Inspector/Police Captain Gaylord B. Loyola coming from a family in Culasi. I entered the Philippine National Police (PNP) in 1993 being assigned to the PNP Special Action Force in Bicutan, Taguig, Metro Manila. In 2003 I became a commissioned officer in the PNP. After some other assignments I have been the Chief of Police of different municipalities in the Province of Aklan, such as Altavas, Ibajay, Malay, and Buruanga, and are presently assigned at the Aklan Provincial Police

Office in the position of the Chief Operation and Planning Officer.

The main parts of the mandate of a Police Officer are to enforce the law without fear or favour, to protect life and properties and ensure public safety. Knowing that these are very noble objectives helps us serving the people in the communities of our respective assignments even in situations where our life is at stake.

On the other hand, some of us in the uniformed service of the PNP are not motivated enough to do their best because some of us are victims of some political leaders who are ethically not fit to fulfill their political mandate to serve the people and the country. These politicians have the hidden agenda to serve first of all themselves and, very unfortunate, have



Thomas Kuenzel, PESCP Technical Consultant, and Geylord Loyola, in joint capacity PESCP Liaison Officer and PESCP Intelligence and Security Adviser. Pandan, 2008. Courtesy Maria Ibabao

the authority to appoint police officers to be in key positions regardless of their qualifications but with reference to the fact that these police officers are first of all willing to protect and support the personal interests of these corrupt politicians.

Such an officer who received a much preferred assignment and knowing exactly that he received it not according to his merits and qualifications but based on his willingness to "help" the corrupt politician will find it very difficult from this time on to act against the interests of this politician even if the latter is pushing through his interests by illegal means and actions – from now on this police officer owes something to that politician and will give "favours" to him, and by doing so is violating the principles of justice and fairness and undermining the PNP's standing in the eyes of the people. In the same manner the officer cannot simply implement the full force of the law against any supporter of the concerned politician in case of violating this law, fearing that their lawful action would be the cause of an undesired transfer or revocation of the preferred assignment.

This system allowing politicians to place police officers into positions according to their "friendship" with these politicians is one of the main reasons why the PNP is failing when it comes to the question about the corruptness of PNP officers. To overcome this "system" should be one of the main tasks of the Philippine Government to stump out corruption in the PNP.

Being an ordinary citizen of this country aside from my profession as a law enforcer I used to dream that there will be a bright future filled with satisfaction among families and all Filipino

people, with fulfillment of their needs up to the last generation, and therefore I still wish and hope for a change especially with regard to such leaders who are misusing by their corrupt leadership the great trust the people have in them for good governance including the protection and preservation of our natural resources which is purposely created to provide basic needs and sustainability of good living condition.

Some people say that the reason for our very slow economic progress (which progress sometimes cannot be seen at all by the ordinary people) is caused by our faulty system of government, but unfortunately, I would disagree with that statement for it is not the system of our Government to be blamed because this has been formulated and designed for good intention - the true problem are the corrupt individuals who are expected to work for the system but fail to perform properly the assigned tasks.

Going back to PhilConserve / PESCP, sometime in January 2007 - I was then the Chief of Police of Ibajay Police Station, Province of Aklan - when I met the group of PESCP Forest Rangers (FRs) headed by their Chief in the person of Maria Theresa C. Ibabao becoming at the same time the Project Manager of PESCP and also the President of PhilConserve, who were able to endorse to my office 681 bd ft of illegally cut timber they had apprehended from haulers along the Mabusao creek in Ibajay. This incident made me feel a little bit embarrassed and humiliated because as the chief of Police it should be the duty of my office to apprehend violators of the law including timber poachers being active in the area of my jurisdiction.

I was especially astonished about this situation because I was well aware that I was once a member of the PNP SPECIAL ACTION FORCE which is very well trained and properly armed to do such jobs - and yet, somebody who is a female leader of a group of civilians (the group of FRs of PESCP) can simply perform such a task. I also observed the tenacity ("bite"), the confidence and the decisive behaviour of Miss Ibabao, which is really impressive and which characterizes her not only as a strong person but likewise also as a strong leader of the group of FRs. On the other hand, Miss Ibabao was also able to speak well about PhilConserve-PESCP and its tasks, and effectively conveyed a message on how important is the protection and preservation of the environment and natural resources for the life of our people.

Eventually, I felt being challenged as I came to realize with better understanding of what this conservation and protection of environment is all about – namely doing good things now for the future; this is the idealistic effort displayed by the PESCP FRs. It really triggered and motivated myself to go an "extra mile" and hoping to make a difference if possible, with the desire of serving the people even beyond the basic mandate of my inherent duties as law enforcement officer.

Few months later, Miss Ibabao came back to my office in Ibajay, Municipal Police Station and introduced me to Mr. Thomas Kuenzel who is her immediate consultant. From then on, a good working relationship has been established between the PESCP and PNP not only in Ibajay but also in some areas of the NWPP. Mr. Kuenzel is also an interesting person. Despite of not being a Filipino, he shows an extraordinary courage with sincerity and fearless action, running after and apprehending illegal loggers, hunters and other violators of the wildlife protection and preservation laws.

Subsequently, these two key players of the PESCP greatly convinced me to join them in their fight for our environment, and I did not think twice when Mr. Thomas Kuenzel and Miss Ibabao offered me to be the Intelligence and Security Adviser and at the same time a Liaison Officer of the PhilConserve-PESCP on a voluntary basis, without compromising my primary duty as a police officer.

Summarily, I am proud narrating some of my significant accomplishments concerning environmental protection as far as PESCP is concerned both in my official duty and as a volunteer of the PhilConserve-PESCP:

- (1) I conducted anti-illegal timber poaching operations that resulted in the apprehension and confiscation (during my stint as Chief of Police of Ibajay) of two illegally used chainsaws and a total of more than 4,000 board ft of illegally cut forest products of different species including a semi finished boat hull for a motorized boat, and took into custody the ten wheeler truck being used in the transporting of the said products. The owner of the said vehicle happened to be one of the drivers and body guards of one of the top political leaders of the Province of Aklan what was probably the reason for my relief as Chief of Police of and transfer away from Ibajay a few months after the apprehension.
- (2) I had to confiscate 21 sacks of charcoal in my own Barangay Regador regardless of the negative reaction of my neighbors who don't understand the violation they have done. At the same time I ran the confiscation of more than 100 of the endangered giant clams in Barangay Naisud, all of Ibajay, Aklan.
- (3) I executed two joint operations with Nabas PNP and the PESCP which resulted in the apprehension of Dau timber along the Tagororoc River and another apprehension of a natural grown tree cut illegally in Barangay Magallanes, all in the Municipality of Nabas.
- (4) Operation with PESCP FRs that resulted in the apprehension of four pieces of Narra doors (finished products) in Barangay Nauring, Pandan, Antique (see also chap. 1.1).
- (5) Operation conducted twice with Mr .Thomas Kuenzel and Ms. Ibabao that resulted in the apprehension of two chainsaws and one air gun in the Municipalities of Tibiao, Barbaza, and Bugasong, respectively, Province of Antique.
- (6) Initiated and assisted PESCP in the coordination of the different territorial forces here in the area of operations among them the PNP and AFP units such as: Madalag Police Station, Madalag, Aklan, and facilitate the forging and signing of a MOA between PESCP and Calinog Police Station, Province of Iloilo.
- (7) Conducted twice monthly meetings with the PESCP FRs for deepening information on field security and wildlife law enforcement.
- (8) Introduced the six Chiefs of Police of Culasi, Barbaza, Bugasong, Belison and Hamtic Police Station in the Province of Antique to Ms. Ibabao and Mr. Thomas Kuenzel thereby establishing a rapport needed to be successful with the plan to turn the 40,000 ha good forest in the CPMR into a Protected Area as Critical Habitat.

By the way, this is just a very small part of the overall accomplishments of PhilConserve-PESCP which is now obviously the most successful and most popular NGO in terms of wildlife protection and forest resource conservation in the Island of Panay and even in the whole Visayas region.

Hence, I would like to congratulate all the people involved directly or indirectly, in one way or another, who were able to contribute such an effort and establish such a kind of organization that truly advocates and fiercely fights against those who destroy the environment and for the preservation of the Natural Resources which are intended to be available also for the next generations. Of course, I would like also to congratulate myself for being a part of this great accomplishment for a successful future of our children, which I consider to be one of my legacies both in the service as a police officer and in my private capacity and a citizen of this country. I also made a commitment to myself to continue this advocacy as much as I can do, and to serve as my greatest fulfillment even beyond the mandate of my job.

1.3 Review of past Activities and planned Program of PESCP for 2009

A Project of the Frankfurt Zoological Society (Germany)²

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1.3.1 Project outline

PESCP, which started its work in the Western Visayas in 1995 (during the first years based on the effort of Prof. Dr. Eberhard Curio from Ruhr-University) as a small project focusing on the conservation of endangered wildlife species. Over the years, and with the continuous and increasing support of the Frankfurt Zoological Society (FZS), it has become a medium sized organisation well known in the region and is now one of the main players on the whole island of Panay in the fields of enforcement of the environmental laws and forest protection, community-based reforestation, protection of critically endangered wildlife species and sustainable development of the upland villages/barangays (brgys).

Main goals of PESCP:

(a) To turn the 5, 000 ha lowland forest of the NW Panay Peninsula into a Protected Area

The main goal during the first years of PESCP's work on Panay has been to make the lowland-rainforest (up to an elevation of 900 m) of the NW-Panay Peninsula (NWPP) – one of the last of this forest type in the Philippines – a Protected Area (PA) totalling 12,000 ha under the NIPAS Act. A first major step towards this goal had been reached when the President of the Philippines signed the document declaring that lowland-forest a PA in April, 2001. Now, by the end of 2008, the underlying bill ought to pass the Philippine Senate.

(b) To turn the 40, 000 ha forest of the Central Panay Mountain Range into a Protected Area

The 12,000 ha PA (with ca. 5,000 ha good forest) mentioned under a) enjoyed the growing appreciation, care taking and conservation effort of the Department for Environment and Natural Resources (DENR), of the new Protected Area Management Board (PAMB), which works since Aug 2004, of the five municipalities encompassing the PA. As the PAMB became operational, waiting for the money which will be available for the protection of the PA as soon as the bill mentioned passes the Senate, the PESCP, in an appropriate manner and along a suitable time frame, shifted its activities to the Central Panay Mountain Range (CPMR) working towards our new main goal: To turn the 40,000 ha good forest of the CPMR into a PA.

The to-be-PA at stake with 40,000 ha good forest in the CPMR is the home of a number of critically endangered, endemic wildlife species such as the **Dulungan Hornbill** (*Aceros waldeni*), the **Visayan Spotted Deer** (*Cervus alfredi*), the **Mabitang** (*Varanus mabitang*), the **Negros Bleeding-heart Pigeon** (*Gallicolumba keayi*), and others.

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² PESCP is a partner through MOA of the Department of Environment and Natural Resources (Philippines).

PESCP has been active in all four provinces of the CPMR already over the last seven years focusing very successfully on the protection of forests and the probably last viable population of the critically endangered Dulungan.

In our effort to lobby for the CPMR to become a PA in 2007 we have been able to win the sympathy of the new Mayor of Libertad, Antique, after the election in 2007, who is very close to the highly influential Congressman Exequiel Javier, who himself is a senior politician who is now looking to leave a legacy of note behind when he is going into retirement, and this his legacy, as thought by him, could be to turn the still good forest of the CPMR mentioned above into a PA. This friendly "coming together" with the Congressman resulted in 2007 in a promise of the Congressman to donate to PhilConserve (NGO under whose umbrella PESCP operates) 600,000 Peso (10,000 EUR) to be used by PhilConserve-PESCP for Forest Rangers (FRs), the protection of the hornbills, and for livelihoods. Now, in Oct 2008, the technical procedure necessary to realize that promise is nearly completed so that we can hope to avail of these 600,000 P before the end of 2008.

In 2008 also the Governor of Antique, Hon. Salvacion Z. Perez, became convinced of the positive effects the activities of PhilConserve/PESCP have in the fields of biodiversity conservation and the development of up-land brgys, and allocated in Sep 2008 300,000 P to PhilConserve to be used for livelihoods and FR activities.

In a meeting with Forester Vicente Sardina (then the DENR CENRO of Culasi, Antique, now the PENRO of Antique) in Sep 2007 we have been discussing the best/fastest way to make the CPMR a PA. Forester Sardina agreed with us to make use of PESCP's data about the breeding range of the critically endangered hornbill Dulungan (*Aceros waldeni*), that is



Fig. 1 Participants of stakeholder meeting at the occasion of resolutions on the declaration of the CPMR as Critical Habitat, Culasi area. 27 Jan 09. Courtesy Anonymus.

also the "Provincial Bird" of Antique. Our breeding data of the Dulungan cover nearly all the forests of the CPMR in all four Provinces of Panay, and therefore will function as the "center piece" of our argumentation to turn the CPMR into a PA. The new Manager of PESCP, Maria Theresa C. Ibabao, presented this proposition to the headquarter of the DENR already in mid Nov 2007.

In April 2008 the Secretary of Environment (DENR, of equal rank to the BMU Minister in Germany) sent an official memorandum to the Regional Executive Director of the DENR in Iloilo (RED of DENR Region VI) wherein the Secretary requested from the RED to undertake all necessary activities needed to protect the 40,000 ha forest of the CPMR by declaring that forest a "Critical Habitat" (CH) according to the Wildlife Law. In his MEMO the Secretary mentioned that PESCP, in its annual reports, has been requesting since long from the DENR to protect that forest which according to PESCP is the home of an impressive number of critically endangered wildlife species, and he requested from the RED to plan and execute that program jointly with PESCP-PhilConserve as partners of the DENR.

On Oct 17, 2008, in following-up the Secretary's MEMO, staff of the DENR Reg VI and PESCP met in Iloilo to discuss the Secretary's suggestion. This meeting resulted in the understanding that some front-line activities must be executed immediately as, e.g., a number of stakeholder meetings (Fig.1) in all four provinces and a survey to get proper knowledge about the extent of

the forest in question and its state of fragmentation. At the same meeting it became also clear that the DENR cannot make funds available before 2009, and that PESCP should ask FZS for funds covering the immediate activities to be done in 2008 in preparation for the designation of the CH. We did this with email from Oct 20 asking FZS for a first extra money of 12,000 EUR hoping for a positive answer.

This project, to turn the forest of the CPMR into a CH jointly undertaken by the DENR and PESCP / PhilConserve, is (1) a major breakthrough for the biodiversity on Panay and for PESCP, but (2) will also increase our financial need for the next 3-4 years enormously - as shown already in our proposal covering ca. 2 million EUR for 3 – 4 years (2009 – 12) that we already presented to the Secretary of Environment who promised to make some of the money needed available. Anyway, it is necessary to realise that the majority of that 2 million EUR needed during the next 3-4 years cannot be made available from funds from inside the Philippines.

Anyway, the budget for 2009 presented here will show our "normal budget" for 2009 but will be used, of course, for activities being part of the larger CH Program. The total budget needed for the CH will be presented in a sort of extension budget covering the extra monetary needs for the CH – this extension budget can be presented to FZS when we know how much money other donors are capable/ willing to spend. To reduce the financial pressure on FZS we have been presenting the above mentioned proposal also to 3 "green" senators in Manila – it has to be seen to what extent they will be willing to help us.

1.3.2 Fundraising highlights of PESCP

From March 2005 to Sep 2006, in tight cooperation with the 25-Peso Multipurpose Cooperative of ASU and on behalf of UNDP/EC, the PESCP executed a reforestation project on Panay with a total value of 46,000 EUR, which was possible only because of the counterpart funding from FZS. - In 2007 PESCP was able to raise additional funds from national and international donor(agencie)s amounting to 25,000 EUR. - For 2008 PESCP has been able to raise additional funds of ca 27,000 EUR coming from the Government of Antique (5,000 EUR) and from donors in Germany, UK, and USA.

All these additional funds are only available because of the permanent funding coming from FZS enabling PESCP to offer counter parting to potential donors.

1.3.3 PESCP - a partner of DENR

PESCP's activities in the Philippines are based on MOAs and MOUs forged with the DENR, a number of LGUs, NGOs, Police Stations, Military Units and Aklan State University (ASU).

The MOA with the DENR is the most basic one because it stipulates that the PESCP is conducting its activities as partner of and on behalf of the DENR, the governmental frontline organisation being mandated with the conservation and sustainable use of the natural resources of the country. PESCP FRs are deputized by the DENR as Wildlife Enforcement Officers (WEOs) giving them the same power and rights as the FRs of the DENR.

1.3.4 PESCP operating under the umbrella of the NGO "PhilConserve"

In May 2006 PESCP created a full-fledged Philippine NGO named "Philippine Association for Conservation and Development Inc." (PhilConserve). Since Oct 2007 the President of PhilConserve is Maria Theresa C. Ibabao who is also the Manager of PESCP. PhilConserve can be seen as PESCP's NGO enabling us to take part in all official activities where an NGO-status is needed for. We are also hoping that PhilConserve over time will be able to win the trust of funding agencies which could help to lessen the financial strain PESCP exerts on FZS every year. As already mentioned we were able to raise funds through PhilConserve from the Governor of Antique in 2008 and the Dept. of Budget and Management. For technical reasons the Governor of Antique and alike donors quite often would not have the legal power to allocate money to PESCP which for some good reasons is not an NGO.

1.3.5 PESCP in 2009

In the following only our standard budget for 2009 will be discussed – anyway, all activities are automatically part of the CH program for the forest in the CPMR.

PESCP's work in 2009 will be executed by 31full-time local staff plus another part-time paid group of around 197 local co-workers (20 Community Conservationists, 165 Nest wardens, 20 station porters), all of whom are supported by a Philippine Manager (Maria Theresa C. Ibabao) and the German Project Coordinator (Thomas Kuenzel) who both are permanently stationed in the project area. A German Scientific Consultant (Prof. Dr. E. Curio) spends at least 4 months per year in the project area. Since Jan 2004 PESCP's Project Coordinator is also holding the position of the Environment Program Coordinator of Aklan State University (ASU), thereby being sponsored by GTZ/CIM, the German Technical Development Agency. Prof. Curio, the present Scientific Consultant of the Project, installed PESCP 14 years ago in the Philippines and acted as its Director until June 2007.

All programs and activities of PESCP are depending on funds being raised from national and international donor organisations among which the FZS is by far the biggest sponsor since the the project's inception 14 years ago. For the main pillars of PESCP's activities see chap. 1.1.

1.3.6 Project Planning Update

1.3.6.1 Overall Goal of Project

The good forests of the NWPP (ca. 5,000 ha) and of the CPMR (ca. 40,000 ha) and its wildlife are sustainably protected/conserved by (and to the benfit of) the people living in and around the areas in question, and that protection/conservation does not rely on foreign support. That biodiversity conservation is sustainable through a precautionary improvement of the living conditions of the people who are the rightful owners of that forest.

1.3.6.2 Successes and Evaluation of past Activity

1.3.6.2.1 Habitat Protection, Law Enforcement, and Rainforestation

Successfully lobbying to turn still existing good forests into Protected Areas:

In April 2001 the 5,000 ha lowland rainforest of the NWPP (one of the last of this forest type in the country, and therefore of immense importance for the maintenance of the biodiversity) has been declared a PA by the President of the Philippines due to the many years of effort of PESCP/FZS in cooperation with the DENR, and others.

PESCP's effort towards the declaration of the 40,000 ha of good forests of the CPMR resulted in a very important breakthrough in April 2008 initiated by the Secretary of Environment who requested from the DENR RED of Region VI to plan and to implement together with PESCP activities needed to declare the forest of the CPMR as a CH, and thus as a PA, as mentioned above.

In following-up a first meeting about that task estimates that the whole program to turn successfully the forest of the CPMR into a PA needs 3-4 years. The costs of that program according to a preliminary estimates (already issued to FZS and other stakeholders) will be ca. 2 million EUR including 0.5 million EUR for livelihood alternatives for the people living in and around the PA.

FR-based habitat protection and law enforcement:

PESCP's habitat protection and law enforcement programs have been very successful and are acknowledged/appreciated by the people, who quite often let us and others know that PESCP is the first and only organization here on Panay which consequently implements its planned and announced law enforcement/ forest protection activities resulting in a high reduction of illegal logging activities where before the illegal loggers wrought havoc to the priceless forest. Some of these successes will be outlined briefly as follows:

- The highly organized effort of groups of illegal loggers to generate millions of Peso during 2002, and the first half of 2003 (pre-election time), by chain sawing down a huge number of mature grown native timber trees inside the PA of the NWPP had been stopped through the consequent patrolling of PESCP's FRs in tight cooperation with the Philippine Army by setting up a FR-forest protection camp inside the PA being manned day and night for ca. 6 months in 2002
- Tree timber poaching activities (illegal logging) in the PA of the NWPP and in the forests of the CPMR slowed down during the years after the election in 2003, but increased again in the year before the latest election in May 2007 culminating in ca. 61 cubic meter illegally cut down White Lauan trees inside the PA of Nabas, Aklan, being found by our FRs in March 2007. From that lumber ca. 40 cubic meter would be marketable lumber after being chain sawed having a total value of ca. 900, 000 P = 13,789 EUR. On behalf of the DENR, PESCP installed an FR camp at the cutting site of the PA in March 2007 which was manned day and night by our FRs in

company with Tanods (village police) of Tagororoc (the brgy in whose area of jurisdiction the illegal logging had occurred). In the second half of 2007 we reached a sort of agreement between the DENR and the NW Panay Biodiversity Management Council (NPBMC) that from Nov 01 it is the Municipality of Nabas, that continues to maintain that camp until the lumber can be finally chain sawed transported to the lowland (not later than mid of Dec 2007) where it will be distributed among the five municipalities located around the PA to be used in building schools etc. - until now (Oct

Fig. 2 Inspection of illegally operated chain saw by PESCP Manager Maria Ibabao accompanied by PESCP FRs. 31 Aug 08. Courtesy Anonymus.



2008) this plan has not been realised by the mayors; this shows clearly how little the mayors are concerned about the environment. Anyway, such use of illegally cut lumber is unusual because normally such lumber has to be handed over to the DENR where it might be used as evidence if a case could be filed, which here

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is not in sight because all witnesses we approached are fearing for their lives and are not willing to sign affidavits. In 2008 further timber poaching has been discovered by PESCP, and more than 1,000 bd ft lumber have been apprehended by PESCP in tight cooperation with the PNP Nabas and the Chief Planning Officer of the Police Headquarter of Aklan, Police Cptn. Geylord Loyola – which activity has been filmed by a professional TV-team and already shown in Philippine TV (see chap. 1.1).

Due to the daily patrolling / monitoring effort of PESCP's FRs in tight partnership with the PNP (especially to be mentioned of Pandan, Libertad, Nabas, Ibajay and Sebaste) and the CAFGUS (part of the Philippine army) a "climate" has been established in the forests which is feared by the illegalists; chainsaws and illegally cut lumber have been confiscated, whenever observed; some illegalists have been imprisoned, and 6 chain saws have been apprehended in 2008 (from among a total of 42 chain saws since 2005). Also here it must be mentioned that our effort is indeed very successful because the number of unregistered chainsaws is decreasing drastically (Fig. 2). Chain saw owners even come now to our office to ask us helping them to register their chainsaws. That means, we have been able to improve to a high degree in the northern parts of Antique and Aklan the environmental law compliance and willingness of the people – and we hope very much that we will be able to produce an alike situation in the whole CPMR during the coming 3-4 years of the CH program.

The NPBMC supported by PESCP has planned invigorating the task force Anak Talon made up of Police, Army, DENR, LGUs, and NGOs already in 2004, that is held responsible for the protection of the PA in the NWPP, which then should be independent from PESCP's protection effort. Unfortunately, the as yet only active part of that task force until today (Oct 2008 which is 4 years later) are the FRs of PESCP due to lack of funding for that task force promised for years by the mayors but not yet realised. In 2007 this unacceptable situation seemed to change to the better, because since the election in May 2007 Libertad has a new mayor who is now also the new Chairperson of the NPBMC, and who from the beginning brought a fresh wind into the Council's meetings, where he first of all ordered the Task Force Anak Talon to be newly discussed, which was done during a meeting in Sep 2007 led by the MENRO of Nabas. He went a long way ensuring that enough men from the brgys. can be recruited for monitoring activities of that Task Force. The money for it is thought to come partially from the LGUs and partially from the Government as soon as the bill for the PA has passed the Congress – which was hoped to happen in 2007.

- This we wrote in the Annual Report for 2007. Now in October 2008 we have to realize that nothing of the above mentioned plans and promises regarding the Task Force Anak Talon has pushed through. The mayors of the five municipalities do not have the necessary money (or are not willing to make it available), and until now no money from the Government is in sight to allow the PAMB paying for the Task Force. All people involved are waiting for this money which is expected to come after the bill is approved by the Senate, which is said to happen before the end of 2008. [At the time of editing this report, i.e. May 09, the bill is still not approved. Ed.)
- Since 2001, PESCP has extended its various measures for habitat protection in the NWPP into all four provinces of the forest of the CPMR, but it must be understood that the proper protection of the ca. 40,000 ha of the good forest of the CPMR needs ca. 100 FRs, and PESCP has a total of only 22 in 2008, which also have to cover the forest of the 12,000 ha PA of the NWPP. These figures highlight the dilemma we need a much higher budget for the employment of more FRs. This sad situation is somehow mitigated by the fact that PESCP beside the FRs has also 20 Community Conservationists and 165 Nest Wardens who are distributed all over the forest of the CPMR in 20 villages. We hope very much that the whole situation will change to the better when the budget needed for the CH program becomes available.

Community-based habitat protection:

In all the many upland communities where PESCP has been active in helping the people to set up livelihood alternatives we are trying to convince our counterparts that any long-term improvement of their and the coming generations' living conditions is dependent on community-based conservation or restoration of a healthy environment. Accordingly we helped them to set up appropriate conservation plans. In continuous follow-up activities PESCP's is monitoring the consequent implementation of these community conservation plans. The positive results show us that the combination of livelihood alternatives and community-based environmental conservation plans are a very useful tool in making conservation sustainable where to the whole region has still a long way to go.

Anyway, when we are talking here in terms of e.g. "consequent implementation of community conservation plans", and "the positive results", then it must be understood that the positive results of / positive reactions to our interventions mentioned are not yet sustainable. To illustrate this, our effort to protect the Dulungan population in the CPMR has been very successful for eight years by now. However, we are also very much convinced that the poaching of these hornbills would start again as soon as we would suspend our effort in paying for each unpoached Dulungan nest hole — meaning, we indeed still have to go a long way to sustainability. Nevertheless, there is no doubt that we are on the right track — this has even been stated by the team of the North of England Zoological Society evaluating PESCP's effort to protect the Dulungan on Panay. In their final report one can read that our effort to protect the Dulungan could lead to sustainability if it can be appropriately continued (see also chap. 1.3.2.2.2). Now that a 3-4 years program (and budget) to declare the 40,000 ha forest of the CPMR a PA lies ahead of us we are convinced that a big step toward sustainability can be made.

Rainforestation:

PESCP's endeavours to raise funds for the extension of our rainforestation program has been extremely successful. As the only organisation in the Western Visayas, PESCP in partnership with the 25-Peso Multipurpose Cooperative of ASU, has been successfully submitting a rainforestation proposal titled "Community-based Maintenance and Restoration of Forests in Central Panay Mountain Range and Protected Area of NW Panay Peninsula (CoFoPa)" to the EC/UNDP "Small Grants Programme for Operations to Promote Tropical Forests". In March 2005 EC/UNDP gave ca. 55,000 US\$ to enable PESCP to execute/implement the activities proposed for CoFoPa, which after 19 months ended in December 2006. A basic condition to receive that funding from EC/UNDP has been a certain capacity for counterpart funding, which PESCP was able to fulfil through the annual funding coming from FZS. Based on funding from FZS and EC/UNDP seven nurseries for native forest trees have been installed and are maintained in the provinces of Antique and Aklan also after the UNDP-funded work ended (see chap. 1.5 with illustration of nursery and out planting work).

In 2007 PESCP has been chosen by the DENR as its partner organisation within the scope of the Green Philippines Program (GPP), and in fulfilment of that program PESCP has been able to plant out a total of 50,000 native forest trees in the provinces of Antique and Aklan in 2007 and another 50,000 in 2008. To complete that task we received help for seedling transporting, hole digging and planting activities from schools, universities and LGUs. Supporting PESCP's request to the DENR to promote in large scale the outplanting of native tree species instead of exotics the DENR PENRO of Aklan, Forester Roul Lorilla, suggested successfully that this our request should be acknowledged and followed-up by the DENR reforestation working group to reduce the number of exotics outplanted by the DENR, and we are thanking Forester Roul Lorillo for his understanding, support and associated initiatives.

In the end of 2008, in addition to our five nurseries maintained by PESCP already for some years we will be able to install four more nurseries based on a budget we will receive end of Oct 08 from Congressman Javier. Therefore, in 2009 we will be able to plant out from our 9 nurseries at least a total of 80,000 native tree seedlings.

1.3.6.2.2 Protection of critically endangered / endangered Wildlife

PESCP's protection of critically endangered / endangered wildlife has been especially successful with regard to programs focusing on two "flag ship" species – the critically endangered Dulungan (*Aceros waldeni*) living in the CPMR, and the endangered Golden-crowned Flying Fox (*Acerodon jubatus*), which has its last roosts of the region on Boracay Island.

Protection of the Dulungan and other coexisting wildlife:

PESCP's community-based protection scheme for the Dulungan reduced nest poaching per breeding season from a former staggering ca. 50 % or more down to ca. 5 %. Before PESCP got active in the CPMR, the information about the Dulungan - which no doubt is one of the most threatened hornbill species worldwide - in the literature amounted to no more than 50 to100 breeding pairs.

After nearly 8 years of intervention through PESCP (with funding mainly from FZS, GEO, NEZS/ UK, NGS/ USA and Columbus Zoo/ Ohio) we had the pleasure to protect until the young birds successfully fledged a total of 985 Dulungan nest holes in 2008. Involved in that activity in 2008 have been 3 Wildlife Educators, 30 FRs, 20 Community Conservationists and 165 Nest Hole Owners/ Nest Wardens, and squads of porters enabling us to go for longer expeditions deep into the hinterlands of Dulungan country.

For the breeding season of 2009 we are planning to have our Dulungan protection effort evaluated again. For this reason we are going to invite interested field ornithologists to participate in our pre-assessment survey in May/June 2009 when we are visiting for verification all Dulungan nest holes known to us. A doctoral Student from Pakistan, Basharat Ahmad, will be crucially involved in this and other assessments of the species. When we receive the funding needed for the Critical Habitat program we will start a full fledged Dulungan nest hole survey during the breeding season of 2009, covering the whole 40,000 ha forest of the CPMR which is expected to give us a final info about the total breeding population on Panay.

PESCP's protection scheme focusing on the Dulungan living in the CPMR at the same time serves also the protection of other wildlife in the area as, e.g., the critically endangered Visayan Spotted Deer (*Cervus alfredi*), and the endangered Tarictic Hornbill (*Penelopides panini*).

Protection of flying foxes:

In 2003 PESCP was able to receive a donation from Haribon (largest Philippine conservation-concerned NGO) to realise a program for the protection and conservation research focusing on the endangered Golden-crowned Flying Fox on Boracay. The most important results of the project are (1) a substantial reduction of the hunting pressure on the Golden-crowned Flying Fox, and on two other flying fox species using the same roost as the Golden-crowned one, (2) the numbers per species using the roost on Boray are known (2, 500 – 3,500 in 2005), (3) the behaviour of the flying foxes is better understood, especially their reaction to stress induced by human activities near the roost (Van der Aa et al. 2006, Acta Zoologica Sinica 52: 827-837), (4) further threats and especially hunting imposed on the flying foxes during their nocturnal forays to the Panay mainland are better understood, and (5) hunting of flying foxes on Boracay went down to nearly zero, mainly due to the fact that the forest containing the roosts is now effectively protected through Shangrila Hotel, the new owner of the land.

Anti-airgun program:

PESCP's Rice-for-Airgun program as an intervention against hunting has been rather successful resulting in the collection of 62 airguns until the end of 2006, when in Nov 06 they were destroyed during a biodiversity conservation event in the presence of the media. The collection/surrender of airguns has abated because the area around Pandan where that program

has been known best is nearly depleted of airguns through that measure. Only seven airguns were collected in 2007. We are trying now to repeat the program in other areas, too.

1.3.6.2.3 Livelihood-based sustainable Community Development

Over the years PESCP's livelihood-based, sustainable community development programs covering all four provinces of Panay have been executed rather successfully.

FZS/NGS/GEO co-financed Dulungan protection related livelihoods:

Within the scope of our Dulungan protection scheme the implementation of livelihood alternatives in the communities living in and around the forest occupied by the Dulungan has been an indispensable and rather successful tool over the last eight years. Being a flanking measure it is enabling the people in the upland to refrain from illegal and unsustainable use of the forest and its wildlife – and so to refrain from poaching the Dulungan nests and/or thus supporting actively the proper execution of our Dulungan protection scheme.

FZS/UNDP-co-financed livelihoods:

From March 2005 to Dec 2006 a fullfledged livelihood program in five counterpart communities in the provinces of Aklan Antique has and executed. been thanks to the cofunding from FZS and EC/UNDP. The five counterpart communities were chosen with regard to their location in or nearby forested land and to the positive potential effect the livelihood interventions would have with regard to



Fig. 2 Pigs donated for fattening and breeding to communities receiving PESCP's livelihood support, one of many measures improving the living conditions of stakeholders living near and in the forest to be protected. Courtesy Anonymus.

the protection of the forest and its wildlife as already explained above for our Dulungan protection scheme – empowerment of the people in our counterpart communities to refrain from illegal and unsustainable use of the forest and its wildlife. In 2007 the livelihood programs in these five counterpart communities have been followed, and in five other villages included in our Dulungan protection scheme livelihood programs have been implemented as for example, making available mother cows (1 for 1 family each), which will be handed over to the next family after giving birth to a calf; or, our potable water programs where PESCP is enabling villagers to access clean drinking water. We also distributed among villagers 10 rice stoves as alternatives to the use of firewood.

In 2008, PESCP/PhilConserve successfully implemented different livelihood projects in the Provinces of Antique, Aklan, and Iloilo as follows:

Pig fattening in 3 communities (Fig. 2)
Pig breeding in 2 communities
Tree planting/farming in 12 communities
Production of organic fertilizer in 2 communities
Pilot projects in rainforestation in 5 communities

Pilot project in agroforestry in 5 communities

Veterinary follow-up activities in the 5 barangays of the CoFoPa project Carabao distribution for farming works and breeding in 2 communities Vermi culture for fertilizer production in 1 community Grocery store installation for nest wardens in 1 community School matriculation fee distribution in 1 brgy for 30 students Goat breeding in 1 community Potable water supply in 1 community

All these livelihood interventions were helping PESCP successfully to make its habitat and wildlife protection activities sustainable by empowering the uplanders to become less and less dependent on the use of the forest.

1.3.6.2.4 Conservation and Development Education

Conservation and development education activities/campaigns are appropriately integrated into all of our community-based livelihood programs in the uplands of all four provinces of Panay. PESCP has been regularly invited by schools to give students lectures about biodiversity conservation and precautionary economic development. Student groups from ASU and schools are regularly visiting PESCP's office, our reha facilities, and even the station to learn about wildlife and its conservation, i.e. curricula which the universities/ schools do not offer. Small groups of Philippine students together with their teachers are regularly invited to stay a couple of days in our research station to get a first impression and introduction about the rain forest in the Philippines. In 2007 a TV team from Germany has been working for three weeks with PESCP producing a 30 min film about PESCP's activities, that has been on German TV already in July 2007. In 2008 we supported 35 poor families by making available to them school fees for their kids.

1.3.6.2.5 Nationalisation / Sustainabilisation of PESCP's Activities and Programs

PESCP's linkage with Aklan State University (ASU):

In 2003 PESCP has been able to win over ASU located at the western slopes of the CPMR as a strong local partner for PESCP's activities/ programs, and the former Manager of PESCP (now its Technical Adviser), Mr. Thomas Kuenzel, became also the Environment Program Coordinator of ASU. Within the scope of that partnership Mr. Kuenzel has been accepted by GTZ/CIM for being supported by GTZ/CIM's program of Integrated Experts making available a honorarium for these positions in 2004; since 2005 that honorarium is co-financed by GTZ/CIM and FZS, which funding is planned to be continued for another 2 years until the end of 2010 [but unfortunately did not materialise since end of 2008, due to the pull-out by GTZ/CIM. Ed.]. By pursuing rather successfully the partnership between PESCP and ASU we have been able to make a very big and important step towards the nationalisation / sustainabilisation of PESCP's activities and programs. In 2007, 20,000 of native forest tree seedlings planted out during the Green Philippines Program came from our nursery being located at the campus of ASU in Castillo jointly managed by ASU and PESCP. In 2008, a total of 12,000 native forest trees have been planted out from that same nursery. The cooperation with ASU in nursery based reforestation, agroforestry and in joint research activities will be intensified in 2009.

PESCP and the Philippine Association for Conservation and Development (PhilConserve):

In March 2005, another step towards nationalisation of PESCP's activities and programs has been successfully executed by installing a Philippine NGO named PhilConserve under whose umbrella PESCP is now operating. The President of PhilConserve newly elected in September 2007 is Maria Theresa C. Ibabao, who is also the Manager of PESCP. Through PhilConserve we have been able to raise money in 2008 from 1 Congressman, 1 Senator and from the Government of Antique (see above). The proposal we submitted to the World Bank in 2006 through

PhilConserve unfortunately did not pass through the first screening committee of the DENR. But it was reconsidered in 2008 with the result, that the CPMR will be seen as the area where beside

the DENR as the lead agency it is the NGO PhilConserve/PESCP which is responsible for the biodiversity maintenance and livelihood development. To enable PhilConserve/PESCP to realise that mandate it is planned to allocate an appropriate budget from the World Bank/GEF until the end of 2008. We hope very much that this scheme will push through because then a huge part of the budget needed for the CH –PA will be covered through money hopefully coming from GEF.

Communities as PESCP's vehicle to sustainability:

As another very important move – possibly the most important one - towards nationalisation and sustainabilisation of PESCP's activities / programs have to be seen all our conservation and livelihood activities we execute together with our local counterpart communities in the forested uplands of Panay. It is here that we forge a link with the people who are the rightful owners of the environment we are concerned about, and who within the scope of our interventions are empowered step by step to accept and execute the idea of conserving nature to the advantage of their coming generations. But nobody should be mistaken about the fact that all education/knowledge remains unimplemented theory as long as the people do not have an income which enables them to live a decent life. Therefore, the maintenance of biodiversity depends to a large extent on the economic situation of the people involved. If the income situation is not appropriate then the people have to survive on a mostly unsustainable use of their natural resources. The CH-PA program will be an invaluable step toward sustainability.

1.3.6.2.6 Rehabilitation and Release of captive Wildlife

PESCP maintains three reha facilities, two in the lowland areas of Pandan and Libertad and another at PESCP's research station in 450 m a.s.l. near the prime forest of the NWPP PA which is used as the only release site for rehabilitated Tarictic Hornbills. Since 2002 all of the released Tarictics are part of our telemetry program sponsored by the Brehm Fonds for International Bird Conservation. In 2007, we first-time released one of the Dulungans, which unfortunately fell prey to a natural predator. For this reason we postponed the further release of Dulungans thinking about a better way to make the Dulungans more fit to join the real life in the forest upon release. In 2008 a complete "Hornbill Release Instruction" (HRI) has been developed by PESCP, and our next release activities according to our HRI document will take place in 2009 as discussed already with the DENR. A Philippine researcher, Marlo Alli, is focusing on the telemetry project has been/is still mainly funded by Prof. Curio's "Foundation for Bird Research and Conservation".

Our former goal to instal a Breeding Center for Endangered Wildlife in ASU for which we planned to build appropriate breeding facilities for the Dulungans had to be cancelled for technical reasons.

Rehabilitation and release of wildlife surrendered to PESCP from private captivity or confiscated through Police or the DENR is successfully going on as overseen by PESCP's veterinary consultant who supervises four care takers (**App. 4**).

All release activities are executed according to DENR regulations and are often witnessed by DENR staff.

1.3.6.2.7 Conservation Research

Conservation research activities have been mainly executed in the prime forest around PESCP's research station, but also on Boracay (for more details see chap. 2 below).

PESCP's records for Panay of species new for science or new distributional records:

The two most important new records will be only mentioned in passing:

- The King Cobra (*Ophiophagus hannah*), one of the most dangerous snakes around the world – a new record for Panay.

- The Mabitang (*Varanus mabitang*), a vegetarian reaching two meter in length described new for science.
- The Panay Shrew (*Crocidura panayensis*) is the first new species of mammal endemic to Panay since the description of the Panay Cloud Rat (see Conservation Research, chap.2.1). This latter discovery fully justifies the setting aside of the NWPP as PA as stipulated by the new Wildlife Act and its Critical Habitat directive since the small area of distribution so far only the NWPP fulfils the required condition of endangeredness [Ed's. comment].

Conservation research at PESCP's Research Station:

The most important project in 2004 to 2008 executed around the research station is titled "Foraging, diet and reproduction upon release of Tarictic Hornbills" for which a major budget line in 2004 came from Haribon and the Brehm Fonds.

The project is making use of Tarictic Hornbills, which went successfully through our rehabilitation process after being secured from illegal maintenance on Panay. These Tarictics when being ready for release are equipped with a transmitter to allow us after release to follow and record their whereabouts, foraging, diet and reproductive behaviour as well as their survival through time, with the first three components mentioned serving as short-term indicators of survival in the wild.

The bulk of the telemetry equipment ordered from Canada, which has been withheld in the customs office in Manila for ca. 2 years, we were able to receive in Oct 2006, and in 2007 we were able to employ a Philippine researcher who is willing to work permanently at the station. The progress of the telemetry project again has been hampered by critical questions coming from the villagers who were concerned about the question if their health could be in jeopardy through our telemetry equipment. These concerns went so far that we were forced to request an official letter from the National Telecommunications Commission (NTC), which activity needed time. After we received that official letter from NTC in Sep 2007 we held again meetings in all three villages included in the coverage of our 3 antennas, which in the mean time have been installed successfully.

The undertaking is thought to gain insight into the suitability of release as a conservation technique for strengthening the wild population of hornbills.

The project is executed by our Philippine researcher who is supported by volunteers from ASU.

Many other research activities have been executed using the research station as a base camp with especially outstanding records in the field of ornithology, herpetology and the behaviour of bats resulting in a number of newly discovered species (see PESCP's previous annual reports) and other outstanding findings.

Conservation research on Flying Foxes:

The conservation research executed on Boracy concentrated on the roosts of flying foxes (for details see 1.3.6.2.2 above).

1.3.3. Planning for 2009

1.3.3.1 Plan of Operation

Specific target Activity A. Habitat Protection, Environmental Law Enforcement and Rainforestation 1.1 2009 is the first year of a period of 3 - 4 years during 1. The ca. 40,000 ha of good forest still existing in the CPMR – the home which PESCP/PhilConserve in tight partnership with the of a number of critically endangered, DENR of Reg VI will execute a program which shall endemic wildlife among them the last result in the declaration of the last 40,000 ha good forest in probably still viable populations of the the CPMR as a Critical Habitat (CH) through which that Dulungan and the Visayan Spotted forest will be protected under the Wildlifel Law of the Philippines. In doing so the DENR of Reg. VI in Deer – are declared as a PA according to Philippine environmental laws. partnership with PESCP/PhilConserve complies with a memorandum of the Secretary of Environment of April 2008. The proposal of PESCP/PhilConserve explaining in detail the activities needed to have the forest of the CPMR declared as a PA has been presented to FZS and main stakeholders already in Sep 2008. With the meeting between DENR and PESCP/PhilConserve on Oct 17, 2008, in Iloilo the planning phase of that 3-4 years CH program has started. In mid of Nov 2008 another planning meeting followed where the DENR Reg. VI presented its ideas/comments re PESCP's proposal mentioned above. Therefore, all activities enumerated here are to be seen as planned with regard to the 117, 744 EUR PESCP requested only from ZFS for 2009 as its annual budget. The total budget needed for the 3-4 years CH program is ca. 2 million EUR as stipulated in the above mentioned proposal. The final plan for the CH program covering th next 3-4 years will be finalised when the associated ideas/plans have been discussed with all stakeholders – this might be not earlier than mid March 2009. 1.2 Lobbying to win the sympathy and the support for the CH program from other politicians of the region and of all stakeholders of the area in question. 1.3 Lobbying for and installing a Central Panay Conservation and Development Committee (CePaCo) under the leadership of the DENR, and with PhilConserve/PESCP as the technical implementing organisation. That CePaCo will be responsible for the maintenance of the 40,000 ha good forest and the conservation of its biodiversity, and a precautionary economic development of the area. PESCP's Forest Ranger-based 2.1 The number of 20 days / months the PESCP FRs are monitoring/patrolling the forests will be maintained. forest protection and environmental 2.2 Having all 21 FRs of PESCP deputized as Wildlife law enforcement is (a) improved in quality, and (b) adapted to the Enforcement Officers (WEOs) through the DENR. increasing demands on our FRs in other 2.3 Improving the effectiveness of the FRs by deploying areas/regions with priority given to the them in 2 groups (to cover a larger area per time unit) and CH program for the CPMR forest. ensuring a tight cooperation of our FRs with DENR, Police and Military, and the communities in question, whereby these 2 FR groups operate independently but will be ready to join their forces if needed.

- 2.4 All operations of the FRs will be recorded through the way-point program of a GPS for improving our control over the activities of the FRs.
- 2.5 Executing 2 half-years training sessions for the FRs in paralegal tasks and the law situation in the Philippines.
- 2.6 PESCP's anti-illegal logging program, which offers anybody who lawfully confiscates an illegally used chainsaw an apprehension fee of 4,000 P, will be continued.
- 2.7 In following a request from the DENR Reg. Exec. Director of Reg. VI PESCP's FRs in 2009 will be tasked with monitoring activities inside the PA of Sibalom in S-Antique, in the forest of the Province of Capiz and in the forest area of Reg VI on Negros Island. The later activity on Negros will be a first out-of-Panay activity, and will be supported and secured through the presence by Police Cptn Gaylord Loyola from the Police Headquarter in Aklan.
- 3. PESCP's community-based habitat/forest protection is strengthened and substantially improved to become our second main tool in making habitat protection in the region sustainable.
- 3.1 The conservation plans attached to livelihood alternatives will be improved in terms of reliability and controllability of the conservation tasks stipulated, and they will be monitored and controlled consistently by PESCP Wildlife Educators supported by Community Conservationists and LGU- Officers.
- 3.2 Many paragraphs for the new environmental code for Pandan Municipality where PESCP together with others has been working on will be the legal base for a substantial improvement of the Brgy-LGUs' capacity to realize biodiversity conservation and sustainable use of natural resources.
- 3.3 To lessen the burden of illegal logging inside the public forests PESCP is presently proposing a paragraph for the new environmental code of Pandan requesting that each brgy must install its own native timber and fruit tree nursery and its own 500 ha native timber and fruit tree plantation situated in public land, which later on should be sustainably used for generating income for the Brgy-LGU through sale of high quality timber.
- 3.4 Giant Bamboo planting on private land will be encouraged in all communities as timber replacement for house and boatbuilding activities to reduce the need for forest tree lumber.
- 3.5 The MENRO of Pandan will be supported to peed up the ratification of Pandan's new environmental code which is on the agenda of Pandan's law makers for more than 2 years already.
- 4. The local task force Anak-Talon, initiated and planned by the NPBMC in cooperation with PESCP and others to protect effectively the PA of the NWPP is operating effectively.
- 4.1 As long as Anak-Talon is not full operational (until now no operations at all) 1 Group of PESCP's FR will monitor/patrol the NWPP PA at least once a week.
 4.2 PESCP will support the MENRO of Nabas and his Anak-Talon scheme presented by him during the last meeting of the NPBMC in Sep 2007, and again in 2008 but not accepted by the 5 Mayors. On a meeting in S. Jose on Oct 23, 2008, personnel of the DENR, PESCP/

PhilConserve and from all five municipalities around the NWPP have agreed about a resolution requesting from each of the 5 municipalities an annual contribution of 100,000 P for the protection of the already existing 12,000

ha PA. During that meeting all accepted a statement that the only existing protection for that PA comes from the FRs of PESCP/PhilConserve, and that therefore 250,000 P (out of the above mentioned 500,000 P contribution of the five NWPP municipalities) will be allocated to PESCP/PhilConserve. To make this a reality it still needs the OK from the five mayors who during the last decade (!!!) have not been willing to spend even 1 P on that.

- 5. The still existing remnants of good forest on Panay will be extended.
- 5.1 Based on nine nurseries a total of 80,000 native forest trees will be planted out in 2009 on public land and partly on private land for tree farming.

B. Protection of Critically Endangered / Endangered Wildlife

- 6. PESCP's measures for the direct protection of critically endangered wildlife species like the Dulungan is continued and extended to cover a wider area occupied by that species, and the total population living in the CPMR is known and protected.
- 6.1 Meetings with our co-workers in the communities of the area in question will be executed to prepare them and the communities for the activities in the coming breeding season in 2009.
- 6.2 A certain number of Dulungan nest holes will be monitored at the start of the breeding season of 2009 to enable us to fix the proper date to start the pre-assessment, which gives us the number (and other data) of the nest holes occupied by Dulungans in 2009 our preliminary guess for 2009: ca. 1,000 nest holes.
- 6.3 Monitoring of a selected number of nest holes during the whole breeding season will be given into the custody of Community Conservationists.
- 6.4 Final acknowledgment meeting in the provinces of Aklan and Antique with all staff, co-workers, LGUs and DENR will be replaced with a less costly data gathering activity.

C. Livelihood-based Sustainable Community Development

- 7. In 2009 the number of livelihoods can be increased if funding promised to our NGO PhilConserve by Congressman Javier and the Government of Antique will be realised. Special emphasis will be given to areas inhabited by critically endangered wildlife species like the Dulungan , and the Visayan Spotted Deer inside the area planned to become a PA.
- 7.1 In all communities covered by the former FZS/UNDP funded CoFoPa project (1 community in the NWPP PA and in 4 communities of the CPMR, the latter 4 surrounded by forests inhabited by Dulungan and Spotted Deer) the livelihood program installed there during CoFoPa including pig and chicken breeding and fattening, production of organic fertilizer, agroforestry, sloping agriculture, and native timber and fruit tree farming, will be continuously supported and followed up.
- 7.2 Further livelihood programs will be executed in 20 of the upland communities not covered by the CoFoPa project but involved in our Dulungan project.
- 7.3 The monitoring of the Conservation Plans related to each of the Iivelihoods will be ensured by giving monitoring responsibility to one Community Conservationist attached to each of the livelihoods.
- 7.4 Well experienced sen. staff of ASU and National Agricultural Offices will support our livelihood program.
- 7.5 In 2008 we were able to employ a new staff in replacement of 1 of our Wildlife Educators. This newly recruited staffer is highly experienced in planning and implementation of livelihood alternatives and in all community matters he has been active for nearly 20 years as Brgy Cptn in different communities. With the help of this newly recruited staff we will be able to improve the quality of our livelihood program.

D. Conservation and Development Education 8. PESCP's conservation and 8.1 Conservation and development activities/campaigns development education effort is will be executed in all communities involved in our improved and the area covered is programs. PESCP staff will execute conservation and extended. 8.2 development campaigns in schools in all four provinces of Panav. The reha facilities and the Station will be used for educational events allowing the students at the same time to see Philippine wildlife. E. Nationalisation / Sustainabilisation of PESCP's Activities and Programs 9. The integration of PESCP's vision The cooperation with ASU where PESCP's 9.1 and programs into Philippine society is Technical Adviser holds the position of the Environment improved. Program Coordinator will be strengthened by involving ASU more tightly into our activities, e.g., in our telemetry project focusing on the protection of Tarictic Hornbills in the wild, and other projects. PESCP's endeavours to empower upland communities to refrain from illegal use of the forests will be supported by the livelihood alternatives planned and through the consequent execution/monitoring of associated Conservation Plans. The Philippine NGO "PhilConserve" established 9.3 by PESCP in 2005 will be used as a tool to enable PESCP to request for funding from Philippine and international sources. 9.4 PESCP's partnership with the DENR will focus more and more on the strengthening of the DENR as the leading agency in the field of the protection and sustainable use of natural resources in the country. F. Rehabilitation and Release of Captive Wildlife 10. Due to increased demand of our 10.1 Incoming wildlife will be rehabilitated and released FR-based-activities through the RED in its natural habitat. Reg. VI and due to our policy to focus 10.2 Survival chances of Tarictic and Dulungan on forest protection only 5% of FZS's Hornbills after being released will be monitored through funding for PESCP in 2009 goes into telemetry. reha and release activities. The other 95 % will have to be made available through Prof. Curio's foundation. G. Conservation Research 11. PESCP's conservation research is Increasing the number of researchers being willing improved. to execute long-term research at the station, and in the

lowlands.

1.4 PESCP's Protection Program from 2002 to 2008 for the last substantial sized Population of the Dulungan Hornbill (*Aceros waldeni*) – Final Report for 2008

By

A. Alabado, R. Lestino, J. Venus, M. Ibabao, T. Kuenzel and E. Curio

The forest of the Central Panay Mountain Range (CPMR) is the last place where the Writhed-billed Hornbill or Dulungan (Aceros waldeni) – endemic to the Western Visayas, and probably the world's second most threatened hornbill species – has survived with a breeding population of a substantial size (whether its population size is still viable is yet another question). In 1996, PESCP started its program in the area of the 5 municipalities around the NWPP to protect the forest and its wildlife, and to help the people in upland Barangays to realise a precautionary, sustainable economic development, and until today extended this program into the CPMR being active now in 42 barangays and/or sitios of 15 municipalities in all four provinces (Antique, Aklan, Capiz, Iloilo) on Panay Island, Western Visayas.

Until the end of 2001, before PESCP started its protection program for the Dulungan, the situation of the species was described in the book "Threatened Bird of Asia" (2001) from BirdLife International as follows:

"This hornbill must now be regarded as one of the rarest and most precariously placed of all Philippine bird species, with remnant populations only on Panay (highest recent record: 25 - 30) and Negros (highest recent record: four.) ... The most recent estimate, based on extrapolation from fieldwork to all remaining forest areas on the Islands, is 60 - 80 pairs."

Therefore, *Aceros waldeni* is regarded as critically endangered by the IUCN.

A pre-assessment executed by PESCP in 2002 revealed an annual minimum loss of at least 50 % of Dulungan broods due to poaching.

PESCP received the first funding for its Dulungan protection program in 2002 from the German journal "GEO" (20,000 US\$), and the same amount in 2003 again from GEO.

In 2004 the funding came partly from the North of England Zoological Society (NEZS), and mainly from the Frankfurt Zoological Society, and in 2005 again partly from the NEZS and Stiftung Artenschutz, and collectively (near to 35,000 US\$) from the two US-based organisations the National Geographic Conservation Trust and the Sea World and Busch Gardens. In 2005, the funding from the FZS (Germany) has been the basic funding for the work of PESCP.

For 2006, 2007, and 2008 the funding came partly from the NEZS, from the Columbus Zoo of Ohio (US) and mainly from the German journal GEO. The very important basic funding came again from the (FZS).

From 2002, the first year of PESCP's program for protecting Dulungan, up to 2008, there has been a steady increase of the number of Dulungan nest holes which were discovered by PESCP and included in our protection program. The funds of the above mentioned sponsoring organisations enabled PESCP to protect

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in 2002 a total of 31 nest holes in 2003 a total of 64 nest holes (+ 106 % compared to 2002) in 2004 a total of 115 nest holes (+ 80 % compared to 2003) in 2005 a total of 349 nest holes (+ 203 % compared to 2004) in 2006 a total of 502 nest holes (+ 44 % compared to 2005) in 2007 a total of 768 nest holes (+ 53 % compared to 2006) in 2008 a total of 1,018 nest holes (+ 33 % compared to 2007)
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This enormous increase by 3,284% by 2008 can be credited to the very effective nest protection scheme PESCP has applied since 2002, but it is – at least partly – also a sign that the data about the occurrence of the Dulungan on Panay collected before 2002 were not too reliable.

To avoid an overestimation of the Dulungan population breeding in the forests of the CPMR we are qualifying the data as follows:

- (1) The total number of nest holes reported through our 6 teams executing the Dulungan nest hole surveys in 2008 was 1,131 but we conservatively assumed based on our experience in 2007 that 10 % of occupied Tarictic (*Penelopides panini*) nests were mistakenly recorded as Dulungan nests resulting in a total of only 1,018 nest holes of the Dulungan.
- (2) We are assuming conservatively a protection failure of 5 % meaning 51 nest holes have been poached in spite of our protection effort.
- (3) We are assuming for the remaining 967 nest holes a 15 % loss (of the whole clutch from natural causes (Kemp 1995, in "The hornbills", mentions 10 % for smaller savannah hornbill species).
- (4) We are assuming that from the remaining 822 nest holes at least 1 chick has fledged successfully resulting in a total of 822 juvenile Dulungans strengthening the wild population in that area in 2008 (clutch size after Kemp can be assumed to be 2 for the genus *Aceros* though Kauth et al. [1998], J. Ornithol., found three young twice in *waldeni*).
- (5) Out of these 822 successfully fledged Dulungans another 75 % (given in Kemp for cooperatively breeding groups) might die due to natural mortality between fledging and first breeding, which might be reached after 3 years (conservative estimate; see also Kemp 1995, in "The hornbills").

Given these assumptions, out of our 1,018 nest holes occupied by Dulungans in 2008 a total of 205 (1 bird only from a total of 5 occupied nest holes) birds will survive until becoming mature adults.

The substantial protection success here described was only possible through the implementation of our double strategy scheme of community-based and "owner" (= hunter)-based nest hole protection where we made use of a protection network existing of conservation concerned PESCP's community based co-workers (3 Wildlife Educators, 19 Community Conservationists, 21 FRs, 156 nest hole "owners" (former hunters, 18 Tanods = community police, + others) on the one hand, and where on the other hand this network of conservation workers is supported/flanked by livelihoods planned and implemented together with the communities living in and around the forests of the Dulungan country.

Our scheme for the protection of the Dulungan in the forests of the CPMR has of course also its very substantial, positive effects on the protection of other wildlife especially on the only other hornbill species occurring on Panay, the Visayan Tarictic being much less threatened than the Dulungan and occurring still in good numbers in both the forests of the NWPP and of the CPMR. But also the critically endangered Visayan Spotted Deer, with its probably last viable population in the forests of the CPMR enjoys protection through our activities focused on the Dulungan.

Believing that the total area in the CPMR suitable as breeding ground for the Dulungan might be at least 1.5 times the size of the area already covered by our protection program we estimate that the total breeding population of the Dulungan over there amounts to ca. 1.500 breeding pairs, which we still regard as a conservative estimate.

To safeguard what PESCP achieved during the last seven years the Dulungan protection program must be continued. That program has been already evaluated in 2006 through the NEZS finding out that the protection program executed by PESC will very probably lead to the sustainable conservation of the Dulungan in the CPMR. For our Dulungan nest hole survey during the breeding season (May/June) 2009 PESCP is again seeking volunteers to join our survey to give us again an independent judgment of our Dulungan protection activities.

1.5 Accomplishment Report: Community-based Nursery and Rainforestation Project

By

John R. Espiritu
PESCP Forester

and

Sonny Eupre E. Galuego PESCP Assistant Forester

<u>Project sites</u>: San Roque San Juan, Libertad, Antique Idiacacan Calabanog, Pandan, Antique Idio, Sebaste, Antique Alojipan, Culasi, Antique Castillo, Makato, Aklan

<u>With participation of</u>: Estelito Unlayao – Nursery Caretaker, San Juan Julito Dioso – Nursery Caretaker, Calabanog Roberto Ronquillo – Nursery Caretaker, Idio Edwin Filaro – Nursery Caretaker, Alojipan Alphonsus Nabor – In-Charge, Nursery and Rainfo, Castillo

With special participation of: Lisa Querhammer - International Forest Ecosystem Management Student, Student Volunteer, Fachhochschule Eberswalde, Germany

Introduction

Once again, this year's (2008) accomplishment report on the "Community-Based Nursery and Rainforestation Project" highlights a very meaningful effort and reflects contributions to two provinces, namely: Aklan and Antique. In the Province of Aklan, one nursery project was installed on the ASU Campus in Castillo, Makato, since 2005; likewise, since 2005 in the Province of Antique, four nursery projects, one each in four municipalities were installed in the following project sites: San Juan Nursery in Libertad, Calabanog Nursery in Pandan, Idio Nursery in Sebaste and Alojipan Nursery in Culasi. These nursery projects are functional up to present wherein native/endemic forest tree seedlings were raised and out planted in each location. Aside from the mentioned project sites, our nurseries serve also as a "bank of seedlings" for private farmers from some nearby barangays.

The pictures of the plate below are giving an overview on the varied activities of PESCP's nursery and rainforestation scheme.



Nursery in Alojipan, Culasi. Courtesy J. Espiritu



Nursery_repair in Castillo, ASU campus. Lisa Querhammer, German student volunteer. Courtesy PESCP Anonymus



Participation in out planting by the community. Courtesy PESCP Anonymus



Potting seedlings in Castillo, ASU Campus, L. Querhammer and helping kids. Courtesy PESCP Anonymus



PESCP Forester J. Espiritu out planting forest trees in Alojipan. Courtesy PESCP Anonymus



PESCP FRs participate in out planting of native trees, Malumpati. Courtesy PESCP Anonymus



Participation by DENR Forester Ernesto Legaste. Courtesy PESCP Anonymus



Out planting in Castillo, ASU campus. Courtesy PESCP Anonymus

In the reforestation "rainforestation" project sites, all seedlings were planted out from the nursery to their respective plantation sites from June-August 2008. However, some seedlings

were replanted in the CoFoPa (PhilConserve/PESCP/ASU/UNDP reforestation and livelihood project) sites especially in San Juan, Calabanog, Idio and Alojipan. On the other hand, in Castillo, replanting was also done in the area of the Green Philippines Program (GPP) serving an extension of the forest plantation in the open grassland of the public forest.

Nowadays, reforestation is a necessity because of global warming. The climate is already changing, the temperature getting high and rainfall increases. Last June 21 and 22,

2008 typhoon "Frank" struck in both Antique and Aklan Provinces where Kalibo suffered from very heavy flashfloods with mud coming from river-up areas around Libacao, Aklan, wherein this municipality is rich in forest cover that needs to be protected. However, there are already some open/deforested steep slopes from where the soil easily eroded and went down to Kalibo with the Aklan River - tons of soil were washed away from the Libacao area into the ocean and much got stuck in Kalibo affecting very badly the lives of the people in general and businesses in particular.

OBJECTIVES:

General:

To plant 52,000 native/endemic forest tree seedlings in Aklan (12,000) and Antique (40,000), respectively. These numbers will be planted out in public forest open land.

Specific:

- 1. To plant 12,000 seedlings in Castillo, Makato, Aklan,
- 2. To plant 10,000 seedlings in Sitio San Juan San Roque, Libertad, Antique,
- 3. To plant 10,000 seedlings in Sitio Calabanog Idiacacan, Pandan, Antique,
- 4. To plant 10,000 seedlings in Idio, Sebaste, Antique, and
- 5. To plant 10,000 seedlings in Alojipan, Culasi, Antique

Planted seedlings in five rainforestation project sites

1. Rainforestation project site: San Roque San Juan, Libertad, Antique (spacing distance 2 m by 2 m = area covered: 4.5 hectares)

Months planted: June and August 2008

NAME OF SEEDLINGS (COMMON NAME)	SCIENTIFIC NAME	FAMILY NAME	NUMBER OF SEEDLINGS PLANTED
1. Badlan	Radermachera pinnata	Bignoniaceae	639
2. Dungon	Pterospermum niveum	Sterculiceae	1,280
3. Narra	Pterocarpus indicus	Legiumenoceae	2,526
4. Kamagong	Diospyros everettii	Ebenaceae	1,024
5. Igmen	-	-	1,108
6. Kalumpit	Terminalia microcarpa	Combretaceae	200
7. Dangkalan	Calophyllum obliquenervium	Clusiaceae	320
8. Batwan Garcinia binucao		Clusiaceae	179
9. Molave	Vitex parviflora	Verbenaceae	181
10. Gisok	Shorea guiso	Dipterocarpaceae	218
11. Red Laua-an	Shorea negrosensis	Dipterocarpaceae	45
12. Bagotadhan	Bridelia penangiana	Euphorbiaceae	89
13. Toog	<u> </u>		70
14. Tul-ay	-		4
15. Antipolo			11
16. Uyaoy	Planchonia spectabilis	Lecythidaceae	78

17. Gugo	Ganophyllum falcatum	Sapindaceae	2,623
18. Kamunsil	Pithecellobium dulce	Fabaceae	30
19. Maganhup sa Bukid	Albizia lebbecoides	Fabaceae	28
20. Malasantol	Aglaia everettii	Meliaceae	530
21. Amugis	Koordersiodendron pinnatum	Anacardiaceae	17
TOTAL			11,250 Seedlings

2. Rainforestation project site: Calabanog Idiacacan, Pandan, Antique (spacing distance 2 m by 2 m; area covered: 4.0 hectares).

Months planted: June and August 2008

NAME OF SEEDLINGS (COMMON NAME)	SCIENTIFIC NAME	FAMILY NAME	NUMBER OF SEEDLINGS PLANTED
1. Badlan	Radermachera pinnata	Bignoniaceae	155
2. Dungon	Pterospermum niveum	Sterculiaceae	1,100
3. Narra	Pterocarpus indicus	Leguminosae	2,165
4. Kamagong	Diospyrus everettii	Ebenaceae	600
5. Igmen	-	-	720
6. Molave	Vitex parviflora	Verbenaceae	265
7. Gisok	Shorea guiso	Dipterocarpaceae	850
8. Bagotadhan	Bridelia penangiana	Euphorbiaceae	421
9. Toog	Bischofia javanica	Euphorbiaceae	1,165
10. Uyaoy	Planchonia spectabilis	Lecythidaceae	140
11. Gugo	Ganophyllum falcatum	Sapindaceae	795
12. Bakan	Litsea perrottettii	Lauraceae	235
13. Bulog	Syzygium pallidum	Myrtaceae	265
14. Salong	Canarium asperum	Burseraceae	150
15. Magibolo	-	-	180
16. Kulanos	Lepiniopsis ternatensis	Apocynaceae	220
TOTAL			9,996 Seedlings

3. Rainforestation project site: Idio, Sebaste, Antique (spacing distance; 2 m by 2 m = area covered: 3.7 hectares)

Months planted: June 2008

NAME OF SEEDLINGS (COMMON NAME)	SCIENTIFIC NAME	FAMILY NAME	NUMBER OF SEEDLINGS PLANTED
1. Dungon	Pterospermum niveum	Sterculiaceae	451
2. Narra	Pterocarpus indicus	Leguminosae	2,397
3. Kamagong	Diospyrus everettii	Ebenaceae	840
4. Igmen	-	-	386
5. Red Laua-an	Shorea negrosensis	Dipterocarpaceae	289
6. Bagotadhan	Bridelia penangiana	Euphorbiaceae	389
7. Toog	Bischofia javanica	Euphorbiaceae	502
8. Molave	Vitex parviflora	Verbenaceae	121
9. Uyaoy	Planchonia spectabilis	Lecythidaceae	75
10. Gugo	Ganophyllum falcatum	Sapindaceae	1,640

11. Malasantol	Aglaia everettii	Meliaceae	300
12. Ughayan	Alstonia macrophylla	Apocynaceae	30
14. Kulanos	Lepiniopsis ternatensis	Apocynaceae	140
15. Kansilay	Cratoxylum sumatranum	Clusiaceae	50
16. Salong	Canarium asperum	Burseraceae	99
17. Magibolo	-	-	358
13. Duhat	Syzygium cumini	Myrtaceae	100
18. Bulog	Syzygium pallidum	Myrtaceae	201
19. Bagilomboy	Syzygium bordenii	Myrtaceae	71
20. Bakan	Litsea perotteettii	Lauraceae	800
21. Banilad	Sterculia oblongata	Sterculiaceae	110
TOTAL			9,349 Seedlings

4. Rainforestation project site: Alojipan, Culasi, Antique (spacing distance 2 m by 2 m = area covered: 4.0 hectares)

Months planted: June 2008

NAME OF SEEDLINGS (COMMON NAME)	SCIENTIFIC NAME	FAMILY NAME	NUMBER OF SEEDLINGS PLANTED
1. Badlan	Radermachera pinnata	Bignoniaceae	690
2. Dungon	Pterospermum niveum	Sterculiceae	376
3. Narra	Pterocarpus indicus	Legiumenoceae	2,731
4. Igmen	-	-	401
5. Molave	Vitex parviflora	Verbenaceae	273
6. Toog	Bischofia javanica	Euphorbiaceae	605
7. Uyaoy	Planchonia spectabilis	Lecythidaceae	199
8. Gugo	Ganophyllum falcatum	Sapindaceae	1,171
9. Malasantol	Aglaia everettii	Meliaceae	329
10. Amugis	Koordersiodendron pinnatum	Anacardiaceae	246
11. Bakan	Litsea perotteettii	Lauraceae	1,762
12. Tul-ay	-	-	476
13. Bagilomboy	Syzygium bordenii	Myrtaceae	259
14. Salong	Canarium asperum	Burseraceae	98
15. Pili	Canjarium ovatum	Burseraceae	201
16. Banilad	Sterculia oblongata	Sterculiaceae	121
17. Bayoko	Artocarpus ovatus	Moraceae	52
18. Kubi	Artocarpus nitidus	Moraceae	125
19. Malabuyo	Piper brevicuspe	Piperaceae	38
TOTAL			10,061 Seedlings

5. Rainforestation project site: Castillo, Makato, Aklan (spacing distance 3 m by 3 m = area covered: 11 hectares)

Months planted: August 2008

NAME OF	SCIENTIFIC NAME	FAMILY NAME	NUMBER
SEEDLINGS			OF
			SEEDLINGS

(COMMON NAME)			PLANTED
1. Narra	Pterocarpus indicus	Leguminosae	5,022
2. Gisok	Shorea guiso	Dipterocarpaceae	706
3. Uyaoy	Planchonia spectabilis	Lecythidaceae	50
4. Malakdios	Beilschmiedia cairocan	Lauraceae	1,375
5. Mountain Agoho	Casuarina equisetifolia	Casuarinaceae	2,340
6. Putian	Alangium javanicum	Alangiaceae	380
7. Malanangka	Parartocarpus venenosus	Moraceae	1,180
8. Batikuling	Litsea leytensis	Lauraceae	987
9. Dagabdab	-	-	200
10. Alupag	Amoora sp.	Sapindaceae	10
TOTAL			12,250 Seedlings

Summary of planted seedlings:

PROJECT SITES	NUMBER OF SEEDLINGS PLANTED	AREA COVERED (hectares)
San Juan San Roque	11,250 Seedlings	4.5
Calabanog Idiacacan	9,996 Seedlings	4
Idio	9,349 Seedlings	3.7
Alojipan	10,061 Seedlings	4.
Castillo	12,250 Seedlings	11
TOTAL	52,906 Seedlings	27.2

Other activities:

The PhilConserve/PESCP in partnership with the DENR, Aklan State University (ASU) and Local Government Units (LGUs) were also helping in other activities, especially in tree planting conducted by the various LGU's and DENR branches where PESCP donated the seedlings.

NAME OF BARANGAYS/ CELEBRATION	DATES OF TREE PLANTING	AREA OF TREE PLANTING	SEEDLINGS PLANTED	NUMBER OF SEEDLINGS DONATED
Sto. Rosario,	Sep 14, 2008	Watershed	Gugo	33
Pandan, Antique			Dangkalan	11
			Igmen	19
			Malasantol	3
			Narra	8
			Kamagong	1
		TOTAL		75 seedlings
Sitio. Malumpati,	June 28, 2008	Along Barangay	Kamagong	100
Guia, Pandan,		Road	Narra	100
Antique		TOTAL		200 seedlings
Peoples Day	April 12, 2008	Given to the	Uyaoy	30
Celebration		interested participants	Narra	80
		during the Peoples	Kulanos	40
		Day	Molave	20
		TOTAL		170 seedlings

The participants of the tree planting in Sto. Rosario were the LGUs, scholar students of PhilConserve/PESCP and their parents, teachers of Mag-aba and PhilConserve/PESCP staff. In Sitio Malumpati, Guia, Pandan, the participants were staff of DENR Culasi, LGU Guia, PESCP and the MENRO (Municipal Environment Natural Resources Officer) of Pandan. For the celebration of the Peoples Day, the DENR Culasi requested from our office to donate seedlings to interested participants.

1.6 Conservation Management

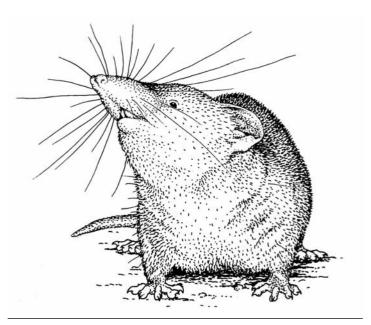
Wildlife and Rehabilitation Accomplishment Report

Unfortunately this contribution did not reach the editor's desk in time but the wildlife finding their way into the PESCP's reha facilities and the circumstances of their submission and release back into the wild can be gleaned from **App. 4**.

2. Conservation Research

2.1 The Discovery and Description of two Shrews new for Panay, Crocidura panayensis, and for Palawan, Crocidura batakorum

The description of two new shrew species is adding to the Philippine mammal fauna two new single island endemites that belong to two separate lineages of different origin. The Panay Shrew (Crocidura panayensis) from the upland forest of the NW Peninsula is one of two established mammalian endemites of Panay Isld., the other being the Panay Cloud Rat (Crateromys heaneyi), yet still more discoveries of small mammal species may be in the pipeline. Because of the extant, closely related Negros Shrew (C. negrosensis) being known since long the find of a new congeneric (= in the same genus) shrew on Panay separation of these two Visayan islands Ed.



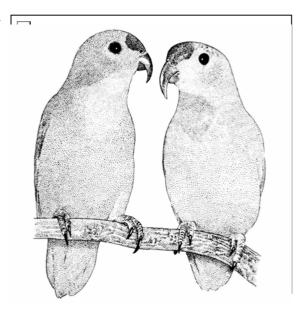
that has evolved in parallel since the Panay Shrew. Artwork courtesy Helga Schulze, after photo of the congration of these two Viscour islands.

is not too surprising. - The second new species, the tiny Batak Shrew (*Crocidura batakorum*), is one of two endemic shrews of Palawan.

For the description see App. 5 (Hutterer, R. [2007]. Records of shrews from Panay and Palawan, Philippines, with the description of two new species of *Crocidura* [Mammalia: Soricidae]. Lynx N.S., 38: 5-20 [two colour plates]).

2.2 First Observation on Breeding of the Colasisi on Panay

The Colasisi (Loriculus philippensis regulus) of Panay, Masbate and Ticao Islands belongs to one of two endemic species of hanging parrots in the country. Leading an unobtrusive life in the canopy the Colasisi is not easily observed. Being dependent on primary forest its prospects of survival hinge, like those of many other forest-dwellers, on the maintenance of the remaining forests. To gauge its survival prospects its breeding biology should be better known. A beginning was made by our finding an active nest in a dead hollow tree in primary forest at 486 m asl, 1.47m above ground in July 2005. The nest with four eggs was lined with green falcate leaves of Eugenia (?) sp. (Myrtaceae) (Hembra, Curio & Jamangal 2008, **App. 6**). The clutch gave rise to a brood of two. Before, only one other nest of the Colasisi (L. p. worcesteri) on Bohol had come to be known;



Pair of Colasisi. © Robiller 1986, Lexikon der Vogelhaltung, Landbuch Verlag, p. 362

also situated in a dead tree. It had contained a brood of three.

Probably the same pair of Colasisi started another brood 5 months later and yet another one again 3 months later in the same tree hole. Hence, there may well be three broods in a year though the identity of the birds remained unknown. The second brood that started in Dec 2005 fell well into the end of the rainy season that most Philippine resident birds exempt from breeding.

2.3 Herpetofaunal Investigations in 2008

by

Maren Gaulke, Arnold D. Demegillo, and Helmut Uerlings

2008 was the last year of the "Mabitang Telemetry Project". Officially, the project ended in August, but actually it took up to the end of September until the last *Varanus mabitang* carrying a transmitter could be recaptured for the removal of the transmitter.

Two more Mabitangs were equipped with transmitters in 2008, one end of January and one mid of April. At the end of the project telemetry data of eight individuals were available. The complete data analysis will certainly not be completed before end of 2009, but we can state already that the project was worthwhile, leaving us with a much better understanding of the life habits of this extremely rare monitor lizard. The data include information on the ontogenetic change in diet, the different sized home ranges of subadults, adult males and adult females, and the environmental requirements for stable home ranges.

Additionally, our activities also covered herpetofaunal surveys of various mangrove areas on Panay, including an old growth mangrove area in the Municipality Ibajay with more than 30 different species of mangrove trees, the man made mangrove area of the Bakawan Eco Park near Barangay New Busuanga, both in Aklan Province, and the partly natural, partly reforested mangrove area around the Municipality Barotac Viejo in Iloilo Province. Interestingly, the man made Bakawan Eco Park mangrove area, which was started in 1990, harbors already many of the typical mangrove dwellers such as different species of mangrove crabs, mussels, mudskippers, and mangrove dwelling reptiles. The snake *Cerberus rhynchops* is exceedingly common in this park; other reptiles are the Rough-necked Water Monitor (*Varanus nuchalis*), and several gecko species. The most interesting find was a population of the small Mangrove Smooth-scaled Gecko *Lepidodactylus lugubris*. This mainly parthenogenetic species is widespread throughout Southeast Asia and New Guinea, and was even introduced to some New World countries, but is

only known from some of the Philippine islands so far. This is the first "safe" record for Panay. A couple of hatchlings, which we bred some years ago from an egg clutch discovered close to Station Sibaliw could then not be safely identified. However, supported through this new find we now feel sure that these hatchlings belonged to *L. lugubris*. The population of the Bakawan Eco Park was possibly introduced together with mangrove seedlings imported from Luzon.

A very interesting snake area was visited in the Municipality of Libertad, close to Barangay Injawan, The area is very rich in rivers and rivulets, which are surrounded by old reforestation areas of the DENR (mainly the exotic *Swietenia macrophylla*). Several large specimens of the Philippine endemite *Zaocys luzonensis*, a colubrid snake, were sighted resting in the trees overhanging the watercourses within just one day. Other snakes sighted there within just one day include *Boiga cynodon*, *Chrysopelea paradisi variabilis*, *Calamaria gervaisii*, *Elaphe erythrura psephenoura*, and *Ahaetulla prasina preocularis*. Inhabitants of the area informed us about a very aggressive, black and white banded snake, which is sometimes seen in the water. A. D. D. keeps visiting the area once in a while, so hopefully we have the identification by 2009.

From May to July, H. U. stayed at Station Sibaliw. His main focus was on the larval development of the Gliding Tree Frog (*Rhacophorus pardalis*), a species that has a good breeding population near the station for many years. The examinations revealed that fly larvae, feeding on the eggs and newly hatched tadpoles, infest many of the foam nests built by this species. Due to these parasites only few of the froglets survive their first days.

Another interesting observation concerns the tree hole dwelling *Kaloula* sp. Apparently these frogs have no preferences regarding size and position of tree holes. Occupied tree holes were observed almost at the ground as well as up to a height of at least 6 m (observation from another area); while some of them have extremely small openings, others have a wide open surface area; an oblong hole may open vertically in line with the trunk, or horizontally between branching twigs. One, two, or three adult individuals occupied the tree holes.

Two articles on herps of Panay were published last year (see **App.7**, **App. 8**):

GAULKE, M., I. FRANK & B. TACUD (2008): Zur Farbvariabilität und Brutbiologie einiger philippinischer Anuren. On the colour variability and breeding biology of some Philippine anurans.— Sauria 30: 11–21.

GAULKE, M., & E. CURIO (2008): Die Jugendzeichnung zentral-philippinischer Königskobras (*Ophiophagus hannah*).— The colour pattern of juvenile King Cobras (*Ophiophagus hannah*) from the central Philippines.— Sauria, 30: 47–50.

2.4 Panay's Marine Toads (*Bufo marinus*) are different: deceptive Prey Luring disappeared

The Marine Toad, also known locally as 'Hawaiian Frog', is a destructive invasor from tropical America. First introduced in 1938 to Negros the toad has meanwhile colonised most of the (larger) Philippine islands. In various student research projects (Esslinger 2006 and Bellhoff 2007, unpublished, 13th and 14th PESCP Reports, unpublished) the toad was confirmed to be a generalist predator.

Being both a searching and an ambush predator the species displays a unique baiting (prey luring) behaviour when confronting a cricket or a young subadult conspecific. The predator waves the middle toe of a hindfoot up and down, as first observed captive Australian Marine Toads by Hagman Shine (2008, Anim. Behav. 75: 123-131). Middle-sized are toads attracted the tow waving, crickets are not.



Marine Toad of Panay. © M. Gaulke, Herp Guide

Whilst toe waving can be interpreted as a prey luring tactic (aggressive mimicry of an invertebrate prey) in the case of carnivorous conspecifics, this idea fails when applied to crickets for various reasons (see below).

Since toe waving could be potentially fatal to native terrestrial anurans of Panay, that are carnivores like the invasor toad and, thus, potentially fooled by the guise, Denise Kuckelsberg (2008, unpublished) took a closer look at the range of prey stimuli releasing toe waving in large Marine Toads (150-800 g body mass) in the wild. She offered four different prey items: subadult Marine Toads, white laboratory mice (Mus musculus domesticus), adult crickets (Gryllidae), adult katydids (Tettigoniidae). Prey were presented during the prime hunting time (19.00 to 22.00 p.m.) and tethered to an angling rod of 2m length and a 1m long nylon thread that allowed the prey moving through a circle of 0.5m radius, and cautiously lowered 20cm in front of an experimental toad. The observer stalked the latter cautiously from behind so that she could monitor one or both hind legs throughout a constant period of time. It turned out that none of 82 focal toads tested displayed toe waving to any of the prey items including 19 subadult, potential prey toads. The hunger state was controlled for by examining the stomach contents in all toads failing to eat the prey offered. The failure to elicit toe waving is aggravated by the fact that it pertains to free-ranging toads whereas the observations of Hagman & Shine (2008) were made with captive toads; importantly, captive conditions tend to suppress rather than facilitate behaviour of non-domesticated animals to appear.

From this one has to conclude that Panay's Marine Toads have lost toe waving as a prey capture tactic, provided that the presence of the trait is the ancestral state, a reasonable assumption. A possible reason for the loss may have been genetic drift when the population had gone through a bottleneck of numbers while colonising Panay decades ago. From a conservation perspective, the loss should be welcomed, however, this would depend on the ratio of conspecific victims to other anurans in the diet and whether the latter would be fooled by the trick. Hence, the overall threat exerted by this generalist predator needs still to be examined more fully.

It should be noted in passing that the Australian Marine Toads are (already) displaying a maladaptive feature of this noteworthy guise: they employ it vis-à-vis crickets, i. e. a prey that is largely herbivorous and therefore not responsive to the lure. Hence, there is ample scope for experimenting with toads in their neotropical haunts of origin to establish a more comprehensive baseline of their foraging behaviour.

2.5 The Gymnosperms of the Sibaliw Area, NW Panay Peninsula

By P. Knopf

The flora of the Philippines contains 33 taxa of gymnosperms (ZAMORA 1986). Four taxa are affiliated with the classes of Cycadopsida and Gnetopsida and 25 taxa are extant among the Coniferopsida. Within the Coniferopsida, representing ca. 5.5% of this group as a whole (601 species in 6 families worldwide, FARJON 2001). Eight taxa among Coniferopsida are endemic. Thus, the Philippines could be referred to as a biodiversity hot spot gymnosperms like Borneo, New Guinea and New Caledonia.

Most of the Gymnosperms occur on Luzon, followed by Mindanao and Mindoro. Only four taxa of the conifers are known for the island of Panay. These comprise *Agathis dammara* (LAMB.) RICH. & A. RICH. of the Araucaria family and *Dacrycarpus cumingii* (PARL.) DE



Fig. 1. A Juvenile plant of *Agathis philippinensis* WARB., ca. 3 m high, **B** bark of an adult plant, **C** plagiotroph branchlet with the typical multiveined "broad" leaves. Images courtesy of P. Knopf.

LAUB., *Falcatifolium gruezoi* DE LAUB. and *Nageia wallichiana* (PRESL.) O. KUNTZE of the Podocarpaceae. The genera *Dacrydium* SOL. ex G. FORST. and *Podocarpus* L' HERT. ex PERS. have previously not been listed for Panay (DE LAUB. 1978). This is noteworthy because both genera have been found on Mindoro, Negros and Palawan. This gap in our knowledge could be a

result of little floristic research in earlier times or of the small patches with cloud forest on Panay. To fill this gap was one aim of the research visit of Patrick Knopf at Sibaliw Station. The second aim was the clarification of the taxonomic position of *Agathis dammara* (LAMB.) RICH. & A. RICH. Several authors (DE LAUB 1988) approve that some north Philippine specimens of *Agathis* represent a taxon of its own right: *Agathis philippinensis* WARB. This opinion is currently contested because the type specimen of A. *philippinensis* WARB. could represent *Agathis borneensis* WARB. Herbarium specimens of all three taxa show adequate differences, so that the reinstallation of *A. philippinensis* WARB. should be investigated. The collection of fresh material from the wild is a requirement for this aim. The research is founded by the DFG grant "Phylogeny and differential diagnosis within Podocarpaceae and Araucariaceae (Coniferopsida) based on

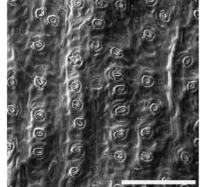


Fig. 2 Abaxial surface of an adult leaf (SEM) of *Agathis philippinensis* WARB. Scale = 100 µm. Image courtesy of P. Knorf

Podocarpaceae and Araucariaceae (Coniferopsida) based on anatomy, morphology und morphogenetics".

Therefore, Dipl.-Biol. Patrick Knopf (PhD candidate), visited Station Sibaliw in May/June 2008. The research objective was the examination of the surrounding area, the locating of

gymnosperms and identification and measurement of leaves, cones and buds. During the first days of preparation single individuals or small groups of the Agathis SALISB. and Nageia wallichiana (PRESL.) KUNTZE were recorded. Samples of mature male cones, unripe female cones, seedlings and branchlets of various Agathis SALISB. individuals were taken and documented (Fig.1). The trees were selected in the areas of Bulanao- and Maramig trails and the hills north of the fern field up from the station.

Fresh leaves were imported to Germany for detailed anatomical study at the Institute for

Biodiversity and Evolution of Plants (Ruhr-University Bochum). The research entails SEM, fluorescence microscopy and light microscopy of Astrablue/Safranin stained paraffin slices. Relevant characters of the leaf cross sections in the genus Agathis SALISB. such as organization of vascular bundle, form of resin canals, vascular sclereids, hypodermis and epidermis were examined (Fig. 2). The molecular analysis is planned for Jan./Feb. 2009 at the Pfizer Lab of the New York Botanical Garden. The anatomical results support the taxonomic status of Agathis philippinensis WARB. This taxon is locally used as construction wood and the resin is harvested latifolium. Image courtesy of P. Knopf.



Fig. 3 Seeds of Gnetum latifolium Bl. f.

(Almaciga or Manila copal). The oldest individuals in the Sibaliw area are (canopy) trees up to 60 m high. Small groups of juvenile plants (Fig. 1A, ca. 10 years old) are growing 50-150 m away from the adult trees (in the majority of cases from air-borne seeds blown downhill). Seedlings were only located in open areas near the station, north of the fern field and on an open SW-slope at the Bulanao trail. It can be assumed with high probability that well-lit and open conditions are necessary for germination.

The vine Gnetum latifolium BL. f. latifolium (Gnetaceae) was often associated with Agathis SALISB. This genus is a member of the non-coniferous Gnetopsida, i.e. a gymnosperm, but it looks more like an angiosperm with the reticulate venation and the seeds covered by red fleshy bractlets. The branchlet with of all seeds in Fig. 3 is equivalent to a cone. This species can climb up to 25 m or more with stems up to 15 cm in diameter. The fibers of the bark are used for making ropes and nets. Gnetum latifolium BL. f. latifolium was not recorded for Panay by ZAMORA (1986).

Fresh branchlets, single leaves and seedlings of the Podocarpaceae Nageia wallichiana (PRESL.) O. KUNTZE were also collected. This taxon has the same distribution as *Agathis* philippinensis WARB. Both are typical elements of primary lowland rain forests (from sea level up to 1800 m). Old canopy trees could not be located in the Sibaliw area, maybe as a consequence of harvesting in earlier times. The wood is used by local people but has no economic importance. The female cones, composed of a near-to-black leathery coated seed and a red fleshy receptacle, are reminiscent of the bicoloured fruits of some Lauraceae or Ericaceae. They are dispersed by birds or bats. This cone type is mostly typical for the Podocarpaceae and particularly for the genus Podocarpus L'HÉR. ex PERS. This genus could be recorded on Panay for the first time (Fig. 4).



Fig. 4 Podocarpus neriifolius D. DON ex Lamb. at Lomate area. Image courtesy of P. Knopf.

The small population is located in the Lomate area at the Bulanao trail (N 11.81341 E 121.97159, elevation of ~ 715 m asl.). The group is composed of three adult trees (2 \circ and 1 \circ), ca 12 to 15 m high), two juvenile plants (ca 2 m high) and numerous seedlings. This taxon could be identified as Podocarpus neriifolius D. Don ex LAMB. It has a wide distribution from Nepal through Indochina and Malesia to the Solomon and Fiji Islands. For the Philippines it was formerly only known from Luzon, Mindoro, Mindanao and Palawan as an element of primary forests from sea level to about 1800 m elevation. The identification was possible by the special arrangement of the leaf anatomical characters (Fig. 5 B+C).

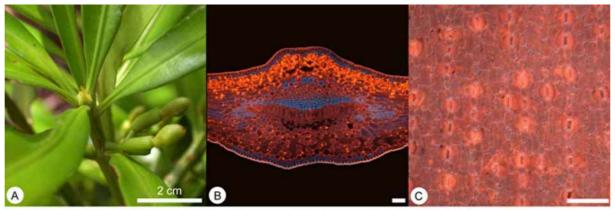


Fig. 5 Podocarpus neriifolius D. DON ex LAMB. A branchlet with unripe female cones, B transverse section of an adult leaf (midrip area), C abaxial epidermis of the same leaf with stomata. (B and C fluorescence-microscopy, scale = 100µm). Images courtesy P. Knopf.

The discovery of *Podocarpus neriifolius* D. Don ex Lamb. in the Sibaliw area brings up the idea of more undetected taxa of this genus. Several specimens of the Podocarpaceae, known from other Philippine islands at the same elevation, DE Laub. 1969 and 1985) such as *Dacrydium xanthandrum* PILG., *Podocarpus polystachyus* R. Br. ex Endl., *P. rumphii* Blume and *Sundacarpus amarus* (Blume) C. N. Page could well be there. The economic importance of these taxa can currently not be assessed.

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1. Basic Research

3.1 The adaptive Value of bicoloured Fruit Displays: Profitability versus Detectability

Plants of at least five tropical families feature bicoloured fruit displays in which, for example, a black drupe is sitting terminally on a red/ orange and widened pedicel, sepal (= calyx leaf) or other proximal structure. This arrangement is typical of *Nagaia wallichiana* (Podocarpaceae) and *Dehaasia* sp. (Lauraceae), both of which species of fruit are depicted in colour on the frontispiece of the 11th Report (PESCP 2005). From a global perspective, 60% of all fruits are black or red, the rest is divided up among all other colours (Wheelwright & Janson 1985, Amer. Nat. 126: 777-798). Hence, in bicoloured displays the most potent fruit colours combine to address the sensory apparatus of what appears to be a plethora of syntopic fruit-eaters. Roughly half of the display is of a vegetative, non-reproductive nature. The energy invested into these displays is therefore most puzzling and highlights the question of their adaptive value as compared to unicoloured fruits.

Basically two functional explanations could account for the existence of those displays. Either they are more easily detected in the surrounding foliage, or, they advertise to the consumer to be nutritionally more profitable. In choice experiments with unicoloured artificially coloured fruits crafted from standard-sized pieces of banana Luft et al. (2002, Silliman J. 43: 42-58) found that Tarictic Hornbills and Musky Fruit Bats (*Ptenochirus jagori*) prefer red and black fruits over green and yellow ones. Since the fruits offered were freely visible at the shortest range this preference cannot have been the result of enhanced detectability. Since colour had been the only

determinant of choice, and the food colours used were of no nutritional value the result supports the profitability hypothesis though indirectly. (The alternative idea that green and yellow are intrinsically repellent can be rejected for various reasons.) Does the auxiliary structure rendering a fruit bicoloured as defined here render it more profitable? The likely answer is NO: upon mandibulation the red pedicel of both *Nagaia* and *Dehaasia* is readily discarded by both species of hornbills (*Penelopides panini, Aceros waldeni*) (pers. obs.). The drupe's pulp is their only reward. Pilot experiments of N. Espinas (pers. comm.) in which the hornbills were given a choice between the entire bicoloured display or one of its component parts yielded no support either for the idea of this display being superior to its component parts.

To control for all permutations of colour and orientation of artificial yet edible bicoloured fruits and their decrease in numbers during a choice experiment **Claudia Gras** conducted cafeteria choice experiments with bicoloured vs. unicoloured dummy fruits. The full displays consisted of two like-shaped and equal-sized 'plums' of agar coloured either black or red. The plums were crafted in a mould of an empty pericarp of a Kinematis fruit (*Horsfieldia* sp., Myristicaceae), thus emulating the size and shape of its only seed. All four arrangements differing in composition and orientation were offered simultaneously as follows:

Red	Black	Red	Black
above	above	above	above
Red	Black	Black	Red.

with the 'plums' impaled in pairs lengthwise on toothpicks inserted into a bamboo dowel. The dowel was laid on the feeding table in each cage where collectively 5 Tarictics and 3 Dulungans were tested for their preference. The preference was assessed statistically with the Rodgers Index compared across displays with the Friedman test (see Luft et al. 2002).

It turned out that birds varied individually in their preferences as measured by the sequence of choosing the eight plums of a trial in turn, yet there was <u>no</u> overall preference for any of the four arrangements or their component parts offered. This result does not seem to support the profitability hypothesis that predicts a bicoloured display to be preferred to any unicoloured display/ component part. However, <u>after</u> the birds had potentially learned that the displays did not differ nutritionally the experiment does no longer test for potential profitability differences and, hence, does no longer test the profitability hypothesis. Yet in aggregate, the experiment leaves, by exclusion, the hypothesis of higher conspicuousness of bicoloured displays as the only candidate explanation. This indirect support of the detectability hypothesis is, of course, only valid, if there is no third functional explanation of bicolouredness.

3.2 Conservation Planning – a hoary Issue

Prioritisation in conservation is an issue of paramount importance when resources are thinly spread which is nearly always the case. But it is a hoary issue, afflicted by much irrationality and rarely rational planning (Curio 2002, Biol. Conservation, 106: 373-380, Pressey et al. 2007, Trends in Ecology and Evolution, 22: 583-592). In conservation, decision-makers are oftentimes confronted with the problem of carrying on with a particular agenda or giving it up to the benefit of a new, more profitable one. Humans are prone to commit the 'Concorde Fallacy': When faced with two options they often chose the one into which they have invested in the past though the wise decision would be to invest into the option with the higher net gain in the future, *regardless* of what has been invested in the past. This can be shown by simply doing the sums (Curio 2008, ZGF Gorilla 3/2008: 18-19, **App. 9**). Applying this insight to conservation decision-making may well lead to protecting, for example, an area with e. g. a higher biodiversity at the expense of a protected area with a lower biodiversity if the former can be maintained with the same funding or even less funding. Similarly, if a species thought to teeter at the brink of extinction is found to be much more common all resources should flow into *in situ* conservation and no longer into

conservation breeding no matter how much has been invested in it previously. To underscore this insight, all facilities erected for the conservation breeding of the allegedly rare species should be collapsed and caretakers sent home. The erring organisers behind the outdated conservation breeding should then have the guts to invest the resources that had gone into their unwise efforts into *in situ* protection of the species, thereby also avoiding all the unpleasant outcomes like e. g. inbreeding depression due to small population numbers in captivity and other hazards encumbering conservation breeding.

When tested for committing the 'Concorde Fallacy' animals have proved rational throughout by basing their decisions to on future, prospect-oriented investment. Why humans tend to commit the fallacy all the time, often accompanied by deep emotions, is a fascinating question for human psychology. To give but one example: When it became clear that the Vietnam war was not to be won with conventional weaponry the bulk of the US American population mourned "Our boys must not have died in vain – we must carry on!" Clearly, every American soldier that died due to this unwise and stubborn gut feeling was one victim too much. Whether the termination of the war through the US administration shortly after was governed by Concordian thinking or something else remains unknown.

3.3 The Forest Floor Fauna: a critical Look at Barber Pitfall Traps

Primary forest is generally poorer in species than is secondary (= second growth) forest (e.g. Terborgh 1992, Diversity and the tropical rain forest. Freeman and Company, New York: Trees, birds, primates; Phillips et al. 1994, Proc Natl Acad Sci, 91: 2805-2809). Furthermore, knowledge of the fauna of the forest floor has become a pressing issue since PESCP started with studying the diet of the alien Marine Toad (Bufo marinus) and its destructive impact on the floor fauna (see also chap. 2.4). For both these reasons the invertebrate fauna dwelling on the forest floor (epigaeic or terricoline species) became the focus of a methodological project testing the efficacy of Barber pitfall traps. Accordingly Anke Siegert set up six such traps in a line in each of both habitats near Station Sibaliw. Different from what is customary we employed live-trapping (Siegert & Curio 2006. Silliman J., 47: 86-94, App. 10). The traps had an opening of 9 cm diameter that opened into a funnel obstructing escape from a plastic bottle 20 cm deep into which terricoline animals fell, more precisely were supposed to fall. Drainage holes forestalled drowning. The opening was level with the surrounding forest floor. Trapping yielded a total of 371 terricolines in primary forest as compared to 280 in secondary forest, a highly significant difference (p = 0.0003, two-tailed binomial test). A remarkable find was an amphipod crustacean (Talitridae = beach fleas) that is presently under taxonomic scrutiny by specialists. Members of this family, that typically inhabit the sea shore, have previously been found in the forest litter of Australia and South Africa (Dr. Coleman, Berlin, pers. comm.).

In order to check out the reliability of Barber trap captures traps were observed from seclusion for one hour in both mornings and evenings at standardized times in both forest types. From a vantage point (hammock, plastic chair) three traps in each forest type could be monitored at a time. Animals walking/ crawling up to a trap received one of three behaviour scores: Capture C, enter and leave trap L (by walking in, around and out of the funnel entrance), and turn away from rim of trap/ funnel T. These direct observations comprised three species of ants (two large Formicinae, 1 small species of unknown taxonomic position) and one small spider (Araneae). Following an earlier analysis (Seifert 1990, Entomol. Nachrichten u. Berichte, 34: 21-27; Laeger & Schultz 2005, Myrmecol. Nachrichten, 7: 17-24), the total capture rate is

$$R = C/(C + L + T) 100 \%$$
.

Accordingly only 19.4 % (n = 31) of all potential captures yielded definitive trap records, the rest was classified as L and T, i.e. was not captured. (The small ant and the small spider would not even have been represented as species.) Note that this proportion of real captures is the result of only 4 hrs. of observation in every 24 hrs. on 16 days (18 Mar - 2 Apr) spent at six, i.e. half of all traps, in both forests. Given the considerable variety of terricoline taxa (Oligochaeta, Crustacea, Arachnida, Myriapoda, Insecta and their larvae, eight ant species included), that made up the

hundreds of real captures in all 12 traps (see above) it is reasonable to assume that this total is but a small fraction of potential captures in that period of time. The Barber trap method alone is thus inadequate in assessing the true abundance of species, let alone their true species composition, and more direct observations are needed to assess the true magnitudes of these figures. This caveat has been voiced already by earlier workers in Germany many years ago (Adis 1979, Zool. Anz. 202: 177-184; Seifert 1990, l.c., Laeger & Schultz 2005, l.c., and refs.), whose work was unknown to us at the time of our independent observations. Accordingly effective sampling, i. e. capture rates for three ants ranged from merely 2.9% to 14.5% which may be explained by the collecting fluid being used Our work, the first assessment in the tropics accounting for biasing effects of the traps used, and one employing no potentially repelling fluid, reveals that the inadequacy of Barber pitfall sampling of terricoline assemblages seems to be a general one.

We thank Dr. R. Schultz (Universität Greifswald) for helpful information.

<u>Stop press</u>: The beach flea (Talitridae) mentioned turned out to be a new species (pers. comm. Dr. O. Coleman, Zoological Museum Berlin).

Appendices 1-10: Overview

App. 1	Ibabao & Kuenzel	P E S C P - Organisational Structure and Staff
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App. 3	Alabado & Venus	PESCP's Summary Report of Dulungan Nest Hole Protection for the 2008 Breeding Season
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App. 5	Hutterer (2007)	Records of shrews from Panay and Palawan, Philippines, with the description of two new species of <i>Crocidura</i> (Mammalia: Soricidae). Lynx, n. s., 38: 5-20
App. 6	Hembra, Curio & Jamangal (2008)	Brutnachweis eines Philippinen-Fledermauspapageis. – [Breeding record of the Colasisi]. Papageien, 21: 172-173
App. 7	Gaulke, Frank & Tacud (2008)	Zur Farbvariabilität und Brutbiologie einiger philippinischer Anuren On the colour variability and breeding biology of some Philippine anurans. Sauria, 30: 11–21
App. 8	Gaulke & Curio (2008)	Die Jugendzeichnung zentral-philippinischer Königskobras (<i>Ophiophagus hannah</i>). – The colour pattern of juvenile King Cobras (<i>Ophiophagus hannah</i>) from the central Philippines. Sauria, 30: 47–50
App. 9	Curio (2008)	Gehen oder Bleiben? Der kluge Naturschützer und der Concorde-Fehler. – [To leave or to stay? The wise conservationist and the Concorde Fallacy]. ZGF Gorilla, 3/2008: 18-19
App. 10	Siegert & Curio (2006)	Pitfall traps misrepresent the terricoline fauna in a tropical forest: A novel evaluation. Silliman J., 47: 86-94

App. 1 Ibabao & PESCP - Organisational Kuenzel Structure and Staff

P E S C P - Organizational Structure and (33 full -paid staff + 42 half-paid staff + 165 Nest wardens paid per hornbill nest protected) - Organizational Structure and Staff

Management

Maria Theresa C. Ibabao

(Manager)

Auxiliary Positions:

Geylord Loyola Police Captain, PESCP's Security Consultant (Volunteer) Thomas Kuenzel Project Coordinator on behalf of Frankfurt Zoological Society, Germany, Integrated Expert of GTZ/CIM, Germany, Environment

Program Coordinator of Aklan State University, Philippines

Eberhard Curio, Prof. Dr. Project Scientific Consultant (Volunteer)

Maren Gaulke, Dr. Project Herpetologist (Volunteer)

> Bookkeeping \coprod

Joavelyn Santillan Rizza Aranas Rhea S. Matining

(Chief Bookkeeper) (Asst. Bookkeeper) (Asst. Bookkeeper)

Environmental Law Enforcement

Maria Theresa C. Ibabao Faustino Guillermo Armelito Ebon 21 Forest Rangers (Field Leader of Forest Rangers) (Liaison Officer) (Chief of Forest Rangers)

Reforestation IV.

John R. Espiritu Sonny E.E. Galuego 5 Nursery Caretakers

(Chief Forester) (Forester)

Livelihood and Wildlife Protection

Henry Dungganon Alexander Alabado Julius Venus 17 Community Conservationists (Up-land

Agriculturist) (Teacher, Wildlife Educator) (Wildlife Educator, till end of 2008)

Henry Jamandron 165 Dulungan Nest Hole Wardens (Livelihood Specialist)

VI. Rehabilitation and Research

Rehabilitation / Dulungan telemetry / Research Station:

Enrique Sanchez, Dr. Vet **Benjamin Tacud** Marlo Alli **Nestor Bagac** (Chief Wildlife Rehabilitation) (Chief Research Station) (Research Assistant) (Wildlife Caretaker)

Macario Melchor **Edward Geronimo** Junmar Jamangal 12 Porters

(Wildlife Caretaker)(Wildlife Caretaker) (Wildlife Caretaker)

Mabitang Telemetry:

Reyel Paulino Arnold Demegillo Gersom Operiano (Principle Rsearcher) (Research Asst.) (Research Asst.) App. 2 Alli Visitors of Sibaliw Research Station

VISITORS OF SIBALIW RESEARCH STATION

January to December 2008

Name/Affiliation	Duration of Stay	Reason for Visit
Edward Vercruysse		
Research Institute for Nature &	January 27 – 31	Birdwatching
Forest, Belgium		
Jürgen Dewolf	27 21	D: 1 1 .
Research Institute for Nature & Forest, Belgium	January 27 – 31	Birdwatching
Claudia Gras	February 7 – April 26	Research volunteer
PESCP/ Ruhr-University Bochum	reducity / – April 20	Research volunteer
Denise Kuckelsberg	February 7 – 18	Research volunteer
PESCP/ Ruhr-University Bochum	Testadiy , 10	Tresearen volunteer
Reynold Alarcon	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Armelito B. Ebon Jr.	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Freddie Fernandez	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Marco Magsipoc	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Joeman Mangga	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Richard Mangga	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Francis Nabong	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Robert Nepomuceno	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Gualberto Tamboong	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Joeserey Tenorio	February 12 – 15	Conduct monitoring and guide the
PESCP Forest Ranger		research volunteers
Dr. Ferdz Recio	April 4 – 6	Filming the release of 4 Visayan
GMA – 7, Born to be Wild Show		Tarictic Hornbills of the PESCP
Obet Bongat	April 4 – 6	Filming the release of 4 Visayan
GMA – 7, Born to be Wild Show		Tarictic Hornbills of the PESCP
Ray Arididon	April 4 – 6	Filming the release of 4 Visayan
GMA – 7, Born to be Wild Show		Tarictic Hornbills of the PESCP
Jacel	April 4 – 6	Filming the releaseof 4 Visayan
GMA – 7, Born to be Wild Show		Tarictic Hornbills of the PESCP
Dr. Enrique Sanchez	April 4 – 6	Release of 4 Visayan Tarictic
PESCP Veterinarian		Hornbills
Maria Theresa C. Ibabao	April 4 – 6	Release of 4 Visayan Tarictic
PESCP Project Manager	1 1 4	Hornbills
Reynold Alarcon	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger	1 1 4	GMA – 7 Born to be Wild Show
Richard Domingo	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger	A i1 4 C	GMA – 7 Born to be Wild Show
Joven Dujali PESCP Forest Ranger	April 4 – 6	Conduct foot patrol and guide for
Freddie Fernandez	April 4 – 6	GMA – 7 Born to be Wild Show
PESCP Forest Ranger	April 4 – 0	Conduct foot patrol and guide for GMA – 7 Born to be Wild Show
Democrito Fernando	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger	April 4 – 0	GMA – 7 Born to be Wild Show
Faustino Guillermo	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger	April 4 – 0	GMA – 7 Born to be Wild Show
Cerwin Ibanez	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger	1 1pm = 0	GMA – 7 Born to be Wild Show
Francis Nabong	April 4 – 6	Conduct foot patrol and guide for
1 Tanois INacong	April 4 = 0	Conduct 100t parrot and guide 101

PESCP Forest Ranger		GMA – 7 Born to be Wild Show
Robert Nepomuceno	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger	71pm + 0	GMA – 7 Born to be Wild Show
Gualberto Tamboong	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger		GMA – 7 Born to be Wild Show
Rolando Tamboong	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger	1	GMA - 7 Born to be Wild Show
Joeserey Tenorio	April 4 – 6	Conduct foot patrol and guide for
PESCP Forest Ranger		GMA - 7 Born to be Wild Show
Remy B. Jamangal	April 9 – 11	Repair solar battery, inspect solar
Electrician		panel, and repair electrical wirings
Frank Rheindt	April 19 – 21	Bird watching
University of Melbourne (Australia)	A :1.22 2.4	E ND 0(1 + 40'l 1'
Dr. Jochen Reiter Zoo Duisburg (Germany)	April 22 – 24	Former PhD Student at Sibaliw
Dr. Julia Hoffmann	April 22 – 24	Sightseeing
Veterinarian (Germany)	11pm 22 24	Signiscenig
Dr. Maren Gaulke	May 4 – 8	Herpetological research
PESCP Herpetologist	,	
Helmut Uerlings	May 4 – July 23	Herpetological research
PESCP		
Peter Maashant	May 9 – 10	Birdwatching
(Netherlands) Diederik Kok	Mary 0 10	Dindyyatahina
(Netherlands)	May 9 – 10	Birdwatching
Hemme Bartjen	May 9 – 10	Birdwatching
(Netherlands)	iviay > 10	Brawatening
Patrick Knopf	May 15 – 27	Botanical research
PESCP/Ruhr-University Bochum	,	
Niño Espinas	May 16 – 27	Research bicoloured fruit displays
PSHS – Main Campus, Quezon City		
Dr. Maren Gaulke	June 7 – 10	Herpetological research
PESCP Herpetologist	June 7 – 10	Hornatalagical regearch
Arnold Demegillo PESCP/MENRO – Pandan	June / – 10	Herpetological research
Kay Fletcher	May 20 - 29	Photography Visayan Warty Pig and
PESCP		other flora and fauna
Donna Baylis	May 20 - 29	Filming flora and fauna
PESCP	•	
Reynold Alarcon	June 11 – 12	Conduct foot patrol
PESCP Forest Ranger	I 11 10	
Richard Domingo PESCP Forest Ranger	June 11 – 12	Conduct foot patrol
Freddie Fernandez	June 11 – 12	Conduct foot patrol
PESCP Forest Ranger	Julie 11 12	Conduct foot patrol
Cerwin Ibanez	June 11 – 12	Conduct foot patrol
PESCP Forest Ranger		1
Jose Matinong	June 11 – 12	Conduct foot patrol
PESCP Forest Ranger		
Expedito Paulino Jr.	June 11 – 12	Conduct foot patrol
PESCP Forest Ranger Joeserey Tenorio	June 11 – 12	Conduct foot patrol
PESCP Forest Ranger	June 11 – 12	Conduct 100t patrol
Francis Hechanova	September 2 – 3	Video document research center
GMA – 7, Born to be Wild Show		activities
Alminh Valenzuela	September 2 – 3	Video document research center
GMA – 7, Born to be Wild Show		activities
Dr. Enrique Sanchez	September 2 – 3	Get blood samples of hornbills
PESCP Veterinarian		
Erik Cichosz	September 9 –	Research volunteer
PESCP/Ruhr-University Bochum	November 20	December 1 4
Anne Einhāupl PESCP/Berlin	September 12 –	Research volunteer
	November 20 September 12 – 18	Research volunteer
Lisa Querhammer	September 12 – 18	Research volunteer

PESCP/ Fachhochschule Eberswalde		
40 Haulers	September 14 – 27	Hauling of coco lumber for the repair of Station (2 nd phase)
Reynold Alarcon	September 29 –	Conduct foot patrol
PESCP Forest Ranger	October 1	
Freddie Fernandez	September 29 –	Conduct foot patrol
PESCP Forest Ranger	October 1	_
Expedito Paulino Jr.	September 29 –	Conduct foot patrol
PESCP Forest Ranger	October 1	-
Gualberto Tamboong	September 29 –	Conduct foot patrol
PESCP Forest Ranger	October 1	-
Rolando Tamboong	September 29 –	Conduct foot patrol
PESCP Forest Ranger	October 1	-
Felecito Villamor	November 3 – 27	Repair of Station (2 nd phase)
PESCP Carpenter		` ` ` `
Felimon Geronimo	November 3 – 27	Repair of Station (2 nd Phase)
PESCP Carpenter		- , , ,
Birk Cichosz	December $3-5$	Sightseeing
Germany		

Prepared by: Marlo A. Alli, Research Assistant

App. 3 Alabado & PESCP's Summary Report of Dulungan
Venus Nest Hole Protection for the 2008
Breeding Season

PESCP's Summary Report of Dulungan Nest Hole Protection for the 2008 Breeding Season

By Alexander Alabado and Julius Venus Wildlife Educators, PESCP

Pla	ace	Total number of Dulungan nest holes	Total number of nest wardens involved	Community Conservationists	Educator in-charge
A. Antiqu	e				
	oatuyao oaste	53	5	Jerry Calawod, Danilo Balindes and Joseph Jonilas	A. Alabado
2. Ab Set	iera oaste	30	8	Rolly Fernando	A. Alabado
3. Ale Set	egre oaste	252	34	Alberto Mangga	A. Alabado
4. Sin	nbula, lasi	72	11	Alberto Placido	A. Alabado
	ningayan, lasi	177	20	Sonny Placido	A. Alabado
<u> </u>	lasi	3	1	Arnaldo Nabas	A. Alabado
	igsaysay lasi	45	11	Rey Estolloso and Benito Placido	A. Alabado
8. Ma Par	adios, ndan	58	6	Rogelio Paulino	J. Venus
B. Aklan					
	ria stina, idalag	119	12	Dante Nabalde	J. Venus
2. Da	lagsaan, bacao	96	18	Nelson Esto	J. Venus
	io Taraw, lagsaan	16	2		J. Venus
Ma	io ningag, nika, pacao	23	10	Noel Agodes	J. Venus
5. Oy Lib	ang, pacao	89	15		J. Venus
6. Yav Ibajay	van.	64	12	Rosibal Tenorio Jr.	J. Venus
C. Iloilo					
1. Aglo Calino		36	9	Josel Lavilla	J. Venus
Total		1,131	156		

App. 4 Sanchez

Animals turned over by the DENR - CENRO Kalibo (Aklan) and Culasi (Antique) under the authority of Act No. 9147 ... "WILDLIFE RESOURCES CONSERVATION AND PROTECTION ACT", presently under the care of PESCP, in three wildlife rehabilitation facilities

ANIMALS TURNED OVER BY THE DENR - CENRO KALIBO (AKLAN) AND CULASI (ANTIQUE) UNDER THE AUTHORITY OF REPUBLIC ACT NO. 9147 (JULY 30, 2001) "WILDLIFE RESOURCES CONSERVATION AND PROTECTION ACT" AND PRESENTLY UNDER THE CARE OF THE PHILIPPINE ENDEMIC SPECIES CONSERVATION PROJECT (PESCP) THREE WILDLIFE REHABILITATION FACILITIES

By Enrique Sanchez

MAG-ABA REHABILITATION FACILITY

Location: National Rd, Brgy, Mag-aba, Pandan, Antique

Species	Identification /	Date of Arrival	Sex	Age	Origin	Remarks
Crested Serpent Eagle (Spilornis cheela)	Ring Number 0807	April 2,2007		Immature	Brgy.Patria,Pandan,Antique	Ongoing flight training at the big cage.
Changeable Hawk Eagle (Spizaetus cirrhatus)	24303 w/VOGELWARTE HEGOLLAND GERMANIA inscription	April 4,2007		Immature	Brgy.Sta. Cruz,Pandan,Antique	Donated by Hanes Noble Release: September 3,2008-under coverage of GMA 7 TV Network program "Born To Be Wild"
Brahminy Kite (<i>Haliastur</i> iIndus)	0163	June 18, 2007		nestling	Brgy. Nauring, Pandan, Antique	Donated by BIOCON Staff Carol Bautista
Visayan Spotted Deer (<i>Cervus alfredi</i>)	none	November 18, 2007	Female	Juvenile	Sitio Dumara, Brgy. Virginia, Laua-an, Antique	Donated by Roxas Dalumpines
Visayan Spotted Deer (Cervus alfredi)	none	December 13, 2007	Male	Juvenile	Sitio Dumara, Brgy. Virginia, Laua-an, Antique	Donated by Roxas Dalumpines
Reticulated Python (Python reticulatus)	None	December 18, 2007		Adult	Panay Island Brgy. Manoc- manoc, Boracay Island , Malay,Aklan	Donated by Stephanie Dornau Release: February 23, 2008-under coverage of GMA 7 TV Network program "Born To Be Wild" Release site: Malumpati Watershed
Crested Serpent Eagle (Spilomis cheela)	0041	December 28, 2007		Adult	Brgy. Centro Norte, Pandan, Antique	Donated by BIOCON Office (Released April 12, 2008 during Earth day Celebration held at Malumpati Watershed)
Grass Owl (Tyto capensis)	none	January 11, 2008		Adult	Brgy.Sto.Rosario, Pandan,Antique	Release: January 23, 2008 (Infested with fly larvae (maggots)

Species	Identification / Ring Number	Date of Arrival	Sex	Age	Origin	Remarks
Philippine Macaque (Macaca fascicularis)	none	February 20, 2008	Male	Adult	Sitio Calabanog, Brgy Idiacacan, Pandan, Antique	Release: February 23, 2008, under coverage of GMA 7's TV Network Program "Born to be Wild"
Philippine Macaque (Macaca fascicularis)	none	January 22, 2008	Male	Juvenile	Pandan, Antique	*classified as unsuitable for release *transferred to Lombija Wildlife Facility in Guimaras through the office of PAWD Director Damaso Fuentes (January 13, 2009)
Changeable Hawk Eagle (Spizaetus cirrhatus)	24301 with VOGELWARTE HEGOLAND GERMANIA inscription	February 8, 2008	Male	Sub-Adult	Brgy. Laserna, Nabas, Aklan	Released February 23, 2008 under coverage of GMA 7's TV Network Program "Born to be Wild"
Malay Palm Civet (Paradoxurus hermaphroditus)	none	February 25, 2008	Male	Adult	Banga, Aklan	*Approximately 1 ½ year in captivity as a young animal and very tame *classified as unsuitable for release * transferred to Lombija Wildlife Facility in Guimaras Island through the office of PAWD Director Damaso Fuentes (January 13, 2009)
Crested Serpent Eagle (Spilornis cheela)	none	March 10, 2008			Pandan, Antique	Got entangled from the vines found by Farmer Release: March 17, 2008
Brahminy Kite (Haliasturi Indus)	0161	March 13, 2008		Immature	Nabas, Aklan	Donated bird received from PAWZ- CMS-DENR-CENRO Kalibo- Forester Nilo Subong
Grass Owl (Tyto capensis)		April 12, 2008				Release: May 1, 2008
Brahminy Kite (Haliastur indus)	No ring attach	May 11, 2008		Juvenile/ Immature	Brgy. Sta. Fe, Pandan, Antique	Donated by Bruno Engler
Brown Booby (Sula leucogaster)	No ring attach	June 25, 2008		Juvenile/ Immature	Sitio Bautista, Brgy. Nauring, Pandan, Antique	*Donated by Mayor John Sanchez *Mortality (June 26, 2008)

Species	Identification / Ring Number	Date of Arrival	Sex	Age	Origin	Remarks
2 Blue-crowned Racquet-tail	506 with PESCP	July 1, 2008		Immature	Brgy. Alegre, Sebaste, Antique	*Recovered by PESCP staff
Parrot (Prioniturus discurus)	inscription					*1 mortality due to stress and under
						nourished a day after the arrival.
Red Jungle Fowl (Gallus gallus)		July 26, 2008	Male	Adult	Sitio Calabanog, Brgy. Idiacacan,	The shared bird was found by PESCP
					Pandan, Antique	Forest Rangers on patrol.
Reticulated Python (Python	none	August 8, 2008		Adult	Culasi, Antique	*Received from PAWZCMS-DENR-
reticulatus)						CENRO-Culasi, Antique
						*Release: September 22, 2008
						*Wound treatment performed and
						quarantined for 30 days
Reticulated Python (Python	none	September 14,		Adult	Bugasong, Antique	*Donated by Sangguniang
reticulatus)		2008				Panlalawigan (Provincial Board
						Member Calixto Zaldivar III)
						*Died of injuries and stress
Common Emerald Pigeon	No ring attach	September 20,		Adult	Brgy. Nauring, Pandan, Antique	Donated to PESCP
(Chalcohaps indica)		2008				Release September 26, 2008
Dog-toothed cat-snake (Boiga	none	September 24,		Adult	Pandan, Antique	Donated by PNP Office ,Pandan,
cynodon)		2008				Antique
Zebra dove (Geopelia striata)	No ring attach	October 19, 2008		Adult	Brgy. Nauring, Pandan, Antique	*Received by PESCP FR's Ebon &
						Fernandez
						*Release;October 27, 2008
Crested Serpent Eagle (Spilornis	0802	October 26, 2008		Adult	Sitio Calabanog, Brgy. Idiacacan,	*Received by PESCP FR's
cheela)					Pandan, Antique	*Release: November 20, 2008
Crested Serpent Eagle (Spilornis	0805	November 11,		Adult	Brgy. Callan, sebaste, Antique	Donated to and received by PESCP
cheela)		2008				FR's
Zebra Dove (Geopelia striata)	No ring attach	December 12,		Adult	Brgy. Nauring, Pandan, Antique	*Donated and received by PESCP
		2008				FR's
						*Release: December 26, 2008
Crested Serpent Eagle (Spilornis	none	December 26,		Adult	Pandan, Antique	Release: January 6, 2009
cheela)		2008				

BULANAO REHABILITATION FACILITY

Location: Old Brgy. Plaza Brgy. Bulanao, Libertad, Antique

Species	Identification / Ring Number	Date of Arrival	Sex	Age	Origin	Remarks
Brahminy kite (Haliastur indus)	0065	May 21, 2007		Adult	Brgy. Malacañang, Culasi, antique	Transferred to Bulanao May 21, 2007 later sent up to Sibaliw Station
2 Tarictic Hornbill (Penelopides panini panini)	0064 0063	June 19, 2007	Male Female	Fledgling Fledgling	Brgy. Nauhon, Sebaste, antique	Transferred to Bulanao July 11, 2007 later sent to Sibaliw Station
Tarictic Hornbill (Penelopides panini panini	0151	June 6, 2007	Female	Fledgling	Brgy. Bagumbayan, Pandan, Antique	Donated by Noel Dioso transferred to Bulanao June 19, 2007
2 Crested Serpent Eagle Spilornis cheela)	0789 0799	July 2007		Adult	Brgy. Pajo, Libertad, Antique	Donated and received by Nestor Bagac- PESCP Caretaker

Release of Changeable Hawk-Eagle on the compound of PESCP's rescue facility in Mag-aba, Municipality of Pandan, upon rehabilitation, 23 Feb 2009. Courtesy PESCP Anonymus



SIBALIW RESEARCH STATION

Location: Sitio Sibaliw, Buruanga, Aklan

Species	Identification / Ring Number	Date of Arrival	Sex	Age	Origin	Remarks
Writhed-billed Hornbill (Aceros waldeni)	0035	June 2000	Female	Fledgling	Sitio Banawang, Brgy. Napuid, Pandan, Antique	Donated
Writhed-billed Hornbill (Aceros waldeni	0036	June 2000	Female	Fledgling	Sitio Banawang, Brgy. Napuid, Pandan, Antique	Donated
2 Tarictic Hornbill (Penelopides panini panini)	0064 0063	June 19, 2007	Male Female	Fledgling Fledgling	Brgy. Nauhon, Sebaste, Antique	Transferred to Bulanao July 11, 2007 later sent to Sibaliw Station
Tarictic Hornbill (Penelopides panini panini)	101	August 31, 2006	Female	Juvenile	Brgy. Sta. Cruz, Pandan, Antique	Donated by Allen Tunguia. Release: April 3, 08 under coverage of GMA 7 TV Network
Tarictic Hornbill (Penelopides panini panini)	108	January 18, 2006	Male	Juvenile	Sitio Malumpati, Pandan, Antique	Donated by Allen Tunguia. Release: April 3, 08 under coverage of GMA 7 TV Network
Tarictic Hornbill (Penelopides panini panini)	0772	July 312003	Female	Fledgling	Brgy. Paz, Libertad, Antique	Donated to PESCP Caretaker Nestor Bagac
Tarictic Hornbill (Penelopides panini panini)	0788	September 1, 2003	Female	Immature	Brgy. Carmen, Pandan, Antique	Donated by Plaridel Sanchez IV
Tarictic Hornbill (Penelopides panini panini)	0796	December 2, 2005	Female	Immature	Sitio Tabay, Brgy. Patria, Pandan, Antique	Confiscated by Angel Tamboong, Forest Ranger BIOCON
Tarictic Hornbill (Penelopides panini panini)	0792	December 2, 2005	Male	Immature	Sitio Tabay, Brgy. Patria, Pandan, Antique	Confiscated by Angel Tamboong, Forest Ranger BIOCON

Note: Animals unsuitable for release sent to DENR PAWD Region 6, Iloilo City. Received by PAWD Deputy Director Damaso Fuentes.