



Asmat Program Moves Ahead As IPCA Trainers Start Work in Agats

IPCA's project in Asmat, Irian Jaya (Papua), Indonesia is moving ahead with exciting new developments. Following IPCA's visit to Agats in October, we are now ramping up the program by providing tools, equipment and training to LMAA (*Lembaga Musyawarah Adat Asmat*), the new Asmat NGO based in Agats.

Our goal is to empower the Asmat people through LMAA to sustainably manage their natural resources for their own long-term benefit, through institutional training and village-level environmental education. Given the serious and immediate threats to Asmat forests and seas currently posed by outside logging and fishing (see related articles), LMAA keenly understands the importance of conservation and the threats to their society and culture posed by these destructive activities.

IPCA just hired two British specialists to train LMAA staff

\$100,000 Gift for Asmat Program

IPCA is pleased to report a major gift of \$100,000 for our work in Asmat from Mr. Lang Gerhard and the Gerhard Family Foundation in San Francisco. While traveling in Asmat last year, Mr. Gerhard and Ms. Gretchen Dykstra were impressed with LMAA's enthusiasm and focus, and wanted to support this critical work. We're also extremely grateful to Barry and Paula Downing of Wichita, Kansas for their gift of \$20,000, and to Ms. Gayla Coulter of Boulder, Colorado for donating stock worth \$10,000. Special thanks also to Patti Seery, who has been instrumental in leveraging these and many other contributions from her clients. On behalf of LMAA and the Asmat people, we are grateful to all those who have given such critical support for our work.

in organizational skills, bookkeeping systems, and program management. We're also providing essential equipment such as radios and computers.

Sue O'Farrell has over 18 years experience working with Irian Jaya's NGOs on organizational development and management. Ms. O'Farrell will be in Agats for several visits starting in December 2000 to help LMAA with strategic planning, man-

agement training, and accounting systems.

IPCA has also hired Neville Kemp, a former VSO volunteer with three years' experience working with the indigenous Mentawai people of Siberut (off Sumatra's west coast). He will be working with LMAA for at least 6 months starting in February 2001, to help LMAA carry out village-level environmental education and study tours.



Bisj-rasing ceremony, Casuarina Coast, Asmat. Photo courtesy George Steinmetz, ©1996.

We now have enough funding to get the work going in Asmat. We couldn't be doing any of the important things we're now doing without your help. Thank

you! This is a pivotal time for the Asmat and many other places and peoples in the Indo-Pacific, and we ask for your continued support to keep the work going.


Indo-Pacific Conservation Alliance

IPCA is dedicated to the study and conservation of the native ecosystems of the tropical Indo-Pacific region and support for traditional peoples in their stewardship of these globally significant natural resources.

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Silent Protest in Sawa-Erma Stops Destructive Fishing

In many parts of the Indo-Pacific, outside industrial fishing operations have a notorious reputation for their rapid and large-scale destruction of fisheries resources. The all-too-familiar pattern is this: foreign (typically Hong Kong or Taiwanese) firms obtain legal permission to fish coastal waters. Villagers are not informed of the arrangement until it is finalized, and then they are coaxed into agreement with promises of jobs in a local fish canning factory. Operations commence, and rivers and seas are stripped of massive quantities of fish and shrimp. Meanwhile, the promised canning factory is constructed. By the time it is completed, so many fish have been removed that the fisheries resource has totally collapsed. Conveniently, the company then has no legal obligation to fulfill its promise of providing jobs. In effect, building the canning factory was merely a "cost of doing business", never intended to be a real going

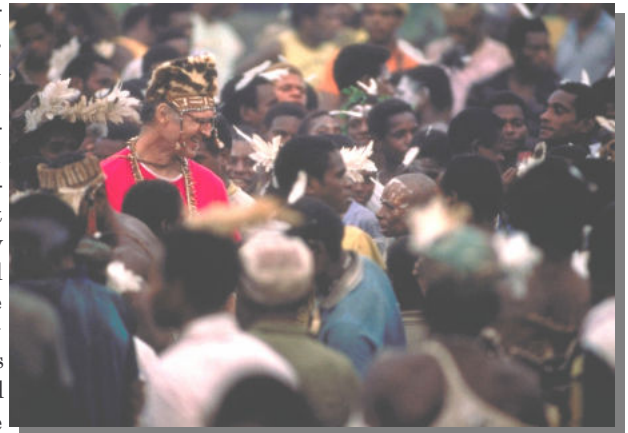
This successful example illustrates how environmental education is an indispensable and powerful tool for achieving both socio-economic and conservation goals.

concern. Local villagers are left not just without jobs, but also without much fish or shrimp to eat.

In 1998, local and regional officials initiated a plan to establish commercial fishing operations and a fish-canning factory in Sawa-Erma village in northwest Asmat. LMAA leaders and **Father Vince Cole** educated villagers in Sawa

about the negative implications of this project, already at an advanced stage. Once villagers understood the negative social and environmental implications of this factory, sentiment against it was mobilized. In early 1999, a silent peaceful protest was staged outside a local office representing the industry. Villagers held signs that expressed their objections to the plan. It was a success:

the peaceful protest was able to stop the project. This modest but highly significant success illustrates how environmental education is a powerful tool for achieving both socio-economic and conservation goals. Indeed, this case study has provided LMAA with the cornerstone of our strategy to combine the protection of Asmat's rich biodiversity with ensuring that local people remain in control of the Asmat way of life.



Father Vince Cole and friends from Sawa village
Photo courtesy George Steinmetz, © 1996.

Biodiversity Crisis Worsens in Indonesia

Forest and marine destruction from illegal logging and fishing have accelerated dramatically in the last six months in Indonesia. As the magnitude of the devastation becomes apparent, there is an increasing sense of a major biodiversity crisis among Indonesian scientists and conservationists. A biodiversity specialist at the World Bank recently estimated that at current rates of destruction, primary lowland forests in Sumatra and Kalimantan (Indonesian Borneo) will be completely gone in five years — and with them, perhaps so too the many species that depend on them, including orangutans, tigers, and rhinos, and many others.

The accelerating destruction of nature in Indonesia is the combined

result of economic difficulties and political changes in Indonesia. The central government seems almost unable to enforce compliance with national environmental policies, and newly empowered local officials have new incentives and opportunities for corruption. While Indonesia has just announced a plan to prohibit log exports in an attempt to stop illegal logging, this has been criticized as insufficient by conservationists, who are calling for a complete moratorium on all logging until an adequate forest monitoring system can be established.

Editor's Note: We apologize for the delay in getting this newsletter out. Future updates will be more frequent. Thanks for your patience.

A World Bank scientist now estimates that unless new and strong measures are taken immediately, virgin lowland forests in Sumatra and Kalimantan will be completely gone in five years.

Scientists' Alert: Coral Reefs Are Rapidly Disappearing

In October this year, 1500 scientists and delegates from 52 countries met in Bali to sound the alarm that an estimated 27% of the world's coral reefs have been destroyed — up from 10% just two years ago. Scientists at the 9th International Coral Reef Symposium warned that unless strong new measures are taken, most of the remaining reefs could be dead in 20 years.

Scientists at the conference emphasized the need to address the many threats facing coral reefs, among them destructive fishing practices, overfishing, land-based pollution (including erosion from terrestrial logging), and — perhaps most critically — global warming.

Coral reefs play a crucial role as an anchor for most marine ecosystems, and their loss would place thousands of species of fish and other

marine life at risk of extinction. Australian scientist Dr. Clive Wilkenson said loss of the reefs would not only be a major blow to the environment, but would also threaten the livelihood of a half billion people around the world who rely on them for food and income.

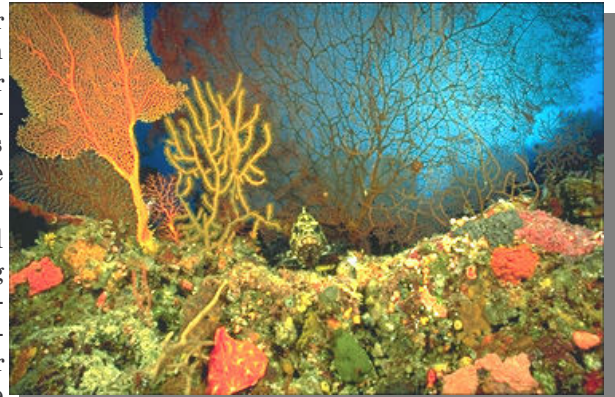
Coral reefs bring an estimated \$400 billion a year in fishing and tourism revenues, as well as their much greater but uncalculated economic value as critical habitat for marine fisheries.

Loss of coral reefs would also be a devastating blow to the medical industry, which is investigating sponges and other reef species as possible sources of new medicines

for cancer and AIDS.

Despite the alarming news, scientists at the symposium also reported **many successful examples of coral reef conservation**; for example, where local communities

(Continued on page 4)



Gorgonian and other corals in the Indo-Pacific
Photo courtesy Wolcott Henry © 1995

Clear-Cut Logging in Asmat Halted by LMAA



Logging in Irian Jaya
Photo © John Burke Burnett, 1991

Our partners at

LMAA report that unauthorized clear-cut logging began in August 2000 in the Atsj area in central Asmat. Unlike previous commercial logging in Asmat, which used local contract labor and was more selective (and thus had less biological impact on the forest), the recent logging by Jakarta-based P.T. Barito Pacific was a clear-cut operation using bulldozers. Moreover, it

was carried out without consultation or compensation to the villagers of Atsj. Reports indicate that as much as 20-40 hectares (50-100 acres) were destroyed before the protests of LMAA and the local FAR Becembub council were successful in halting the logging. Negotiations are continuing between LMAA, FAR Becembub, and Barito on the issue of retroactive compensation for the destroyed forest and its negative impact on the availability of game and other food resources.

While disturbing, this case yet again indicates how **effective local environmental education and community mobilization** is in stopping destructive activities such as commercial logging.

Unfortunately, however, dubious commercial operations such as this are likely to continue to arise in Asmat and elsewhere in Indonesia. This simply illustrates how suddenly Asmat's rich natural and cultural heritage can be threatened, and how critical LMAA is today in articulating and protecting the Asmat way of life.



Fishing in Asmat
Photo courtesy George Steinmetz © 1996

Watersheds and Coral Reef Protection

(Continued from page 3)

have been enlisted to protect no-fishing areas, **damaged reefs may be able to rebound dramatically in five to ten years.**

To adequately protect coral reefs, it's necessary to protect the terrestrial watersheds to which they are linked. Reefs and fisheries are intimately connected to their adjacent land. These watersheds contain a

It makes little sense to try to protect coral reefs without protecting the upstream forests from deforestation and the subsequent erosion and siltation that are one of the major factors underlying reef destruction.

variety of habitats, including forests, rivers, and mangroves. Links between marine and terrestrial ecosystems are so critical, in fact, that from a conservation standpoint, it makes little sense to try to protect coral reefs without protecting upstream forests from deforestation. Logging results in erosion and siltation that are one of the major factors behind reef destruction. A strategy to protect coral reefs through marine parks alone is therefore inadequate. Effective protection for reefs requires a broader scale, watershed-based approach that involves local communities and other stakeholders in safeguarding forests from over-logging and expanding agriculture.

IPCA is exploring options for new projects in the Indo-Pacific that employ a watershed-based

approach to terrestrial and marine conservation.

This approach would be a model for combined terrestrial and marine conservation in the region. Most conservation projects have not used a watershed model partly because it doesn't fit into neat but artificial categories of "terrestrial" or "marine" conservation. Watershed-based conservation is not just limited to formal protected areas, but aims to protect biodiversity within a matrix of managed land, rivers, and seas. With careful design and implementation, the watershed approach to conservation will help communities maximize the sustainability of their resource management systems, allowing reefs — and the forests to which they are linked — to thrive in perpetuity.

Monkeys! New Guinea's "Ecosystem Cancer"

The introduction of exotic (non-native) species into island ecosystems such as New Guinea is one of the most underrated threats to biodiversity. In the long run, exotic species are no less of a threat than direct habitat destruction. Even degraded habitat can probably

Alarm at the presence of monkeys in New Guinea is not simply the special concern of biologists. Indeed, the problem can hardly be overstated: if not immediately addressed, it could render other conservation efforts in Irian and PNG moot.

recover, but exotic species, once established, are forever. Indeed, it is akin to "cancer" of the ecosystem: destructive foreign elements competing and preying on native species — and spreading or "metastasizing" unchecked.

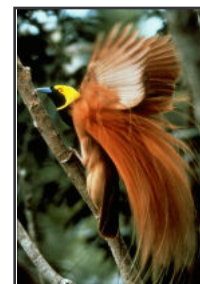
IPCA, WWF, and other conservation organizations working in Irian Jaya are sounding an alarm that feral monkeys (Crab-eating macaques) have recently been documented in Irian Jaya. Monkeys are native to western Indonesia (Sumatra, Java, Bali, Borneo, and Sulawesi) but are not natural to New Guinea. Probably brought in by transmigrants to the Jayapura area within the last two years, these macaques are both ma-

nipulative frugivores (they compete with birds and marsupials for limited food supplies) and nest predators (they steal and eat bird eggs). Introduced macaques on the island of Mauritius were one of the main factors behind the extinction of the dodo.

Dr. Jared Diamond, distinguished biologist and Pulitzer Prize-winning author of "Guns, Germs, and Steel", has called monkeys in New Guinea "my worst nightmare". Time is critical. If the macaque populations become fully established, it will be nearly impossible to eradicate them. Moreover, alien species do not recognize international borders, so the problem extends to Papua New Guinea as well. Many native New Guinea species, including **Birds-of-paradise**, parrots, and marsupials such as **tree kangaroos** are under real threat of extinction if monkeys are not eliminated.

IPCA is discussing with WWF-Sahul

on how to collaborate to address the problem. It's more complicated than it might appear. Trapping or capturing the monkeys is not really workable. The only viable conservation option is a campaign to exterminate the monkeys, but this requires first educating government and residents about the seriousness of the threat. IPCA is seeking funding support to provide tools and training to assist villagers in tracking and eradication. (Thanks to **Jared Diamond** for his help with this story.)



Top L: Raggiana Bird-of-paradise (*Paradisaea raggiana*); Photo © Bruce Beehler

Bottom L: Papuan Parrot-Finch (*Eythrura papuana*); Photo © Michael Moore 1998

Bottom R: Crab-eating macaque (*Macaca fascicularis*); Photo by Tony Whittaker; © Corbis Images

IPCA Discusses Biodiversity Monitoring and Training Center

No one said that making conservation happen is easy. But it's downright impossible if you don't have adequate information on the species and habitats in an area. Unfortunately, this data is sorely lacking for a great many areas, particularly New Guinea. IPCA is taking the lead in discussing a plan to establish a permanent forest research tract and simple field station near Lorentz National Park (recently designated a UNESCO World Heritage Site) in southern Irian Jaya. UNESCO's designation means that Lorentz is, quite simply, one of the most important biodiversity areas in the world. It contains nearly the

entire spectrum of New Guinea's habitats: marine, mangrove, rainforests, alpine ecosystems, and even permanent tropical glaciers (one of only three such sites in the world). Its global importance cannot be overstated, yet so little is known about its habitats and species that conservation efforts there are currently quite difficult.

As UNESCO has now recognized, Lorentz National Park is quite simply one of the most important areas for biodiversity protection in the world. But far too little is currently known about the park's species and habitats to be able to adequately protect it. IPCA hopes to lead in critical research and training that will lead to more effective conservation in Lorentz.

skills are extremely critical to make conservation successful, yet it does not exist locally or regionally. Our program would make a major contribution to conservation both locally and glob-

ally. The program, still under discussion, is proposed to be carried out by IPCA, the Indonesian Institute of Sciences, Cenderawasih University, WWF-Indonesia, the Smithsonian Institution, and others.



Mt. Jaya in Lorentz National Park. The tallest mountain between the Himalayas and the Andes, it is only one of three places in the world



Tree fern (*Cyathea*) forest in Lorentz National Park. Photo courtesy George Steinmetz © 1996.

IPCA's Asmat Program: A Short Summary

The Asmat, a group of some 70,000 indigenous people in the southern lowlands of Irian Jaya (Papua), Indonesia, are perhaps the most famous woodcarvers in the entire Pacific. Renowned for their extraordinary culture, art, and unique forests, IPCA is working with the Asmat through their new community-based organization, *Lembaga Musyawarah Adat Asmat* (LMAA). LMAA's mission is to preserve natural resources in Asmat for the benefit of future generations.

Today, industrial fishing, commercial logging, and other damaging activities pose a serious threat to Asmat society, culture, and nature. Our program with LMAA will help preserve Asmat's natural heritage by providing tools and training to increase local awareness of the importance of sustainable management of natural resources in Asmat. The goal is to empower LMAA to mobilize the Asmat people to manage natural resources sustainably, for their own long-term benefit.

IPCA is assisting LMAA in an integrated

program that is:

- **Providing training & equipment** to LMAA to build their institutional capacity to undertake activities effectively;
- Helping LMAA carry out an **environmental education program** that will enhance Asmat villagers' understanding of the importance of sustainably managing their natural resources, and of the negative social and economic consequences of logging and commercial fishing;
- **Map biologically & socially critical habitat** in order to document especially important or sensitive areas that should be off-limits to outside exploitation. We will also carry out the **first-ever biological survey** of Asmat's forests, rivers, and seas.

The nature of the environmental and social threats is immediate. The most effective strategy for stopping commercial logging or fishing is to mobilize local support for halting projects that will negatively affect communities. Our environ-

mental education program will facilitate better village-level understanding of the cultural, economic, and environmental implications of industrial-scale activities in Asmat.

LMAA has set up a village network to provide forums to discuss emerging environmental and social issues in Asmat and the steps needed to address those threats. IPCA is leveraging support for a community-based "**Radio Asmat**" to facilitate cultural and environmental communications in this far-flung and remote area.

IPCA and LMAA also want to recognize WWF-Indonesia/BSP's Kemala Program, who has provided a computer and other modest support to LMAA for work in the Asmat part of Lorentz National Park. We all look forward to working together.

Asmat Program Advisors:

Bishop A. Sowada & Ms. Dea Sudarman (Co-Chairs); Yufen Biakai, B. Burnett, Fr. Tom Carlhuff, Fr. Vince Cole, Gunter & Ursula Konrad, Mr. Paul Murphy, Patti Seery, and Fr. Virgil Petermeyer.

About IPCA

The Indo-Pacific Conservation Alliance (IPCA) is a non-profit scientific and educational organization dedicated to the study and conservation of the native ecosystems of the tropical Indo-Pacific region and support for traditional peoples in their stewardship of these globally significant natural resources.

IPCA is organized in collaborative association with scientists at The Bernice P. Bishop Museum (Honolulu), the Smithsonian Institution's National Museum of Natural History, and other scientific and conservation organizations. Until IPCA was formed, no organization was specifically geared to providing requisite conservation science information to decision-makers and resource managers in the Indo-Pacific region.

Our geographic scope is the "Four '-nesias" of the Indo-Pacific — Indonesia, Melanesia, Micronesia,

and Polynesia. Currently, our work is focused on the Indonesian province of **Irian Jaya**; we hope to expand our portfolio of projects to other parts of **Indonesia**, **Papua New Guinea**, and **Micronesia** in the very near future.

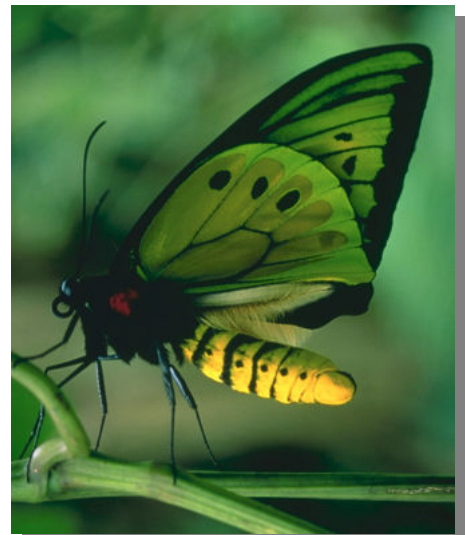
IPCA will fill a crucial gap by providing training and information on conservation science to national and local governments, local communities, and the private sector. This will help facilitate more practical and sound approaches to watershed-based land and marine resource management.

IPCA's approach is to:

- **Empower** local community organizations to sustainably manage their natural resources, by providing tools, training and environmental education;
- **Generate and mobilize** scientific data on an area's biotic resources in order to provide baseline knowledge critical to carrying out sound conservation strategies;
- **Carry out** economic studies on

ecosystem resources (including valuation studies) in order to provide a sound economic argument for biodiversity protection;

- **Activate** this information to facilitate improved land management and to enhance the policy context in which development and conservation decisions are made.



Birdwing butterfly, (*Ornithoptera*) Arfak Mountains, Irian Jaya, Indonesia
Photo courtesy George Steinmetz, © 1996

We're on the Web!
www.indopacific.org

New IPCA Board Members

Three new members were elected to the IPCA Board of Directors in our recent November 2000 board meeting. We are pleased to welcome Mr. Lang Gerhard from West Highland Capital in San Francisco, Dr. Scott Miller from the Smithsonian Institution's National Museum of Natural History in Washington, DC, and Ms. Patti Seery from Indonesian Insights/Geographic Expeditions in Chicago. We're also pleased to welcome Mr. Ray Larson to the IPCA Advisory Committee. Mr. Larson recently visited the Asmat and the Baliem Valley areas in Irian Jaya/Papua, and is enthusiastic about helping IPCA and our partners in Asmat.

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Lang Gerhard (*West Highland Capital*)
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Patti Seery (*Indonesian Insights*)

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The American Museum of Asmat Art
Thanks also to P.T. Freeport Indonesia for donated in-kind logistical support.