

TREE KANGAROO CONSERVATION PROGRAM ANNUAL REPORT

//2010



TREE
KANGAROO
CONSERVATION
PROGRAM



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A.

COVER PHOTOS

A. Bruce Beehler / Conservation International

B. Bruce Beehler / Conservation International

ABOUT US

//01



VISION

The Tree Kangaroo Conservation Program envisions a sustainable, healthy environment that maintains the unique biodiversity of Papua New Guinea in balance with the culture and needs of human communities.

MISSION

The Tree Kangaroo Conservation Program fosters wildlife and habitat conservation and supports local community livelihoods in Papua New Guinea through global partnerships, land protection, and scientific research.

HISTORY

The Tree Kangaroo Conservation Program (TKCP) is one of Woodland Park Zoo's Partners for Wildlife and partners with local landowners on the Huon Peninsula in Papua New Guinea (PNG). TKCP began in 1996 as a conservation research project on the ecology of the endangered Matschie's tree kangaroo (*Dendrolagus matschiei*). Since then the program has evolved into a collaborative effort involving indigenous communities, conservation biologists, social scientists and research institutions. These diverse partners are working together to preserve fragile habitat on PNG's Huon Peninsula. The Matschie's tree kangaroo has deep cultural significance for the local indigenous communities, and serves as the flagship species for the program. In a groundbreaking achievement, TKCP helped create PNG's first officially-recognized Conservation Area (CA).

TKCP activities take place in the YUS region of PNG's Huon Peninsula, so named after the area's three main watersheds — Yopno, Uruwa, and Som. This region is home to over 10,000 people in over 45 villages. Most people in this region lead a subsistence lifestyle, supporting themselves through hunting and farming. Under PNG's unique land tenure law, indigenous clans own all of the land in YUS. Working with TKCP, these clans have pledged an estimated 180,000 acres of land towards resource

conservation. This groundbreaking commitment protects the rain forest habitat for the Matschie's tree kangaroo and other endemic and endangered wildlife species — and also protects precious natural resources for future generations.

On January 9, 2009 TKCP achieved an important milestone. On that date, the PNG national government formally recognized the land the indigenous communities pledged towards conservation as the Yopno-Uruwa-Som Conservation Area (YUS CA). Under the Conservation Areas Act of 1978, this designation guarantees the highest level of land protection under PNG law. No resource extraction, including logging and mining, will be allowed within the Conservation Area (CA) boundaries. The YUS CA extends from sea level to over 4,000 meters, protecting an unprecedented altitudinal spectrum of PNG's unique endemic wildlife and cloud forest ecosystem.

From the beginning, TKCP recognized that collaborating with local communities is essential to long-term conservation. In order to ensure that local communities benefit from their commitment to conservation in YUS, TKCP has worked to build capacity and improve socio-economic services, including education and health care. In addition, TKCP is providing major support for a local Community Based Organization to manage the YUS CA and direct community projects over the long-term.

COMMON ACRONYMS

TKCP // Tree Kangaroo Conservation Program

WPZ // Woodland Park Zoo Seattle, Washington, USA

PNG // Papua New Guinea

YUS // Yopno / Uruwa / Som

CA // Conservation Area

CBO // Community Based Organization

NGO // Non Governmental Organization

CI // Conservation International

KfW // German Development Bank

JCU // James Cook University Cairns, Queensland, Australia

NGS // National Geographic Society

LLG // Local Level Government

GIS // Geographic Information Systems



Dr. Lisa Dabek and tree kangaroo joey "George"

In 2008, TKCP received a major boost to these efforts through a collaborative, multi-year grant from Conservation International (CI) and the German Development Bank (KfW), under the German Government's "Lifeweb Climate Change Initiative." Under this initiative, goals for establishing the long-term success of the YUS CA include:

- » Developing a Management and Landscape Plan for sustainable land use in and around the YUS CA
- » Building the capacity of the YUS Community Based Organization (CBO) for local management of the protected area
- » Piloting fast-growing fuelwood and sustainable livelihood opportunities
- » Developing community-driven ecological and socio-economic monitoring systems to evaluate the impact of the YUS CA on wildlife and local human communities
- » Supporting research into the impacts of climate change on YUS, and promoting the expansion of protected areas in PNG with the YUS CA as a model

TKCP is working closely with Conservation International's Global Conservation Fund to establish the necessary planning, oversight and funding resources for long-term, sustainable management of the YUS CA.

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Keweng village, YUS
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TKCP also said goodbye to two long-term staff members in 2010—US Program Manager Susan O'Neil and Research & Monitoring Coordinator Gabriel Porolak. Fortunately for TKCP, both O'Neil and Porolak are now in private consulting positions, allowing TKCP to continue to work with them and benefit from their institutional knowledge on projects such as the draft Management Plan for the YUS CA and development of the ecological monitoring system in YUS. Thank you to Susan and Gabriel for your time with TKCP and your dedication to the people and wildlife of YUS!

YEAR IN REVIEW

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PLANNING FOR LONG-TERM MANAGEMENT OF THE YUS CONSERVATION AREA

Now that the YUS Conservation Area has been formally approved, TKCP is laying the groundwork for long-term, sustainable management of the CA. TKCP made great strides in 2010. Accomplishments include creation of a business plan for future financial management of the YUS CA, and a draft framework of the YUS CA Management Plan, identifying the community-chosen rules for enforcement and monitoring of the YUS CA.

INNOVATIVE LONG-TERM FUNDING FOR THE YUS CA

TKCP is pursuing a relatively new and innovative approach to secure long term funding for management of the YUS Conservation Area. We are working to establish the **YUS Conservation Trust**, an endowment which will provide sustainable annual core funding for the work in-country. This endowment is made possible by a challenge grant from CI's Global Conservation Fund. TKCP made significant progress on raising half of the match needed for the YUS Conservation Trust in 2010, and Woodland Park Zoo and TKCP staff are in the last push to raise the remaining \$500,000 by July 2011.

GROWING THE MARKET FOR YUS CONSERVATION COFFEE

Through partnering with TKCP and the PNG Coffee Industry Corporation, YUS coffee growers are improving the quality of their coffee beans for sale in local and international markets. Economic gain is directly tied to support of conservation in YUS.

BUILDING CAPACITY OF THE YUS COMMUNITY BASED ORGANIZATION

The YUS Community Based Organization (CBO) made great strides in 2010, including creation of an updated constitution for the CBO, appointment of representatives and committees, and election of Executives to guide the CBO's work in YUS communities and the CA.

MONITORING FOR CONSERVATION AND COMMUNITY IMPACT

Under the partnership with CI and KfW, TKCP staff are working with researchers from James Cook University in Cairns, Australia who are leading efforts to establish a long-term monitoring system for the YUS CA and impacted communities. In 2010, the partners worked with YUS communities to identify the priority wildlife species for ecological monitoring in addition to tree kangaroos, and conduct initial surveys for the baseline socio-economic monitoring system.

PARTNERSHIPS

TKCP's work with CI and JCU under the KfW partnership has facilitated accelerated progress in 2010 benefiting the YUS CA, including initial development of agroforestry pilot projects (pg 26), climate change research (pg 23), and ecological and socio-economic monitoring systems (pg 22). Other valuable partnerships for TKCP include National Geographic Society (pg 34), Shared Earth Foundation (pg 35), Association of Zoos & Aquariums (AZA) Tree Kangaroo Species Survival Plan and AZA institutions (pg35), and Caffé Vita (pg 25).

CHECK OUT OUR NEW WEBSITE!

In early 2010, TKCP launched a new website, thanks to the generous support of KfW and CI, staff at WPZ, and the design work of Daniel Dechert of Digital Warrior, Inc.

Please visit us to see program updates, notes from the field and our latest media features.

www.zoo.org/treekangaroo



YUS CONSERVATION TRUST FUND

//03



TKCP supporter George Meyer with his namesake, tree kangaroo joey "George," along with Gabriel Porolak and Bruce Beehler

TKCP is pursuing a relatively new and innovative approach to secure long term funding for management of the YUS Conservation Area. **We are working to establish the YUS Conservation Trust Fund**, an endowment which will provide sustainable annual core funding for the work in Papua New Guinea. Far too many protected areas around the globe are protected in name only. Strong community support, collaboration with landowners and the government, effective management planning, and secured long-term financing will ensure that the YUS Conservation Area is truly sustainable.

Thanks to the generous support of TKCP's partner organizations, donors and volunteers, we successfully raised \$500,000 towards the YUS Conservation Trust Fund in 2010. TKCP is now in a critical push to raise the remaining \$500,000 in the first six months of 2011. If we achieve this goal, we will receive \$1 million in matching funds from CI's Global Conservation Fund (GCF).

In addition to raising the funds for this endowment, in 2010 TKCP created documents for set up of the YUS Conservation Trust. These planning tools include the draft Management and Business Plans for the YUS CA, and the design of the governance and disbursement structures for the YUS Conservation Trust Fund. Throughout 2010 TKCP staff worked closely with consultants from Starling Resources, Ltd; WPZ leadership in Finance and Executive departments; and members of the WPZ Board's Finance and Conservation and Education Committees. The final documents analyze ongoing and anticipated future management costs for the YUS CA, and articulate the level of funding needed for Trust capitalization. These tools will ensure the YUS CA and YUS CBO have the long-term funding necessary for meaningful community-based conservation and management of the protected habitat and species.

\$2,000,000 BY THE NUMBERS

\$1,000,000

Amount pledged to WPZ from Conservation International, if WPZ match fundraising is met by June 30, 2011

\$1,000,000

Total amount needed from WPZ to match CI's pledge by June 30, 2011

\$494,151

Remaining amount needed for WPZ to match CI's pledge

\$505,849

Amount raised by WPZ by Dec 31, 2010

73%

Of funds raised were from private donors and corporate matches

27%

Of funds were raised from AZA institutions or private foundations

THANK YOU FOR YOUR SUPPORT!

TKCP greatly appreciates the support we have received from so many donors to date! We are earnestly raising the remaining funds to match the \$1 million Matching Challenge Grant by June 30, 2011.

Every gift is doubled by this grant, and will help create a Trust/endowment to ensure lasting conservation solutions for some of the world's most fragile habitat.

If you have thought about giving, or would like to make an additional gift at this critical time, visit www.zoo.org/treekangaroo/give or call staff members Paul Balle (206.548.2446) or Hilary Aten (206.548.2620) to make your donation or for more information.

This initial goal of \$2 million for the endowment will help us towards covering our core annual operational costs in PNG for the long term. These annual in-country costs for management of the YUS Conservation Area include:

- » **Ecological monitoring of the YUS CA**
- » **Enforcement of the YUS CA rules**
- » **Mapping of existing and pledged land parcels**
- » **Support for education, health and community development projects identified in partnership with the YUS CBO**

YUS CONSERVATION AREA

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Formal approval of the YUS Conservation Area was a crucial first step. TKCP is now focused on planning for the long-term management and support of this unique protected area. Strong community support, collaboration with landowners and the government,

effective management planning, and secured long-term financing will ensure that the YUS Conservation Area is truly sustainable.

In 2010 TKCP worked with the YUS CBO and partners to accomplish these steps towards long-term success of the YUS CA.

LANDOWNERS WORKSHOP

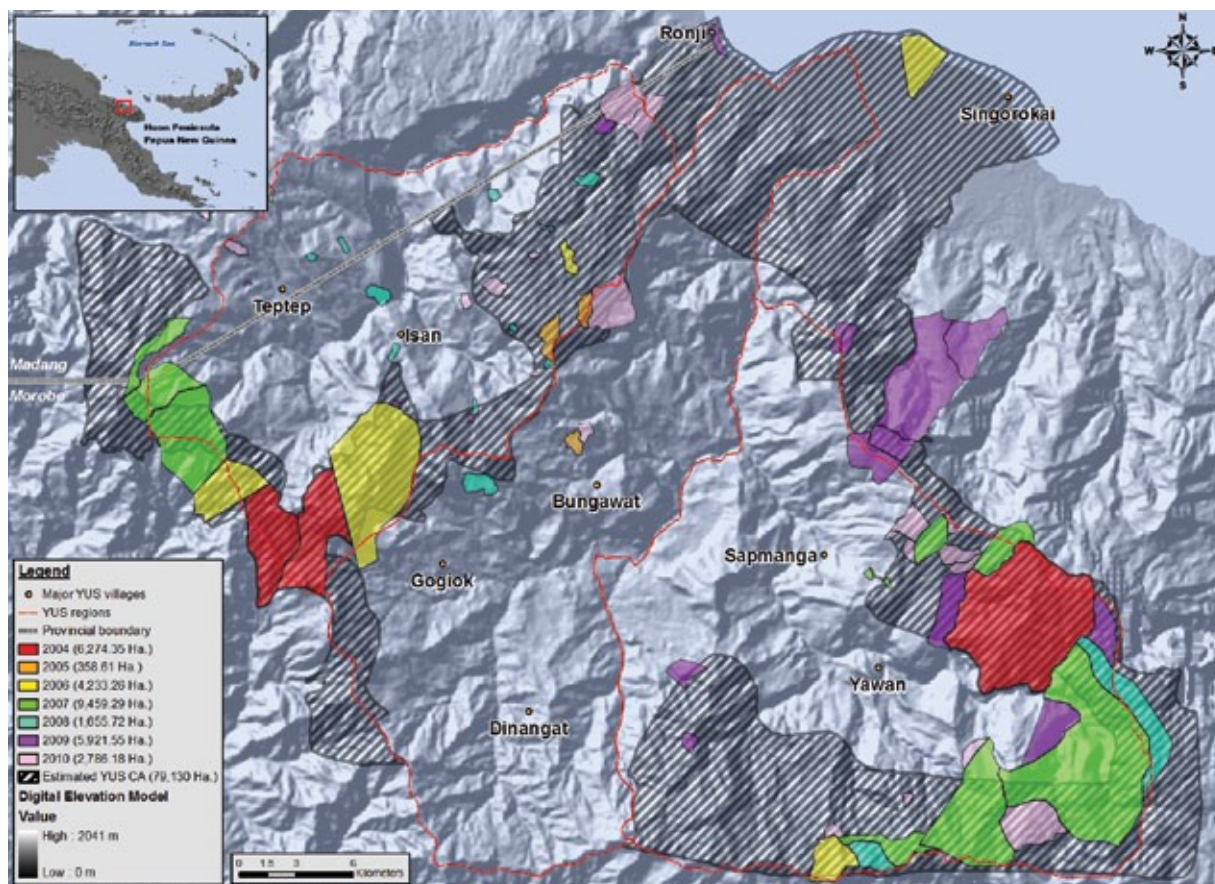
In April 2010, TKCP hosted the second YUS Landowners Workshop in Bungawat village. The purpose of the workshop was to revise and approve the final rules, regulations and enforcement structure for the YUS CA. This work built upon a draft plan and rules initially produced at a workshop in Isan village in March 2008. Approximately 30 participants attended the 2008 workshop, primarily landowner representatives. The 2010 workshop sought to include more pledged landowners in the event, as a final approval of the draft rules for the YUS CA Management Plan. Over 100 participants attended and were fully engaged in the workshop. Engaging a larger group in decision-making ensured the workshop outcomes have a high level of validity—especially critical because this workshop represented final community approval of the rules and fines governing the YUS CA. The workshop also provided a forum for the landowners to define the geographic scope of villages involved in the YUS CA program and TKCP's work. YUS landowners agreed to have the YUS CA boundary extended to encompass specific border-lying villages, and those within the watershed catchment, ultimately including an additional nine YUS communities in the YUS CA.



Landowners review and finalize their decisions on the rules for the YUS CA

▼ Cooperative exercise at Landowners Workshop in April 2010





MAPPING OF PLEDGED LANDS

In 2010, an additional 20 land parcels (2,786.18 hectares) were mapped by GIS and Conservation Coordinator Karau Kuna and his team of Mapping Officers, Matthew Tombe and Victor Eki. Due to the tireless efforts of Tombe and Eki in the field, a total of 73 land parcels of the gazetted YUS Conservation Area have now been mapped, with the boundaries of 29,864 hectares (figure 3) of pledged land delineated in GIS. Sixty-two percent (62%) of the estimated YUS CA now remains to be mapped. The Mapping team aims at reducing this figure significantly in 2011 as TKCP works with landowners to pledge grassland areas for Agroforestry and Reforestation projects, and receives new pledges from villages added to the work area of the YUS CA at the 2010 Landowners Workshop.

Six (6) of the twenty (20) land parcels mapped this year were extensions of existing land parcels mapped in previous years. Extension of the boundaries of previously pledged land parcels is becoming an increasing trend among clans who have already pledged land to the YUS CA, in a show of support and dedication to conservation.



The TKCP Mapping Team

Because the pledging of new land parcels to the CA can be a lengthy process involving extensive negotiations between clans and individual landowners, in 2011 the mapping team plans to add an awareness-driven campaign, encouraging the extension of current boundaries while awaiting the resolution of new pledges.

YUS CA BUSINESS PLAN

In July 2010 TKCP staff held a facilitated strategic planning retreat in Port Moresby, PNG. This retreat was held to develop a detailed strategic plan for long-term success of the YUS CA, as well as the financial plan in support of the protected area. The retreat was facilitated by consultants from Starling Resources (based in Bali, Indonesia) and involved all staff of TKCP in the planning, including US, Australia, and PNG-based staff, as well as TKCP Conservation Officers from YUS and WPZ's Human Resources Vice President Damian King. Having the input of all staff on the future of the YUS CA was a critical step in long-term planning for TKCP as an organization, future support of the YUS CBO, and implementation of long-term monitoring and enforcement programs for the YUS CA.

The end result of this process is a draft Business Plan for the Huon Conservation Landscape Initiative, which identifies the organizational structures, activities, and financial support required for management of the YUS CA over a 10-year period. This Initiative involves the main program partners of Woodland Park Zoo, the NGO for TKCP's in-country operations (currently being established in PNG), and the YUS CBO. In 2011, TKCP will continue to work with the members of the YUS CBO and partner organizations on the strategies identified, including establishment of an NGO in PNG and fundraising for the YUS Conservation Trust Fund.



The TKCP team at the YUS CA Business Planning Retreat, Port Moresby

YUS CA MANAGEMENT & LANDSCAPE PLANS

In December 2010 TKCP staff worked with Evergreen Funding Consultants of Seattle, Washington to create the draft framework of the YUS CA Management Plan. This draft framework incorporates the results of the landowner workshops with previous findings of biodiversity surveys in YUS, and the plans defined for ecological monitoring and enforcement programs for the YUS CA. TKCP staff are now working with the PNG Department of Environment & Conservation (DEC) to ensure that the rules and penalties agreed upon by the landowners are in line with existing PNG law.

TKCP is also working on a broader Management and Landscape Plan, as required by the PNG DEC under the PNG Conservation Areas Act of 1978. Under this requirement, the Management Plan of the YUS CA also incorporates planning by different land use zones, including a buffer zone, where limitations on certain high-impact land use activities in adjacent areas prevent damage to the core protected area's integrity.

TKCP also established the YUS Conservation Area Management Committee in late 2010 under a DEC requirement. As the first use of the PNG Conservation Areas Act, this activity serves as a capacity building exercise for the PNG government in fulfilling its statutory obligations to the YUS CA. Comprised of three YUS CBO nominated representatives, members of PNG-DEC, National, Provincial and local government, and TKCP Manager, this committee will have responsibility for advising the Minister on YUS conservation matters.

COMMUNITY BASED ORGANIZATION

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The Community Based Organization (CBO) in YUS is intended to provide local community members with opportunities to participate directly in the management of the YUS Conservation Area (YUS CA), and to develop, or collectively leverage, projects aimed at improving livelihoods within

YUS CA communities. In 2010 TKCP continued working to establish a functional and effective organization, focusing primarily on engaging CBO representatives, ensuring their participation, and improving their capacity to become leaders in the development of the organization.



During the Landowners' Workshop in April, landowners were given an opportunity to express ideas and ask questions about the new CBO. In response, TKCP organized a CBO awareness campaign, facilitating community meetings throughout YUS. During these meetings, TKCP explained the CBO's intended purpose, its function and its relationship to the YUS CA. TKCP also addressed questions and elicited feedback from community members and CBO representatives. The ideas and relationships that arose from these meetings set the stage for a successful CBO Formation Workshop held in Bungawat village in October.

The TKCP-facilitated CBO Formation Workshop also served as the CBO's first official general meeting. Workshop participants included nearly 40 CBO representatives, members of the YUS local-level government (LLG), and TKCP staff. During the workshop, participants developed a collective history that built common ground and strongly linked the CBO with the YUS CA. Participants also developed a vision for the CBO, identifying specific goals and projects towards a cohesive conceptual framework of the YUS CBO.

During the Formation Workshop, CBO representatives also made important revisions to the CBO structure, creating an executive body comprised primarily of YUS residents and a modified committee structure that

now includes a Conservation Committee, Education Committee, and Healthy Community Development Committee. After revising the structure, representatives selected officers for each committee, for the executive body, and for representation on the DEC's CA Management Committee. In all, nine representatives were chosen to lead the CBO, including Eseng Batumang as president, Barbara Sowang as secretary and Tingke Dopke as treasurer. Each committee and the Executive Body of the CBO have at least two women representatives.

The YUS CBO's Education Committee held its first official meeting in 2010. The committee selected three YUS students to receive this year's Balob Teachers' College scholarships and began developing a Junior Ranger pilot program to promote conservation awareness in YUS schools. The committee also began several small fundraising projects in order to support its future work.

In 2011, the CBO plans to hold two general meetings, in addition to smaller committee meetings. It will finish revising its constitution and identify ex-officio advisors for its executive. In 2011 CBO representatives will also have opportunities to collaborate with DEC officials towards developing a YUS CA management plan, and to receive ecological monitoring training as the YUS CA Ranger Program develops.

RESEARCH

//06





Young Matschie's tree kangaroo / Bruce Beehler / Conservation International

TREE KANGAROO RESEARCH

In 2010, Research Coordinator Gabriel Porolak left his staff position at TKCP to pursue research in YUS through consulting. Porolak's new role as a consultant benefited TKCP when partner organization James Cook University contracted Porolak through the KfW LifeWeb Initiative efforts to help develop an ecological monitoring regime for the YUS CA.

TKCP continued to support collaborating scientist TJ McGreevey in 2010. In October, the journal *Zoo Biology* accepted McGreevey's et al. research article, "Genetic Evaluation of the Association of Zoos and Aquariums Matschie's Tree Kangaroo (*Dendrolagus matschiei*) Captive Breeding Program" for publication.

This article details the results of four years of McGreevey's research on the genetic diversity of captive and wild tree kangaroos, under the guidance of TKCP's Dr. Dabek and Dr. Tom Husband at the University of Rhode Island.

TKCP continues to work collaboratively with National Geographic Society's Crittercam program to analyze the pilot tree kangaroo video data collected in 2009 and plan for future work. Dr. Dabek and National Geographic's Director of Research in Remote Imaging, Kyler Abernathy, determined further research goals utilizing the successful Crittercam methodology and will implement further field research in 2011.



YUS high elevation forest landscape / Bruce Beehler / Conservation International

ECOLOGICAL MONITORING

TKCP and CI are partnering with James Cook University in Cairns, Australia to develop a system of ecological monitoring for the YUS CA to evaluate the impact of the YUS CA. This project is funded through KfW's LifeWeb Initiative.

In 2010 JCU hired Mark Ziemnicki to work with Dr. Andrew Krockenberger to develop the ecological monitoring system for the YUS CA with TKCP. Building on the 2009 Monitoring Planning Workshop held at JCU in 2009, efforts in 2010 focused on identification of key species for ecological monitoring, and development of protocol and techniques for community-based monitoring.

At a 2010 April Landowners Workshop held in Bungawat village, TKCP staff led YUS landowners in identification of the priority species for monitoring, according to the relevance to YUS communities. Other factors considered in JCU's species prioritization included indicator of ecosystem health, global significance, perceived responsiveness to hunting pressure, relevance to climate change, and status as an umbrella species. The species identified for monitoring include Matschie's tree kangaroo, other macropod species, possum species and cassowaries. JCU staff completed four trips into YUS in 2010, working with communities and landowners to conduct background surveys on hunting of fauna in YUS, and assess feasibility of various low-technology monitoring techniques for long-term community based implementation.



Treeplot study under CI's carbon stock research / Bruce Beehler / Conservation International

CLIMATE CHANGE RESEARCH

Under the KfW initiative, TKCP partner Conservation International, under the direction of Dr. Bruce Beehler, is gathering data on impacts of climate change on the YUS ecosystem and endemic species, including the Matschie's tree kangaroo. These data will help TKCP understand what impact climate change may have on YUS agricultural and subsistence practices, species adaptation to climate change, and ultimately species survival. During 2010, a team of Conservation International scientists worked

with YUS landowners and TKCP staff to establish an elevational transect in the YUS CA from sea level to 3,000 meters elevation along a single ridge from Nanaiya Village to Wasaunon Camp. Eleven field camps were established in 2010, facilitating initial tree plots, bird surveys, other wildlife surveys and digitized GIS mapping. These activities will help establish baseline data for the long-term research project. Related work this year included measuring the standing carbon stocks in the YUS area.



CONSERVATION COFFEE & LIVELIHOODS

//07

In 2010 TKCP worked to further identify income-generating options for YUS communities. These efforts built upon 2009 research into coffee production in YUS. The team determined that income generation from local coffee production could not only provide much-needed resources for local communities, but would also foster a higher profile for conservation in YUS.

The high quality of YUS coffee, the compelling conservation story, and the immense dedication of the farmers to the land, could combine to help market YUS coffee while bringing the story of the YUS Conservation Area to a wider audience. Coffee grown in YUS could command a higher price on the international market because it qualifies as direct buy, and promotes conservation.

In 2010, Agroforestry & Livelihoods Manager Zachary Wells began piloting the YUS Coffee for Land and People Project with the help of new Community Development Coordinator, Benjamin Sipa. This included establishment of an agreement between TKCP and PNG's Coffee Industry Corporation (CIC) to bring CIC's technical trainings for coffee growers to YUS for the first time. In May TKCP and the CIC provided 72 hours of trainings for 330 coffee farmers from 12 pilot villages. Topics included pruning and garden management, quality bean harvesting, proper washing and drying techniques, and improved composting. The growers participated in workshop sessions from the CIC's proven curriculum, and new themes on land-use planning, ecosystem services, and conservation, delivered by TKCP staff.

The team also worked with local coffee groups to gather data on over 450 individual farmers, providing a baseline understanding of the role of coffee in the local economy. This growing source of information is being supplemented by intensive economic survey work through TKCP's partnership with James Cook University.

CIC trainings were followed by visits to individual farms later in the year, building local capacity for production of high quality coffee through one-on-one, on-farm training sessions. Meanwhile, TKCP staff based in Seattle worked with Caffé Vita, a Seattle-based roasting company, to evaluate coffee samples from YUS villages. Caffé Vita hosted two coffee cuppings where the green beans were roasted in small batches, brewed, and tasted for quality. Cuppings held before and after the training sessions indicated that the workshops had a noticeable positive impact on quality improvement.

In 2011 TKCP plans to host a site visit for Caffé Vita staff to meet with YUS coffee growers and discuss techniques for increasing quality of the beans produced. This visit will be a significant step forward in improving YUS coffee quality and will help YUS farmers to understand and access the specialty coffee market.



A coffee nursery in Yawan village



December Caffé Vita cupping in Seattle / Ryan Hawk / WPZ



Green and roasted beans from YUS growers / Ryan Hawk / WPZ

AGROFORESTRY & REFORESTATION

//08

Agroforestry is important to the YUS landscape because the people of YUS actively cultivate trees for many daily needs including medicine, construction materials and firewood. Meeting the needs of expanding populations in many YUS villages may require increasing the efficiency of traditional practices. In previous years, WPZ Horticulturalist David Selk worked with TKCP staff to survey YUS residents on the types of

trees harvested and preferred for construction materials and fuelwood. Building on this initial survey, TKCP staff Benjamin Sipa and Zachary Wells teamed up with Drs. Miriam Murphy (Post Doctoral Research Fellow), Tony Page (Senior Research Fellow & Lecturer), and Jonathan Cornelius (Senior Lecturer) all from James Cook University's Australian Tropical Forest Institute, to improve agroforestry practices in YUS.



Constructing a traditional house from bush materials in Teptep village

With support from the YUS Community Based Organization and local land owners, the TKCP and JCU team is carrying out intensive socio-economic monitoring to better understand the local economy and how people depend on forest products and crops. The team is also conducting technical trainings with local farmers on tree planting and maintenance. Goals include improving local capacity to cultivate the species they most depend on. In 2011 they will begin channeling the results of the economic surveys and agroforestry workshops into village planning workshops addressing development challenges in a small group of pilot villages. In 2010, Sipa and Dr. Page completed two initial agroforestry technical workshops, facilitating 32 hours of training with over 60 participants from 11 villages. During these workshops, participants selected anthropogenic grassland sites for future demonstration plantings. These areas will no longer be burned, but planted and reforested with useable species. TKCP's mapping officers will work with local land owners to map the sites and they will be identified as a new land-use type within the YUS sustainable landscape. Through the course of the workshops, coordinators and participants gained a much better understanding of local planting techniques and local visions for agroforestry and reforestation.

The first agroforestry project village meetings were held in 2010, introducing programs and consulting with local participants to adopt plans and build awareness. Simon Passingan of Barefoot Community Services, East New Britain, PNG, led workshops building a comprehensive plan for the pilot village agroforestry projects. Passingan will return in 2011 to begin the first village planning workshops. Dr. Miriam Murphy also trained eight local, community-appointed surveyors for monitoring work, using an adapted version of the Center for International Forestry's (CIFOR) Poverty, Environment Network (PEN) survey. Dr. Murphy and her team completed the first surveys between September and October, gathering information from numerous households. These surveys will continue through 2011 and will be the basis of long term monitoring by the YUS Community Based Organization.



EDUCATION

//09

WORLD ENVIRONMENT DAY ESSAY CONTEST

On June 5, seven YUS primary schools participated in the 2010 YUS World Environment Day (WED) essay contest coordinated by TKCP. The topic for this year's content was global climate change, and students

were encouraged to identify possible means and ways to minimize green house gas emissions. Over 571 students participated in the activity, with awards and prizes chosen for 18 students.

CONGRATULATIONS MR. ZUA

TKCP is very proud to recognize Jacob Zua, the first graduate of our Teacher Scholarship program to have completed six years of service to the people of the YUS region! From the scholarship cohort of 2002, Zua faithfully honored his commitment under the scholarship contract, teaching at Isan Primary School for a year before becoming Head Teacher at

Yawan Primary School and building a successful 8th Grade Graduation program. Congratulations to Mr. Zua on successful completion of his service to the people of YUS—from all of us at TKCP, thank you for your faithful support of the program, your commitment and patience! Mr. Zua will continue his college education.

SCHOLARSHIPS FOR YUS TEACHERS

Since 2001, TKCP has helped alleviate the shortage of teachers in YUS village schools by supporting scholarships to Balob Teacher's College in Lae, PNG. A two year program, scholarship recipients then agree to the YUS community to return to YUS to teach for a period of six years, ensuring that village schools have trained teachers. Schools have proven to be a critical link in promoting conservation education and awareness in YUS communities. Under the coordination of Education Coordinator Danny Samandingke, four TKCP sponsored students graduated with Diplomas in Primary Teaching from Balob Teachers College in November 2010. With this class, TKCP has now sponsored a total of 17 teachers who now serve in ten village schools across the YUS region. In September, the YUS CBO Education Committee selected the cohort of three new students for the 2011 scholarship to Balob Teachers College.



Part of the YUS CBO Education Committee in their breakout session — discussing selection criteria for 2010 Balob Teachers College scholarship application screening held in Notate Primary School.

ENVIRONMENTAL EDUCATION

In 2010 Samandingke visited teachers and their classrooms across YUS to identify priority areas and assess gaps in current environmental curriculum. Through these visits, Samandingke found that local teachers needed additional tools, background knowledge, resources and empowerment to conduct environmental education for YUS community members. These resources would help teachers assist community members in their efforts to sustainably manage their resources and the overall YUS Conservation Area. Samandingke found that continued in-services, transferring of appropriate knowledge, and provision of resources (including curriculum) to schools would help to improve the level of environmental education in these remote areas. In 2010 TKCP also completed distribution of the remaining critically needed equipment and supplies (purchased with support of CI and KfW) to nine Primary Schools, 13 Elementary Schools and 14 TokPles Pre-Schools within the YUS area.

In 2011 Samandingke will pilot conservation education activities based on the best practices exchange with the Hutan Asian Elephant Conservation / Kinabatang Orangutan Conservation Program in Sabah, Borneo (see pg 33), supported by Shared Earth Foundation. These activities will include an environmental education program for members of the YUS CBO committees, teachers, students, and the general public of the YUS CA region, as well as a “Junior Conservation Education Ranger Program” with students at Yawan Elementary, (Uruwa) Notate Primary (Som) and Tapmange Tok Ples Pre-school (Yopno).



HEALTH

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HEALTHY VILLAGE, HEALTHY FOREST

Mountainous terrain and limited resource capacity contribute to inconsistent health services in the YUS region. To address this challenge and provide a benefit to the communities supporting the YUS CA,

TKCP has been collaborating with the government's Health Departments at national, regional and local levels to improve access to health care in YUS.



Solar panels for Bungawat solar fridge



Bungawat village aid post solar fridge

IMMUNIZATION INITIATIVE

In 2006 TKCP began the Immunization Initiative with the support of the Wyco Fund, aiming to reduce the incidence of preventable disease in YUS. In 2009 TKCP was able to expand the program, purchasing an additional three solar refrigerators with the support of CI and KfW. These solar-power refrigerators allow YUS village aid posts to keep a supply of cold-storage vaccines, allowing for improved vaccine access to YUS villagers. Two of the refrigerators were installed in 2010; one in Bungawat village and the other in Sapmanga village. In October the first vaccination patrol from the Sapmanga Solar Vaccine Fridge was done from Sapmanga to Yawan, with great community response. In addition, a training for health workers was held in Bungawat December 13-17 to cover the proper handling and maintenance of the solar refrigerators, the cold-chain process and how to administer vaccines efficiently in the field. TKCP will collaborate with the Provincial and District government to identify the villages for installation of the remaining three solar refrigerators in 2011.

HEALTH PATROLS

Since 2007 TKCP has collaborated with Health Care Workers from the Morobe Provincial Health Department to facilitate health patrols in YUS, providing local communities with an opportunity to access medical treatment and capacity building the government's role in providing health services. In 2010, a six-person team of Health Care Workers from Goroka, Eastern Highlands, traveled into Yawan in early December for a week long patrol. TKCP Conservation Field Officer and YUS LLG Councilor Mr. Dono Ogate assisted the two health teams with carriers for the patrol. A total of 985 cases were treated, including cases of skin diseases, arthritis, asthma, gastro-intestinal disease and dental problems. The Health Patrol team also provided a summary assessment on Health Care needs and capacity of village aid posts in YUS to TKCP. In 2011 TKCP will conduct a strategic plan and conduct additional activities under the Healthy Village, Healthy Forest Initiative, including further Village Birth Attendant trainings, collection of YUS medical data evaluation of potential for a Health Care Worker scholarship program, and international health assistance.

MEDIA & PARTNERSHIPS

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GLOBAL MEDIA COVERAGE

In April of 2010, a news team from German television station Deutsche Welle traveled with CI and TKCP staff to the village of Tepetep in the YUS region of PNG. Created as a piece for their series on climate change, “Ideas for a Cooler World,” Deutsche Welle created a seven-minute piece focused on forest use and protection in YUS, told through the voice of local community members, including TKCP Education Coordinator Danny Samandingeke, Yopno Conservation Officer Namo Yaoro, and Mapping Assistant Mathew Tombe. The piece aired in late July 2010, in multiple languages and across the globe. Deutsche Welle also created an excellent interactive web documentary on the story of conservation in YUS communities — this excellent tool for educators and partners can be visited in the TKCP website’s media section.

The successful establishment of the YUS Conservation Area in 2009 received additional media attention in 2010, through publication of an article in the Association of Zoos & Aquariums’ August issue of “Connect” magazine. In August, an article written by National Geographic’s Tim Laman on the Huon Peninsula’s wildlife and the success of the YUS CA was published in the magazine of the National Wildlife Federation (NWF). Finally, Sy Montgomery and Nic Bishop’s award-winning book on a research expedition with TKCP, *The Quest for the Tree Kangaroo*, was published in paperback in 2010. This book has proven to be a successful education tool for TKCP, both in the US and PNG.

TKCP’s work on the Coffee for Land and People project received additional media coverage in Papua New Guinea as well; on March 11 the The National covered TKCP’s Memorandum of Understanding with the PNG Coffee Industry Corporation to support TKCP’s extension trainings with YUS coffee growers. On June 3, The National covered the eight-day TKCP/CIC conservation-based coffee growing trainings.



Deutsche Welle in Tepetep



Deutsche Welle interactive web documentary

TKCP LAUNCHES NEW WEBSITE



In May 2010 TKCP officially launched a new website, hosted by Woodland Park Zoo. Thanks to the generous support of CI/KfW and guidance of Ric Brewer and other Public Relations staff at WPZ, TKCP worked with Daniel W Dechert to create the site. The website has proven to be a useful tool for reaching a broader audience with TKCP's conservation goals and work to support the YUS CA. Through the media and fundraising tools now available on the website, TKCP has received unsolicited contacts, inquires and donations from new contacts in the US and across the globe. The website also provides partners with easy access to some of the key resources for conservation in PNG, including the Landowners Law Booklet and the YUS Indigenous Mapping project. In 2011 TKCP staff aim to engage a broader audience through regular updates to the "News from the Field" blog — stay tuned to read the latest updates directly from PNG and the US!

www.zoo.org/treekangaroo

MOROBE SHOW AWARD

The Morobe Province Agricultural Show is an annual event in PNG featuring traditional dance groups, entertainment and stalls for community organization outreach. The 49th Morobe Agriculture Show took place October 23–24, 2010 in Lae. The Morobe Tourism Bureau (MTB) hosts a stall each year, and asked TKCP and the group Culturelink PNG Art & Design to share the booth with them. TKCP PNG Program Coordinator Ruby Yamuna worked with staff from MTB and TKCP to decorate, provide TKCP awareness materials, and staff the booth for the weekend event. The booth provided TKCP with a successful opportunity to educate the public in Lae about tree kangaroos in PNG and TKCP's associated conservation work in YUS. The MTB-TKCP stall was awarded first place of the annual show for the category "Cottage and Support Industries."



Highlands singing group / Morobe Tourism Bureau



Morobe Tourism Bureau, Culturelink & TKCP Stall / Morobe Tourism Bureau

PARTNERSHIPS

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NATIONAL GEOGRAPHIC SOCIETY

TKCP is grateful for the long-time support of the National Geographic Society. This collaborative relationship began in 2006, when NGS funded a TKCP study of the home range and habitat use of the Matschie's tree kangaroo. In 2010 TKCP continued to collaborate with NGS staff using NGS' Crittercam® technology to study the feeding ecology and behavior of wild tree kangaroos in

the canopy. This research will inform potential further studies into tree kangaroo ecology. TKCP Director Dr. Lisa Dabek was featured by NGS in 2010 — once in a presentation to National Geographic Expeditions in Cairns, Australia in July 2010, and again as the featured presenter in October 2010 in the National Geographic Live! speaker series in Washington, DC.

BEST PRACTICES EXCHANGE WITH CONSERVATION IN BORNEO

Thanks to the generous support of the Shared Earth Foundation, TKCP participated in a learning exchange with the Hutan Asian Elephant Conservation/Kinabatangan Orangutan Conservation Program (KOCBP) in 2010. This community-based conservation organization directed by Marc Ancrenaz and Isabelle Lackman is located in Sabah, Borneo, Malaysia. This reciprocal exchange followed up on a 2008 visit in which staff from Hutan/KOCBP traveled to YUS to visit the communities of the YUS CA. Through these exchanges, staff from each organization learn from each other and share ideas about community-based conservation strategies. In 2010, TKCP staff Zachary Wells and Danny Samandingke travelled to Borneo where they met with Hutan and KOCBP staff and traveled to field sites, learning about the organization's work in conservation awareness, reforestation, environmental education, and monitoring. Samandingke was also able to meet with representatives from the Sabah Forestry Department's Rainforest Discover Center, and participate in an Earth Expeditions course for educators at KOCBP led by WPZ and Miami University's Project *Dragonfly* program. (For more information on the Borneo Earth Expedition offered by WPZ and Miami University, including visits with conservation partners in the field, please visit <http://www.zoo.org/borneo>)

This experience was inspirational for Samandingke, who has since designed pilot TKCP Junior Ranger and Environmental Education programs based on this exchange. In addition to the Shared Earth Foundation, TKCP also thanks Hutan/KOCBP for their generous donation of a laptop computer to the YUS CBO's Education Project. This exchange of best practices between two of Asia-Pacific's ground-breaking, community-based conservation programs was highly successful, providing both partners with new insights, strategies and reinforced dedication to their work in conservation, culture and incredible natural habitats.

THE ASSOCIATION OF ZOOS & AQUARIUMS (AZA) AND TREE KANGAROO SPECIES SURVIVAL PLAN

TKCP is grateful for the ongoing support and collaboration with other AZA institutions and with the AZA Tree Kangaroo Species Survival Plan (TK-SSP). In 2010, AZA partners including the TK-SSP, Columbus Zoo, Roger Williams Park Zoo and the AZA Conference Committee supported TKCP's outreach efforts for the YUS Conservation Trust Fund campaign through speaker opportunities and award nominations. TKCP has also benefitted from a continued partnership between TKCP Education Coordinator Danny Samandingke and Anne Bartin, Zoological Manager at St Louis Zoo, for the successful Art and Ideas Exchange program, in which PNG and US students learn about each other's culture, wildlife and daily experiences through an exchange of drawings, paintings and poetry.

GIS

In 2010, TKCP joined forces with partners at Conservation International and James Cook University to create a shared database of all available GIS data for the YUS CA. Improvements to the database were made possible through generous assistance from Conservation International's Remote Sensing & Geospatial Analyst, Anurag Ramachandra. In July 2010, TKCP staff Karau Kuna and Ramachandra met in Cairns, Australia to analyze and organize all data from the YUS CA into the working database. This collaboration will continue into 2011 when partners David Gillieson and Jeff Silverman of James Cook University will work with TKCP and Conservation International to collect further imagery. This imagery will be especially useful for planning village-level land use, and will prove critical for effective management planning of YUS.

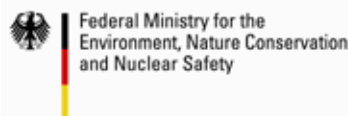
SUPPORT

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2010 SUPPORT TO TKCP OPERATIONS & THE YUS CONSERVATION TRUST FUND

\$100,000 AND ABOVE

Conservation International—Global Conservation Fund
Lifeweb Initiative of the German Federal Ministry of Environment (BMU) and German Development Bank (KfW)—through partnership with Conservation International



\$50,000 TO \$99,000

Maria Semple and George Meyer
Swift Foundation



\$20,000 TO \$49,999

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Microsoft Employee Matching Gift Program

\$5,000 TO \$19,999

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Gail Warren
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Kevin Schofield
Gena Shurtleff & Richard Wurdack
Gary Smith & Kathleen Kemper
Lisa Tiedt
ZooParc de Beauval



UP TO \$999

Anonymous,
in honor of Tia's 8th birthday
Richard Abel and Roberta Berner,
in memory of John Philips
Hannah Ahmed
Dominique Bideau-de Rozario
Richard Biribauer
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in honor of Ethan and Aurora Madsen
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Daniel and Meredith Morris
Doug Schaaf and Judy Nyman-Schaaf
Carol and Seymour Sarnoff,
in memory of John Philips
Patricia and Scott Sebelsky
Second Ascent (in-kind support)
TCS & Starquest Expeditions
Russ White,
in memory of Brady Patrick Tyler
Mike & Jan Williams
Kevin & Jo Wilhelm

PARTNERS & SUPPORTERS

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- » Lae Medical Store Team for support of our medical needs in YUS communities
- » Members and families of the Health Patrol Workers for their service to YUS communities
- » WPZ Board Member Rob and Marti Liddell, Carol and Bruce Hosford, and UBS Senior Vice President of Investments John Adams for hosting fundraising events in support of the YUS Conservation Trust Fund
- » National Geographic Live! series for support and facilitation of TKCP speaking engagements and outreach in Australia and the US
- » CI's Sojourns program and Dr. Bruce Beehler for the planning and coordination of the inaugural donor trip in support of the YUS Conservation Trust Fund—special thanks as well to our donor participants, who made the trip truly memorable!
- » Woodland Park Zoo volunteers Judy Nyman-Schaf and Trish Watson who have provided many hours of outreach support, managing our photos and online blog materials
- » Best wishes to the Leahy family as longtime TKCP supporter Richard Leahy of Kiunga Aviation continues his long recovery
- » Carl Darnell of Chinook Medical Gear for generous long term support of our field equipment needs.
- » Conservation Governor Luther Wenge

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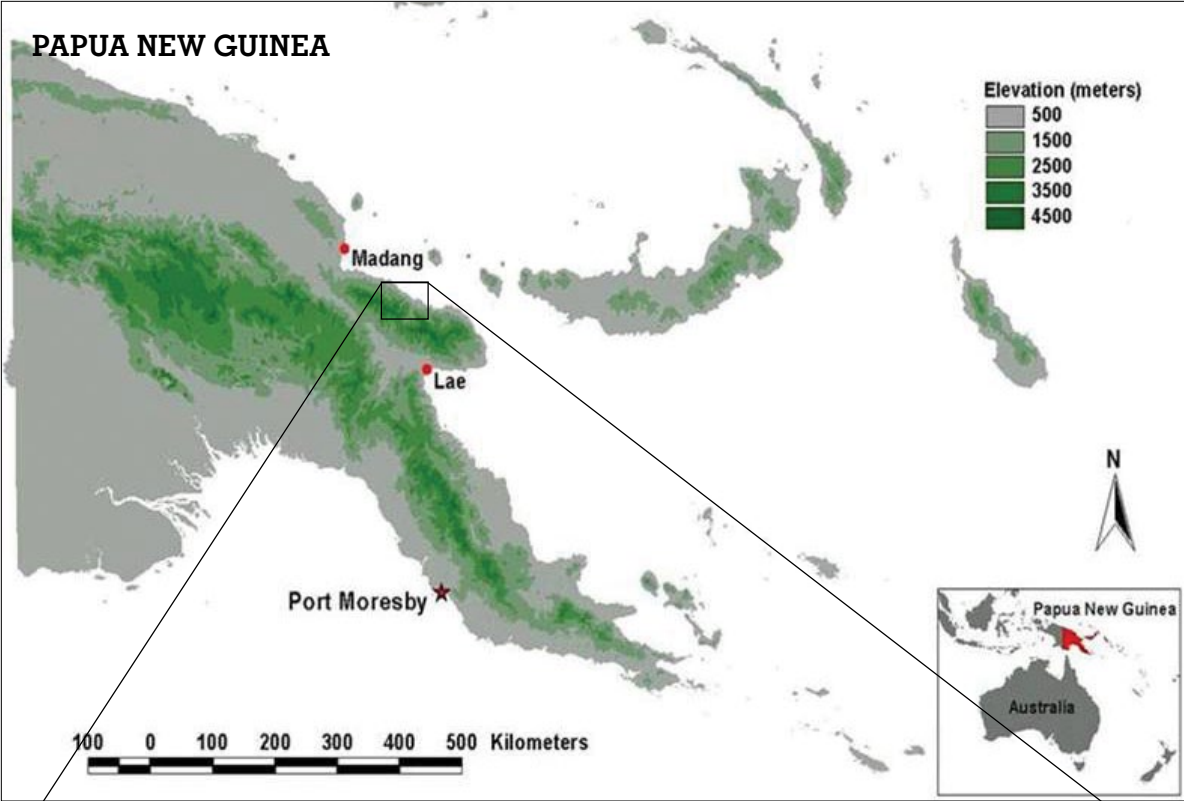
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PNG Department of Environment & Conservation
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 Kabwum District Government
 YUS Local Level Government
 PNG Forest Research Institute
 Balob Teachers College
 Teachers, Headmasters and
 School Board Members of YUS
 North Coast Aviation
 Dr. Andrew Krockenberger

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● Major Villages / Rivers ■ Gazetted YUS Conservation Area

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