

REACH 'LEARNING through ACTION'



Images © Szu-Li Lim, Rachel Philips, Crispin Zeeman, Dr Glen Reynolds, Nestor Amanca

Business *and* World Heritage

The Business Skills for World Heritage Programme was launched in October 2009 and will run for five years, until 2013.

The programme is a collaboration between Earthwatch, Shell and the United Nations Educational, Scientific and Cultural Organisation (UNESCO), and is based around the idea of Shell employees transferring their business skills to natural World Heritage site employees. It is hoped that the programme will enhance effective management of the World Heritage sites involved. This exchange of skills will provide economic benefits to local communities and will assist in the preservation of some of the most beautiful and threatened natural environments on Earth.

In 2009, senior management from three natural World Heritage sites - Ujung Kulon National Park (UKNP) in Indonesia, Puerto Princesa Subterranean River National Park in the Philippines; and Kinabalu Park in Malaysia - were each partnered with a Shell employee for the 11-day training course. The course took place at the Danum Valley Field

Centre in Sabah, Malaysian Borneo, where scientist Dr Glen Reynolds also runs the Earthwatch research project *Climate Change and Landscape in Borneo's Rainforest*.

Uus Susanto from Indonesia told Earthwatch how impressed he'd been with the programme, saying how his Shell mentor had really helped him to understand the business planning process. His colleague, Monica Rahmaningsih, said: "If our action plan works, then UKNP will be the first national park in Indonesia with a business plan." As well as taking part in Business Skills Transfer sessions, the team also received personal learning sessions to build their confidence and participated in actual field research on the Earthwatch climate change project in Borneo.

The Shell mentors felt they also learnt a lot during this experience, with one mentor Szu Li Lim commenting: "Going through this with my World Heritage site team has helped develop our relationship to a level which a traditional method of training may not have achieved."

The relationship between the World Heritage site staff and their mentor from Shell will continue for one year, to ensure that their newly acquired skills are successfully integrated into the day to day management of their World Heritage site. The relationship is encouraged to continue for as long as possible as the effects of the business planning may take several years to come into effect. All the participants acknowledged the importance of both the new relationships and the programme. Dr Maklarin Lakim, a Senior Manager from Sabah Parks in Malaysia, commented that "continuity of this programme is vital for World Heritage sites worldwide", whilst Mylene Santos, a Shell mentor from the Philippines, concluded: "The programme proves that more things may be done through collaboration. I look forward to seeing the World Heritage sites reap the benefits of the training in the years to come."

In 2010, six more World Heritage sites' staff will benefit from the business planning training. By 2013, the programme hopes to have trained the senior management of every natural World Heritage site in Southeast Asia and delivered a real impact on sustaining these spectacular places.

This programme is supported by Shell International

Earthwatch engages people worldwide in scientific field research and education to promote the understanding and action necessary for a sustainable environment. Through our programmes and partnerships we:

- engage people from diverse countries, cultures and organisations, inspiring them to take responsibility for the environment
- support objective scientific research which informs decisions on important environmental issues
- educate and motivate people to change their attitudes and behaviour

FROM THE EDITOR...

This is the 13th edition of REACH and once again it has been another fantastic and more focussed year for Capacity Development through Earthwatch, with over 70 fellows from Africa, Asia and Eastern Europe attending nine diverse projects. These provided training in scientific field research techniques, built team-working and communication skills and offered an opportunity to network with fellow professionals. Our aim is for all of those who participate to develop the knowledge and skills necessary to be leaders in conservation.

This year we've been trialling some new initiatives to ensure our fellows get the most from their Earthwatch experience. This included hosting the first *Business Skills for World Heritage* team on our *Climate Change and Landscape in Borneo's Rainforest* project. This unique training programme brought together Earthwatch scientists and staff, UNESCO World Heritage Site Managers with Shell Business Managers. You can read about this in our lead story on the front page of this newsletter.

We're also bringing you updates here from our work in Malawi, protecting one of the last remaining prime forest reserves in the country. Read about the ongoing efforts to protect Ghana's beautiful and rare white-necked rock fowl. And there's news from South Africa, where our researchers are investigating carnivore conservation initiatives.

Some excellent news to finish off this edition of REACH: we are delighted to bring you details of the 10 exceptional young scientists who have received training grants to develop their skills in a range of different ways.

Many thanks to everyone who has worked on our field research teams this year, both staff and fellows alike.

Claire Lippold

Claire Lippold
Capacity Development Programme Officer



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Ensuring a future at Mount Mulanje

Earthwatch has supported the Mount Mulanje Ecological Monitoring Programme since 2007. Located in south west Malawi, the Mount Mulanje Forest Reserve is a UNESCO Global Biosphere Reserve, rich in biodiversity and home to over 70 endemic species of fauna and flora. The area is under considerable pressure from the introduction of invasive species, outbreaks of fire, poaching, and illegal logging.

In 2009 Earthwatch sent four teams of conservationists from around Africa to contribute their time and expertise to the ecological monitoring of this region. The participants developed their existing research skills by conducting ecosystem surveys of the reserve. Isaac Ondigo, Head of the Afforestation Programme for Ecofinder in Kenya said: "During the field work I was able to learn how to lay down transects, mark points using GPS, collect data on regeneration, on species diversity and abundance." Joan Otengo from the East Africa Wildlife Society added, "The research work has helped me acquire new skills on how to use field tools and equipment. I am now able to speak with confidence on the importance of conservation and biodiversity as a whole." The data collected will be used to improve management strategies, hopefully securing the future of one of the last remaining prime forest reserves in Malawi.

Earthwatch volunteers engage in ecological monitoring on Mount Mulanje
Image © Moses Gichua



The project provides a unique forum for networking. Whilst in the field, the 2009 participants discussed the challenges they face within their region, and made valuable links to like-minded conservation professionals from around Africa. Karin Isaacs, a participant from Augrabies Falls National Park in South Africa said: "The programme was great because of the networking between fellow students and the interaction on how we could find solutions to the difficulties we face in our respective countries." The fellows returned home with new technical expertise and motivation to confront the environmental issues they face in their professional lives. José Monteiro, a Forest Researcher, now hopes to implement a similar project in his home country. "I feel motivated to undertake more research activities and am now involved in preparing a project proposal for funds to establish an ecological monitoring programme in Mozambique."

David Nangoma, Biodiversity Officer for the Mount Mulanje Conservation Trust, said: "The monitoring has brought in research expertise from across the globe. We would like to thank all Earthwatch fellows for the interest they took in the project and for their personal contributions during their time here."

This programme is supported by British American Tobacco PLC

Conserving Ghana's white-necked rock fowl



The elusive and charismatic white-necked rock fowl (*Picathartes gymnocephalus*) was, until 2003, thought to be extinct in Ghana and is currently classified as Vulnerable (IUCN Red List). Earthwatch is running a pioneering research project, investigating the rainforest habitat of the species to help improve of the chronic lack of information necessary to manage conservation efforts.

The Earthwatch project *Ecology and Conservation of the White-Necked Rock Fowl in Ghana*, led by scientist Patrick Adjewodah in the Asumura area of the Brong-Ahafo region, is run in collaboration with the Nature Conservation Research Centre in Ghana, supported by Newmont Ghana Gold Ltd, and British American Tobacco plc.

In 2009, a team of six Newmont employees together with four conservationists helped with the data collection and shared their significant knowledge and expertise. Fatien Karunia Fajarrini recognised the potential of this skilled teamwork. "We all live on the same planet. What happens to Ghana's environment will impact us all wherever we are. Every little effort in conservation will help and, considering the status of the rock fowl, this research is not a small project." The participants explored ways of maximising the project's impact, addressing issues of conservation and sustainable development alongside the needs of the local community.

Crucially, the project is increasing the faculty of Ghana's young scientists to conserve the country's natural heritage. Scientists joining the project receive intense scientific training in modern data collection techniques, such as radio-tracking the birds' movements in the environment. Adam Rukayatu, a fellow in 2009, says it all: "Seeing the issues on the ground whilst in the field has really made me passionate about conservation and I intend to take it up as a career."

The on-going success of this enterprise is dependent upon engaging not just a new generation of African scientists, but also the communities which border the rock fowl habitat. By employing neighbouring farmers and hunters as field guides, the research team is benefitting from local knowledge of the environment. Earthwatch is also hoping to inspire birdwatchers to visit the region, providing income through responsible eco-tourism.

Left: Understanding canopy density measurement equipment
Image © Zoe Gamble

Below: Patrick Adejewodah identifying a rock fowl nest
Image © Natalie Rothwell



Learning to laugh

WITH SOUTH AFRICA'S BROWN HYAENAS

In January 2010 Earthwatch ran its first teacher team on the *South Africa's Brown Hyenas* project, with research sites in Pilanesberg National Park and Mankwe Wildlife Reserve in the North West Province. Six teachers from the local area and around South Africa joined forces to help research local carnivore ecology, with a particular focus on brown hyaena (*Hyaena brunnea*). Like other carnivores, the brown hyaena is suffering from shrinking habitats and conflict with humans. The land around protected areas is being increasingly developed, which means hyaenas that venture into neighbouring farmland and game ranches run the risk of being poisoned, trapped, or hunted down as pests.

As well as taking part in the research itself, the teachers also participated in workshops to explore how best to transfer the skills learnt in the field back to their pupils. Penny Rees, an Educational Facilitator from Wildlife and Environment Society of South Africa, provided valuable support. Penny explained: "All the research techniques conducted can and will be applied back at school. They really lend themselves to the classroom, not only for natural sciences but maths, social studies and English."

The project also provided a unique forum for networking. Whilst in the field, the participants discussed the challenges they face within their school and have planned to take lessons back to their pupils. Petronella Vermeulen, a Life Sciences and Environmental Studies Teacher from Rustenburg High School in South Africa, said: "This week will have a far-reaching ripple effect and many learners will benefit from what the teachers took away with them."

This legacy is already becoming evident as the teachers continue to support the project. All of their pupils will be asked to complete a questionnaire to gauge perceptions of the brown hyaena and all school pupils from the region will be asked to take part in the survey. Lisa Gladwin, Natural and Life Sciences Teacher at Fields College, Rustenburg, explains: "I have a renewed vigour for the environment. I intend to share these experiences by involving students in the Kgaswane Game Reserve and hopefully Mankwe."

This programme is supported by UBS

Image © Dr Dawn Scott



profile of a Partner NGO

ECOLOGICAL SOCIETY OF EASTERN AFRICA

Ecological Society for Eastern Africa (ESEA) is a network of organisations and individuals engaged in ecological research and socio-economic development in Eastern Africa. Their membership base stems from various professionals and institutions in Kenya, Uganda, Tanzania and Ethiopia.

Founded in 2007 by Nick Oguge, Earthwatch Country Director, Kenya, ESEA has been involved in capacity development by facilitating training and awareness talks. ESEA provides a forum for ecologists to network, and share information and research findings. The partnership with Earthwatch helps young conservationists participate in Earthwatch's Capacity Development Programme.

ESEA holds an important Regional Scientific Conference every year as part of its mission to collate and disseminate crucial ecological information. The 2010 annual event is being held on 19 - 21 May at Multi Media University, Nairobi, Kenya. Built around the theme, climate change and natural resources in Eastern Africa it will bring together environmental experts, policy makers and implementers, communication agents, and the general public, significantly increasing awareness of these issues and opportunities to help vulnerable communities, wildlife and ecosystems in East Africa.

For more information about this and all aspects of ESEA's work, please visit their website www.ecsea.org

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CAPACITY DEVELOPMENT GRANTS AND AWARDS



Early career scientists 'graduate' from the Earthwatch Capacity Development Programme. © Katie Wilson

Neville Shulman Awards

The **Neville Shulman Awards** are an opportunity for outstanding individuals, nominated by Earthwatch scientists, to submit a proposal and win funding to run their own personal research projects. Not only do the results of these projects add to our scientific knowledge but they are a chance for early career scientists to gain valuable skills and experience at a key stage in their professional development.

In this second year of the awards some fantastic proposals were submitted, which made deciding who should win very difficult. However, the following two projects stood out and will each receive £4,000 funding for their projects.

Juliana Binti Senawi, a lecturer from University Kebangsaan in Malaysia, will be comparing cranial morphology, bite performance and diet of insectivorous bats from undisturbed and disturbed habitats.

Buyandelger Suuri a researcher at the Ikh Nart Nature Reserve in Mongolia will be evaluating the conservation importance of one of Mongolia's most endangered mammals, the Siberian marmot (*Marmota sibirica*).

Runners up, Richard Mariita and Mariciano Mutiga from Kenya, Mavis Zupork Dome from Ghana, and Iwan Kurniawan from Indonesia received £500 grants towards training.

UBS Training Grants

UBS has supported Earthwatch's Capacity Development Programme through providing vital training grants of up to £5,000 each since 2004. This year:

Daniel Bewong will get training in camera-trap methods, GIS mapping and carbon-trading initiatives.

Fridah Munyi will study scientific methods as a postgraduate at Edinburgh University (UK) and experience field work in Kenya.

Lauren Esterhuizen will develop her career as a scientist - through field research on an Earthwatch project - while studying for a Zoology degree at the same time.

Lauren Jane Waller will undertake training in statistics, communication, GIS and project management.

Other Awards

Rufford Maurice Lang will be providing training grants for young African scientists as part of the Capacity Development Programme this year.

Aviva are supporting Kenyan PhD student Joseph Langat who is studying the potential of carbon sinks for mitigating climate change.

For more information about the Capacity Development Programme, contact:

Earthwatch Institute
Mayfield House
256 Banbury Road
Oxford OX2 7DE, UK

Tel: +44 (0)1865 318826
Fax: +44 (0)1865 318869
Email: capacitydevelopment@earthwatch.org.uk

www.earthwatch.org/europe/capacitydevelopment

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Earthwatch is a diverse community of scientists, educators, students, and passionate volunteers, working together around the world, gathering critical information about threatened species, habitats and ecosystems, informing conservation decisions, and leaving a legacy of knowledge and skills within local communities. Our vision: a world in which we live within our means and in balance with nature.

Earthwatch is an international environmental non-profit organisation (UK registered charity number: 1094467).