

Smallest kangaroo species discovered



The Wallaby *Dorcopsulus* sp. nov., the world's tiniest known member of the kangaroo family, discovered by Kristofer Helgen of the Smithsonian Institution. Tim Laman

The discovery of an array of new species in the Indonesian province of Papua on the island of New Guinea was announced by Conservation International last May, during a week that marked the 2010 International Year of Biodiversity.

The species – which included mammals, reptiles, amphibians, insects and birds – were discovered by a team of international and Indonesian

scientists participating in one of Conservation International's rapid assessment program surveys. Species were tracked for three weeks in the remote Foja Mountains region of the island, which encompasses an area of more than 300 000 square hectares of undeveloped and undisturbed rainforest. The expedition team discovered a forest wallaby (*Dorcopsulus* sp. nov.) that is the smallest

documented member of the kangaroo family in the world, as well as an imperial pigeon, a spike-nosed tree frog, an oversized woolly rat and a gargoyle-like, bent-toed gecko with yellow eyes.

The health and biodiversity of the Foja Mountains region wilderness makes it a critical carbon sink for the planet, as well as providing vital ecosystem services to forest-dwelling peoples who depend on its resources.

'Places like these represent a healthy future for all of us and show that it is not too late to stop the current species extinction crisis,' says Dr Beehler, a Senior Research Scientist at Conservation International and expedition participant.

● Michele Sabto

More information:

www.conservation.org

A related article, with images by Tim Laman, appears in the June issue of *National Geographic*.

To view more images, go to www.ngm.com/foja

Firing up biodiversity in the wheatbelt

Improved fire management could benefit native vegetation and biodiversity in Western Australia's wheatbelt, according to a research project run by the Department of Environment and Conservation (DEC) and CSIRO Sustainable Ecosystems.

The Western Australian wheatbelt region, which partially surrounds Perth, has an area of approximately 155 000 square kilometres. It is part of a globally recognised biodiversity hotspot, due to its diverse plant communities.

Dr Carl Gosper, a scientist working with both CSIRO and DEC, says that nature reserves in the wheatbelt are mostly small and isolated, and are usually surrounded by agricultural land.

'Because fires have been suppressed in landscapes of this nature in the past, fires in reserves have been



Seeds of many wheatbelt plant species, such as *Banksia media*, are protected by their woody fruits and are released after the passage of fire. C. Gosper, CSIRO

infrequent, and there has been little understanding of the consequences for flora that would have originally been more exposed to fires,' Dr Gosper says.

'Our research shows that fire is a viable option for biodiversity conservation in intact mallee remnant interiors, because it does not exacerbate weed invasions. Remnant edges, however, are susceptible to weed invasion irrespective of fire management. Nutrient enrichment of soils by adjoining agricultural activities, and an abundant supply of weed seeds, such as from annual non-native grasses, make reserve edges highly susceptible to weed invasion.'

The next stage of the research will help determine suitable fire frequencies.

Building a carbon-responsive workforce

Since July 2008, many businesses across Australia have faced reporting obligations on carbon emissions under the government's *National Greenhouse and Energy Reporting Act (2007)*. These obligations are just one example of the expanding regulatory environment under which Australian business operates with respect to greenhouse gas emissions and energy efficiency. Australia faces the challenge of building a carbon-skilled workforce able to manage these obligations.

The tertiary education sector has started to rise to this challenge, with qualifications in carbon management such as the University of Adelaide's Graduate Certificate in Carbon Management and Masters in Carbon Management, and Swinburne University's Diploma of Carbon Management (pending accreditation).

The recent launch by Australian company Carbon Training International (CTI) of a suite of new accredited courses in carbon management indicates that the private sector will also play a role in what Rob Nicholls, CTI Managing Director, calls the creation of a 'carbon-conscious, carbon-skilled and carbon-responsive workforce.' Among CTI's offerings is a Certificate IV in Carbon Management, which aims to develop competencies in areas such as measuring carbon emissions, evaluating greenhouse gas abatement programs, and devising, implementing and managing carbon response plans.

● Michele Sabto