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Mount Mabu Media Coverage Report

Conservation of Mountains in Northern Mozambique

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CONSERVATION OF MOUNTAINS IN NORTHERN MOZAMBIQUE

The mountains of northern Mozambique were always believed to be important for biological conservation and the home of many rare and threatened species not found elsewhere. However, little was known scientifically about them and they are not yet formally protected.

To address this problem a project called "Monitoring and Managing Biodiversity Loss in South-East Africa's Montane Ecosystems" was developed by the Royal Botanic Gardens, Kew and BirdLife International, the Instituto de Investigação Agrária de Moçambique (IIAM), the Mulanje Mountain Conservation Trust (MMCT) and the Forest Research Institute of Malawi. Focussing primarily on Mozambique, the project built on the wide knowledge of Kew on plants and BirdLife International on birds, and on the experience gained by MMCT in practical conservation and monitoring on Mt Mulanje in adjacent Malawi. The main departments of IIAM involved were the National Herbarium, Forestry Research and the Land and Water Department. The Natural History Museum, part of Eduardo Mondlane University, also participated.

The project was funded under the UK Government's Darwin Initiative and started in July 2006. The Darwin Initiative assists countries that are rich in biodiversity but poor in financial resources to implement the Convention on Biological Diversity (CBD) through the funding of collaborative projects which utilise UK biodiversity expertise.

The project's main objectives were to gather information and develop tools and skills to enable biodiversity management and monitoring across some of these mountains.

Over the three years we have run five expeditions to three montane areas in Mozambique and one in Malawi, during which many new and exciting discoveries were made.

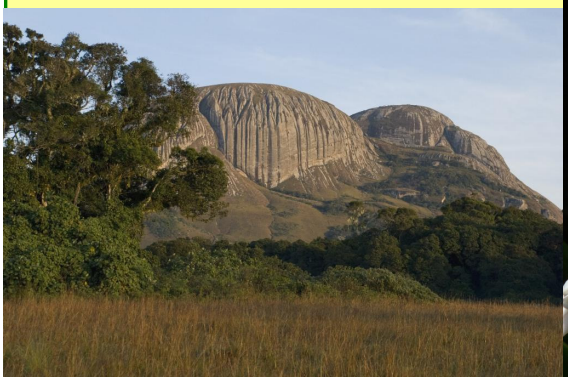
Activities included:

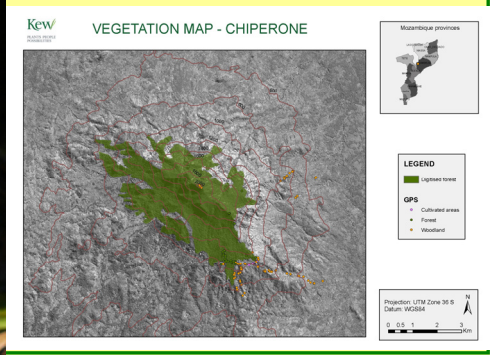
a) carrying out field surveys of plant species, vegetation and birds,
b) training a team of researchers and field-workers from Mozambique and Malawi to gather and utilise data for both management and monitoring,
c) making recommendations and promoting conservation management to the appropriate national or regional authorities.

MAIN OVERALL FINDINGS

1. There is much nationally and internationally significant and exciting biodiversity still to be found in Mozambique, especially in the northern Provinces. The levels of diversity are higher than previously thought, and there is still much to be discovered.
2. Important and spectacular biodiversity can include plants, small vertebrates and insects, as well as the more obvious larger animals.
3. There is a significant number of species – plants, birds, reptiles and insects – that are found only on one or more of these mountains and nowhere else in the world. The Mozambique Government has particular responsibility for the conservation of these species under the CBD.

4. The isolated mountains of northern Mozambique are globally important areas for conservation, forming part of a series of biodiversity "stepping stones" between the mountains of eastern Zimbabwe, southern Malawi and the highlands of southern Tanzania for birds and plants. At present none of these mountains in Mozambique are formally protected and their often unique biodiversity is often unrecognised. Several have good potential for ecotourism.
5. Conservation of these scattered montane areas could also be addressed through trans-border initiatives, in particular with Malawi. Such initiatives would build on regional expertise, experience and partnerships, and would allow for greater international recognition and support.
6. Conservation areas do not have to be very large or formal, such as designation as a National or Transfrontier Park, in order to conserve important biodiversity. For example, Important Plant Areas – specific areas with particularly rich or special biodiversity or habitats – can be a very useful way to expand a network of national conservation areas, without necessarily altering people's way-of-life.
7. Biologists, foresters, herbaria and natural history museums have historically had an important role to play in conservation, and should be fully involved in all conservation projects and initiatives. Such institutions and professionals have a wealth of knowledge that needs to be better utilised.





	Mt Chiperone	Mt Mabu	Mt Namuli
			
Locality	Mt Chiperone in Milanje District, historically associated with nearby Mt Mulanje.	Mt Mabu in Tacuane District. Previously virtually unknown and unexplored scientifically. Some abandoned tea estates on S slopes	Namuli massif in Gurué District. Surrounded on the S & W sides by tea plantations, now being rehabilitated. c.15,000 people in area
Shape	Isolated steep-sided conical mountain with ridge	Elevated area of forest-covered ridges and peaks	Massif with series of upland plateaux out of which rise some large rocky domes
Extent; highest point	49 km^2 above 800 m; highest point 2054 m	Area c.140 km^2 above 800 m; highest point 1710 m	Massif covers 200 km^2; main plateau at 1800–1900 m; main peak 2419 m
Forest area & type	1600–1700 ha of quality moist forest from 1000–2000 m; montane forest above 1600 m. Very limited area of other habitats	Over 6900 ha of moist forest, most medium-altitude between 1000–1600 m; c.850 ha above 1400 m	1100 ha of moist montane forest, most above 1700 m. Only 135 ha of medium-altitude forest in small patches below 1600 m
Conservation importance	Pristine forest of various types; good surrounding miombo woodland	Possibly largest medium-altitude forest in southern Africa. All in very good condition. Forest provides perennial water supply. Still likely to still be new species	Most important habitats are 300 ha of scarce upland peat grassland, extensive patches of montane forest, and few patches of medium-altitude and riverine forest. Area above 1500 m is important for conservation; major regional significance
Plants	229 species above 800 m, 3 new Mozambique records. No new plant species	Identification of plant specimens not completed. At least 250 species	530 species above 1000 m, 26 new Mozambique records, 5 new species and 16 endemics known only from Namuli
Birds	Forest important for 2 globally-threatened bird species, Thyolo Alethe & White-winged Apalis. Recognised as Important Bird Area	126 species, including 5 that are globally threatened. Populations of Thyolo Alethe & Green Barbet particularly important globally	155 species, good populations of 5 globally threatened species. Recognised as Important Bird Area. Main locality for Mozambique's only endemic bird
Reptiles		New forest snake (*Atheris*), possibly 2 other new snakes and a chameleon	New dwarf chameleon, plus 4 lizards thought previously to only occur on Mt Mulanje
Butterflies	56 species, 6 new Mozambique records	156 species, 5 new to science. 32 new Mozambique records	126 species, 7 new to science. Area with highest number of endemic butterfly species in Mozambique
Threats	Loss of third of forest cover 1969–2002 from cultivation on S and SE slopes. Threats from wildfire along forest margin and in gullies	Few threats at present; wildfire, bushmeat, no tree cutting. Risk if tea estates reopen	Increasing threats, principally logging for timber, clearance for potato cultivation. Also vegetation destruction by semi-wild pigs, cattle grazing, bushmeat, wildfire. Conservation action needed soon
Potentials	Important for year-round water supply to villages below; water is a critical issue	Ecotourism from publicity and wilderness	Ecotourism, very scenic, back-packing, water catchment

Mount Mabu expedition media coverage

An exclusive feature which ran in the *Observer* (UK national Sunday newspaper) on 21 December 2008 sparkled off huge media interest in the Royal Botanic Gardens, Kew led expedition to Mount Mabu in northern Mozambique. The resulting coverage put Mozambique's rich natural heritage firmly in the spotlight.

Coverage included CNN (USA), BBC World Service's *World Tonight* programme (UK and international), *Sky News* online (UK), *Daily Mail* (UK), *Daily Telegraph* (UK) and numerous international publications. These included *Der Spiegel*, one of Europe's largest circulation weekly magazines, Spain's *El Mundo* and France's *Le Monde*, to name but a few. A full log of coverage and examples of print and online articles are included in this report.

The Kew media office is aware of 105 pieces of coverage, across print, broadcast and online (including blogs and specialist websites). Given the great international media interest in the story, it is highly likely that this figure is not an accurate reflection of the total number of pieces of coverage generated.

While the RBG Kew press office is able to monitor UK media coverage, and to some extent international online media coverage, international coverage is prohibitively expensive to monitor in print. Articles that appear in print often appear online too, although this is not always the case.

In addition, we have only been able to report circulation figures for UK media outlets (where those circulation figures are publicly available). Based on this, combined circulation for UK media outlets covering Mabu is 68,812,458*. This coverage has an estimated equivalent advertising value close on £80,000.

The Kew press office believes these figures are very much the tip of the iceberg.

Thanks to scientists at RBG Kew, Mozambique Agrarian Research Institute (IIAM), Birdlife International and the Mulanje Mountain Conservation Trust for making themselves available to speak to the media.

**This figure includes circulation for one European publication, Der Spiegel, with a circulation of 1,000,000*

Mount Mabu expedition media coverage

PLEASE NOTE, media coverage listed below is not likely to be a complete log of all media coverage generated about the Mount Mabu expedition. While the RBG Kew press office is able to monitor UK media coverage, and to some extent international online media coverage, international coverage is prohibitively expensive to monitor in print. Articles that appear in print often appear online too, although this is not always the case.

Continent	Country	Media outlet	Date	URL if known
Europe	**UK**	The Observer Circulation: 455,130 Value: £11,424	21/12/08	http://www.guardian.co.uk/environment/2008/dec/21/mount-mabu-mozambique-jonathan-timberlake
		Guardian.co.uk Circulation: 26,238,539	21/12/08	Online photo gallery http://www.guardian.co.uk/environment/gallery/2008/dec/21/new-species-wildlife-mozambique?picture=340939201
		Daily Telegraph Circulation: 835,497 Value: £15,496	22/12/08	http://www.telegraph.co.uk/earth/earthnews/3884623/Scientists-discover-new-forest-with-undiscovered-species-on-Google-Earth.html
		Telegraph.co.uk Circulation: 27,708,274	22/12/08	Online photo gallery http://www.telegraph.co.uk/earth/earthpicturegalleries/3901029/Mount-Mabu-Mozambique-Scientists-discover-new-forest-with-undiscovered-species-on-Google-Earth.html
		SkyNews.com Circulation not available	22/12/08	Online photo gallery http://news.sky.com/skynews/Home/World-News/Kew-Gardens-Expedition-To-Mount-Mabu-In-Mozambique/Media-Gallery/200812315190616?lpos=World_News_Second_World_News_Strap_Teaser_Region_0&lid=GALLERY_15190616_Kew_Gardens_Expedition_To_Mount_Mabu_In_Mozambique
		Daily Mail Circulation: 2,339,733	22/12/08	http://www.dailymail.co.uk/sciencetech/article-1100323/Lost-World-discovered-thanks-Google-Earth.html
		Horticulture Week Circulation: 9,579	09/01/09	http://www.hortweek.com/news/login/871596/

		Value: £399		
		Daily Express Circulation: 655,053 Value: £22,272	11/01/09	http://www.express.co.uk/posts/view/79343/How-Google-found-the-land-that-time-forgot-/
		Daily Post (Wales) Circulation: 36,432 Value:£1,579	19/01/09	http://www.dailypost.co.uk/news/north-wales-news/2009/01/19/jungle-finds-by-scientist-inspired-by-google-earth-55578-22721815/
		Wales Online (news website) Circulation not available	19/01/09	http://www.walesonline.co.uk/news/wales-news/2009/01/19/how-google-pointed-julian-to-the-lost-world-of-mabu-91466-22722298/
		BBC Wales Online (news website) Circulation not available	19/01/09	http://news.bbc.co.uk/1/hi/wales/7837049.stm
		Flintshire Evening Leader (Wales) Circulation: 21,180 Value: £694	19.01.09	
		Wrexham Evening Leader (Wales) Circulation: 21,180 Value: £1,134	20.01.09	
		BBC World Service, World Tonight (radio) Listenership figures not available	27/01/09	Interview with Jonathan Timberlake in RBG Kew's Herbarium, talking about the expedition and looking at some of the plant specimens bought back
		BBC World Service, Brazilian Section Listenership figures not available	Not known	
		BBC Online (news	27/01/09	http://news.bbc.co.uk/1/hi/in_depth/7860561.stm - Audio slide show

		website) Circulation: 4,000,000		
		The Times Circulation: 642,711 Value: £13,482	14/02/09	http://www.timesonline.co.uk/tol/travel/destinations/africa/article5724793.ece
		Guardian Weekly Circulation: 77,470 Value: £1,700	20/02/09	http://www.guardianweekly.co.uk/?page=editorial&id=958&catID=4
		Evening Standard Circulation: 424,177 Value: £11,088	03/03/09	http://www.thisislondon.co.uk/standard/article-23656839-details/Google+map+leads+Kew+scientists+to+hundreds+of+new+species/article.do
		The One Show, BBC 1 (TV) Circulation: 4,000,000	20/03/09	Interview with Jonathan Timberlake in RBG Kew Palm House
		RHS The Garden (magazine) Circulation: 347,503	Not known	http://www.rhs.org.uk/
		Darwin News (Defra publication) Circulation not known	Issue 12, April 2009	Hard copy available
	Sweden	Dagans Heyeten	22/12/08	http://www.dn.se/DNet/jsp/polopoly.jsp?d=597&a=866900&rss=2216
	Italy	La Republica	22/12/08	http://www.repubblica.it/2008/12/sezioni/scienze/mozambico-inesplorato/mozambico-inesplorato/mozambico-inesplorato.html?rss
	Belgium	ZD.net	23/12/08	http://www.zdnet.be/news.cfm?id=96398
		De Morgen	Not known	
		Het Laatste Nieuws	Not known	
	Portugal	Publico	23/12/08	http://ultimahora.publico.clix.pt/noticia.aspx?id=1354048&idCanal=13
		Campo&Jardim	Not known	

	Netherlands	ZD.net	23/12/08	http://www.zdnet.nl/news.cfm?id=96396
		NOS	30/01/09	http://www.nos.nl/jeugdjournaal/artikelen/2009/1/30/googleontdektbos.html
		Nieuws uit de Natuur, Stichting Teleac/NOT (TV)	04/02/09	
	Greece	To Vima (The Tribune)	23/12/08	http://www.tovima.gr/default.asp?pid=2&ct=33&artId=248026
		Origo	06/02/09	http://www.origo.hu/tudomany/elovilag/20090204-mount-mabu-rejtett-oazisba-vezette-a-kutatokat-a-google-fold.html
		News of the Hellenic Nobel Collection	Not known	
	Spain	La Segunda	23/12/08	http://www.lasegunda.com/ediciononline/espectaculos/detalle/index.asp?idnoticia=455113
		Yahoo Spanish	23/12/08	http://espanol.news.yahoo.com/s/23122008/54/internacional-descubierto-mozambique-bosque-desconocido-atesora.html
		ABC, Spain	23/12/08	http://www.abc.es/20081223/nacional-sociedad/descubren-gracias-google-earth-200812232127.html
		Diario Metro	23/12/08	http://www.diariometro.es/es/article/efe/2008/12/23/775420/index.xml
		El Mundo	Not known	http://www.elmundo.es/
		El Pais	Not known	http://www.elpais.com/global/
	Germany	Berliner Zeitung	23/12/08	http://www.bz-berlin.de/BZ/boulevard/2008/12/24/mit-google-earth/entdecken-forscher-ein-vergessenes-paradies.html
		Der Spiegel Circulation: 1,000,000	03/01/09	Hard copy available
		NRC Handelsblad (children's page)	Not known	
	France	Futura Sciences	30/12/08	http://www.futura-sciences.com/fr/news/t/zoologie/d/un-monde-perdu-decouvert-sur-google-earth_17785/

		Liberation.fr	07/01/09	http://www.ecrans.fr/Un-monde-perdu-decouvert-grace-a,6062.html
		Le Monde	06/01/09	Hard copy available
		RFI Radio	07/01/09	http://www.rfi.fr/actufr/articles/109/article_77498.asp
		Abondance	07/01/09	http://actu.abondance.com/2009/01/google-earth-permet-de-dcouvrir-une.html
		Europe 1	02/01/09	http://www.europe1.fr/Info/Actualite-Internationale/Afrique/Une-foret-decouverte-au-Mozambique-grace-a-Google-Earth/(gid)/191713
		L'actu (children's newspaper)	Not known	www.playbac.fr
		Science et Vie Junior	Not known	http://www.science-et-vie.com/
		Sciences et Avenir	Not known	http://translate.google.com/translate?hl=en&sl=fr&u=http://sciences.nouvelobs.com/&ei=A7oKSuybAdC6jAeO65GMCw&sa=X&oi=translate&resnum=1&ct=result&prev=/search%3Fq%3DScience%2Bet%2Bavenir%26hl%3Den%26rlz%3D1T4SKPB_enGB313GB314
		Découverte (magazine of museum, the Palais de la découverte)	Not known	
		Réponse a tout	Not known	http://www.reponseatout.com/
		Figaro Magazine	Not known	http://www.lefigaro.fr/lefigaromagazine/index.php
		Le Point	Not known	http://www.lepoint.fr/
		Géo ado	Not known	
	Turkey	Hurriyet	26/12/08	http://www.hurriyet.com.tr/teknoloji/10647392.asp?gid=234
	Hungary	The Explorer Magazine	Not known	
	Norway	NRK Oslo	28/01/09	http://www.afrol.com/articles/32263
		VG	Not known	
	Denmark	Politiken	Not known	http://politiken.dk/
Australasia	**Australia**	Western Australia	Not known	http://www.watoday.com.au/world/paradise-found-on-google-20081226-75bj.html
		The Age	26/12/08	http://www.theage.com.au/world/paradise-found-on-google-20081225-753x.html

		Sydney Morning Herald	4/01/09	http://www.smh.com.au/news/opinion/nature-bites-back/2009/01/03/1230681806843.html
	New Zealand	New Zealand Herald	Not known	http://www.nzherald.co.nz/
Africa	**Zambia**	Zambia News.Net	22/12/08	http://www.zambianews.net/story/444912
	Zimbabwe	Zimbabwe Star	22/12/08	http://story.zimbabwestar.com/index.php/ct/9/cid/c1ab2109a5bf37ec/id/444912/cs/1/
	Madagascar	Mongabay.com	22/12/08	http://news.mongabay.com/2008/1222-google_earth.html
	South Africa	South Africa Direct	10/02/09	http://www.southernafricadirect.com/news/entries/2009-04-01/mozambiques-unmapped-mount-mabu-explored.html
		Afrol news online	26/01/09	http://www.afrol.com/articles/32263
		Independent on Sunday	01/02/09	http://www.sundayindependent.co.za/index.php?fSectionId=2581&fDate=2009-02-01&fEdition=1&fIndex=6
	Cameroon	Ici Cemac	08.01.09	http://www.icicemac.com/news/index.php?nid=12236&pid=152
	Mozambique	Notícias	29/12/2008	Hard copy available
		O Pais	Not known	http://www.opais.co.mz/opais/
USA		Albuquerque Express	22/12/08	http://story.albuquerqueexpress.com/index.php/ct/9/cid/89d96798a39564bd/id/444912/cs/1/
		FindingDulcinea.com	23/12/08	http://www.findingdulcinea.com/news/environment/2008/December/Google-Earth-Leads-Scientists-to-New-Species-in-Mozambique.html
		Techradar	23/12/08	http://www.techradar.com/news/world-of-tech/lost-world-discovered-on-google-earth-496918
		TMC.net	24/12/08	http://www.tmcnet.com/usubmit/2008/12/23/3876275.htm
		CNN	07/02/09	Jonathan Timberlake talks to CNN's Ralitsa Vassileva http://www.truveo.com/Mozambique%E2%80%99s-new-discoveries/id/144115201098430690
		Link TV	Not known	http://www.linktv.org/

Canada		Daily Planet, Discovery Channel Canada	02/02/09	
Latin America	**Brazil**	Horizonte Geográfico	Not known	www.horizontegeografico.com.br
		BBC Brasil	23/12/08	http://www.bbc.co.uk/portuguese/reporterbbc/story/2008/12/081223_galeriamontemabu_np.shtml
		Globo TV	Not known	
	Ecuador	El Telegrafo	23/12/08	http://www.telegrafo.com.ec/mundo/noticia/archive/mundo/2008/12/23/Descubren-bosque-desconocido-que-atesora-nuevas-especies.aspx
	Colombia	El Tiempo	24/12/08	http://www.eltiempo.com/verde/faunayflora/home/un-bosque-desconocido-que-atesora-nuevas-especies-fue-descubierto-en-mozambique-_4736323-1
	Argentina	Agromeat	29.12.08	http://www.agromeat.com/index.php?idNews=81208
		La Voz	26/12/08	http://www2.lavoz.com.ar/08/12/26/Descubren-insolito-bosque-Mozambique.html
	Mexico	El Dictamen	23/12/08	http://www.eldictamen.org/ver_nota.php?noticia=20412&seccion=Ciencia%20y%20Tecnologia&seccion=Ciencia%20y%20Tecnologia
		Yahoo News online	23/12/08	http://mx.news.yahoo.com/s/23122008/38/tecnologia-descubierto-mozambique-bosque-desconocido-atesora.html
	Chile	La Segunda	23/12/08	http://www.lasegunda.com/ediciononline/espectaculos/detalle/index.asp?idnoticia=455113
		El Mercurio	23/12/08	http://www.emol.com/noticias/todas/detalle/detallenoticias.asp?idnoticia=336566
Asia	**India**	Top News India	Not known	http://timesofindia.indiatimes.com/
		Daily India.com	Not known	http://www.dailyindia.com/
		Thaindian News.com	22/12/08	http://www.thaindian.com/newsportal/health/scientists-use-google-earth-to-discover-new-forest-with-undiscovered-species_100133738.html
		Newspost online.com	22/12/08	http://www.thaindian.com/newsportal/health/scientists-use-google-earth-to-discover-new-forest-with-undiscovered-species_100133738.html
		Newstrack India	22/12/08	http://www.newstrackindia.com/newsdetails/51739

		NDTV online	23.12.08	http://www.ndtv.com/convergence/ndtv/story.aspx?id=NEWEN20080077542
		The Hindu	23.12.08	http://www.thehindu.com/holnus/008200812231862.htm
		Fresh news	24/12/08	http://www.freshnews.in/google-earth-helps-discovery-of-an-unfounded-forest-107057
		MSN India	26/12/08	http://computing.in.msn.com/articles/article.aspx?cp-documentid=1766666
		Entertainment and Showbiz	30/12/08	http://www.entertainmentandshowbiz.com/scientists-use-google-earth-to-discover-new-forest-with-undiscovered-species-200812308047
		E Brandz	26/12/08	http://news.ebrandz.com/google/2008/2338-google-earth-found-lost-paradise-in-mozambique.html
		Latest News	29/12/08	http://www.freshnews.in/google-earth-helps-discovery-of-an-unfounded-forest-107057
	Singapore	Discovery Channel	Not known	http://dsc.discovery.com/
		Reader's Digest Asia	Not known	http://www.rdasia.com/rd/rdhtml/splash.jsp
	Malaysia	Malaysia Sun	22/12/08	http://story.malaysiasun.com/index.php/ct/9/cid/89d96798a39564bd/id/444912/cs/1/
	Russia	Vokrugsveta	22/12/08	http://www.vokrugsveta.ru/news/5570/
	China	163 News	02/03/09	http://discover.news.163.com/09/0203/10/517L7B2E000125LI.html
Middle East	**Israel**	National Geographic Kids magazine	Not known	
Blogs and other online	**USA**	Environmental Graffiti	18/02/09	http://www.environmentalgraffiti.com/featured/google-earth-uncovers-lost-forest-mount-mabu/7747
		Living the scientific life	02/02/09	http://scienceblogs.com/grrlscientist/2009/02/birds_in_the_news_158.php
	Not known	Ogle earth	05/01/09	http://www.ogleearth.com/2009/01/mount_mabu_unve.html
	UK	Birdlife International Website	26/01/09	http://www.birdlife.org/news/news/2009/01/mount_mabu.html
	UK	WildlifeExtra.com	22/12/08	http://www.wildlifeextra.com/do/ecco.py/view_item?listid=1&listcatid=1&listitemid=3914&live=0

	UK	Forestpolicyresearch.org	22/12/2008	http://forestpolicyresearch.org/2008/12/22/mozambique-news-species-discovered-on-mt-mabu/
	South Africa	Africagoodnews.com	07/04/09	http://www.africagoodnews.com/environment/mozambiques-mount-mabu-holds-unseen-natural-wonders.html
	Not known	Losgranos	22/12/08	http://www.losgranos.com/?p=1491
	Not known	Mathaba news network	23/12/08	http://www.mathaba.net/0_index.shtml?x=614270
	Not known	Real Africa	24/02/09	http://www.realafrica.co.uk/blog/?tag=mabu-forest-mozambique
	UK	Digitaljournal.com	22/12/08	http://www.digitaljournal.com/article/263826
	USA	Yale environment 360	22/12/08	http://e360.yale.edu/content/topic.msp?id=235
	Not known	Treehugger.com	02/03/09	http://www.treehugger.com/files/2009/02/new-species-discovered-via-google-earth.php
	Not known	Peopleforearth.net	01/02/09	http://www.people4earth.net/blogs/userBlog/userId/230.html
	UK	Africanbirdclub.org	26/01/09	http://www.africanbirdclub.org/countries/Africa/news.html
	France	Ornithomedia.com	Not known	www.ornithomedia.com

For immediate release

22 December

The lost forest of Mount Mabu

Scientists based at the Royal Botanic Gardens, Kew (RBG Kew) have led the first expedition to the previously unmapped Mount Mabu in northern Mozambique, funded by Defra's Darwin Initiative. The expedition is part of RBG Kew's ongoing work with Mozambique's government to identify priority areas for conservation in the face of rapid development.

Until just three years ago the vast area of forest was known only to villagers nearby. The team 'found' Mount Mabu with the help of Google Earth maps in 2005 while looking for sites for a conservation project on land above 1,600m where higher rainfall means there is likely to be forest.

Dr Julian Bayliss, the project's field coordinator, investigated the unexpected patch of green and used satellite photos to identify a large, unexplored forest. Following a series of scoping trips, in October and November this year an international team of 28 scientists and support staff from the UK, Mozambique, Malawi, Tanzania, Belgium and Switzerland hiked into it.

Expedition leader, RBG Kew botanist Jonathan Timberlake said "The phenomenal diversity is just mind-boggling: seeing how things are adapted to little niches, to me this is the incredible thing. Even today we cannot say we know all of the world's key areas for biodiversity - there are still new ones to discover."

They found a wealth of wildlife including pygmy chameleons, Swynnerton's robin, butterflies such as the Small Striped Swordtail and Emperor Swallowtail as well as three new species, a previously undiscovered species of forest adder and many exotic plants, including a rarely seen orchid. The team brought back over 500 plant specimens and are looking forward to finding out more about the species they collected.

Jonathan continues: "This is potentially the biggest area of medium-altitude forest I'm aware of in southern Africa, yet it was not on the map, and most Mozambicans would not have even recognised the name Mount Mabu. Kew is working with the Mozambique government to protect areas like Mount Mabu and encourage local people to value the forest for its wildlife. By conserving the plant life we can help secure a future for all the other creatures we saw there."

RBG Kew is using its expertise and collections, coupled with Mozambique collections, to identify new species and areas of interest for biodiversity. RBG Kew also works to build capacity of local partners to enable them to carry out similar work in the future.

The expedition was led by RBG Kew working with colleagues from the Mozambique Agronomic Research Institute (IIAM), Birdlife International and the Mulanje Mountain Conservation Trust (MMCT) in Malawi.

Outside the forest the country's roads and buildings have been badly affected by a civil war that lasted from the early 1980s to 1991, but inside scientists found the landscape was almost untouched. Ignorance of its existence, poor access and the forest's value as a refuge for villagers during the fighting had combined to protect it.

With local people returning to the area, and Mozambique's economy booming, there is a risk that this precious oasis of life will come under pressure as the area around is cleared to make space for crops.

Ends

To speak to Jonathan Timberlake or for more information please contact the RBG Kew press office, telephone 020 8332 5681 or e-mail pr@kew.org. Colleagues from the Mozambique

Agronomic Research Institute, Birdlife International and the Mulanje Mountain Conservation Trust are also available for interview.

Images are available at www.kew.org/press/images/mount_mabu.html
Please contact the press office for the username and password

Notes to editors

Mount Mabu's Google Earth coordinates are 16 degrees 17 min, 56 secs south and 36 degrees 23 mins 44 secs east

Mount Mabu is also home to three bird species not known in the area previously:
Thyolo Alethe – globally threatened and seen in relatively high numbers in the Mabu forest
Namuli Apalis – Mozambique's only endemic species, previously known from only one mountain. The fact it has been spotted on Mabu is significant for conservation
Swynnerton's Robin – previously only known from three locations (Tanzania's east coast, Zimbabwe and central Mozambique)

The Royal Botanic Gardens, Kew is a world famous scientific organisation, internationally respected for its outstanding living collection of plants and world-class herbarium as well as its scientific expertise in plant diversity, conservation and sustainable development in the UK and around the world. Kew Gardens is a major international visitor attraction and its 132 hectares of landscaped gardens and its country garden, Wakehurst Place, attract nearly two million visitors every year. Kew was made a UNESCO World Heritage Site in July 2003 and celebrates its 250th anniversary in 2009. For further information please visit www.kew.org

Birds and butterflies among host of species discovered in African Eden

Scientists from Kew have brought back an astonishing collection of new specimens from the unmapped heart of Mozambique

by Juliette Jowit
Environment Editor

Expedition leader Jonathan Timberlake surveys the forest from Mount Mabu. Photograph by Tom Timberlake

IT WAS one of the few places on the planet that remained unmapped and unexplored, but now Mount Mabu has started to yield its secrets to the world.

Until a few years ago this giant forest in the mountainous north of Mozambique was known only to local villagers; it did not feature on maps nor, it is believed, in scientific collections or literature. But after "finding" the forest on a Google Earth internet map, a British-led team of scientists has returned from what is thought to be the first full-scale expedition into the canopy. Below the trees, which rise 45m above the ground, they discovered land filled with astonishingly rich biodiversity.

The scientists found what they believe are three new species of butterfly, a previously undiscovered adder snake and new populations of rare birds. They also expect to find new plants among the hundreds of specimens they have brought back with them.

Photographs from the trip – published here for the first time – show just part of the forest, tropical creepers, giant snakes such as the gaboon viper, and other wildlife seen by the team, including small klipspringer and blue duiker antelope, noisy samango monkeys, elephant shrew, and the granite-like rocky peak of Mount Mabu. Back at Kew Gardens in west London, where he is based, expedition leader Jonathan Timberlake said the wonder of what they experienced was only sinking in now that they are home: "That's when the excitement comes out – when you come back home or start reading some of the background and realise you're breaking new ground."

Scientists "describe" about 2,000 new species a year but discovering new ones still captures the imagination, said Timberlake: "The phenomenal diversity is just mind-boggling – seeing how things are adapted to little niches, to me this is the phenomenal thing. If we don't have wonder as a human species, where are we? If we don't have excitement, what are we doing with our lives?"

Mount Mabu was "discovered" in 2005 when Timberlake's team were looking for a site for a conservation project. Soon afterwards, locally based conservationist Julian Bayliss visited the site and studied satellite photos which showed a forest of about 80 square kilometres.

"It's then we realised this looked [to be] potentially the biggest area of medium-altitude forest I'm aware of in southern Africa," said Timberlake, who has spent most of his working life in the region. "Nobody knew about it. The literature I'm aware of doesn't mention the word 'Mabu' anywhere; we have looked through the plant collections of Kew and elsewhere and we don't see the name come up. It might be there under another name, but we're not aware of any collection of plant or animals, or anything else taking place there."

After a few exploratory trips, in October and November this year 28 scientists and support staff from the UK, Mozambique, Malawi, Tanzania and Switzerland, with 70 porters, drove to an abandoned tea estate where the road ended and hiked the last few kilometres into the forest to set up camp for four weeks. One highlight was emerging from the canopy on the peak of Mount Mabu, 1,700m up, where "hundreds upon hundreds" of male butterflies had gathered in the sunlight to attract mates by flying as high as possible. "There were swifts flying in and peregrines in the air above: it was phenomenal," said Timberlake.

Outside the forest the land has been devastated by a civil war that lasted from 1975 to 1992, but inside scientists found the landscape was almost untouched. Ignorance of its existence, poor access and the forest's value as a refuge for villagers during the fighting had combined to protect it, Timberlake explained.

The scientists fear that with local people returning to the area, and Mozambique's economy booming, pressure to cut the forest for wood or burn it to make space for crops will threaten the ecology.

Visiting and describing what they found was the first step to conserving the new species, said Timberlake. "They are not propping up the earth in most cases, but if you know about them what right have you to destroy them? If you don't know about them, it was an accident; if you know about them, it's malicious."

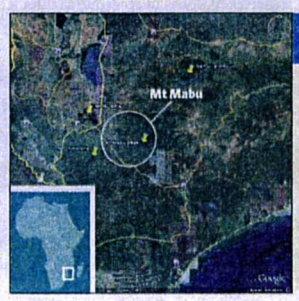
HEMIPTERAN BUG Spectacular new variety of a sap-eating species found around the world. Photographs by Julian Bayliss

SMALL STRIPED SWORDTAIL BUTTERFLY One of three new species of Lepidoptera found so far by scientists.

OLIVE SUNBIRD A new population of a species found in a large part of Africa south of the Sahara. It prefers forested regions.

GABOON VIPER A new member of Africa's most deadly and gorgeous family of snakes, it can kill a human with a single bite.

PYGMY CHAMELEON It changes colour but prefers sombre shades of tan to grey.



HOW SCIENTISTS FOUND THE UNKNOWN FOREST

Scientists based at the Royal Botanic Gardens in Kew stumbled across the existence of Mount Mabu after looking at Google Earth internet maps in 2005, in the hope of finding a site for a conservation project.

Conservationist Julian Bayliss visited the area soon afterwards and saw satellite photos of a large, unexplored forest. In late 2008, an expedition hiked into it and was confronted with a treasure trove of new species.

>> ON THE WEB

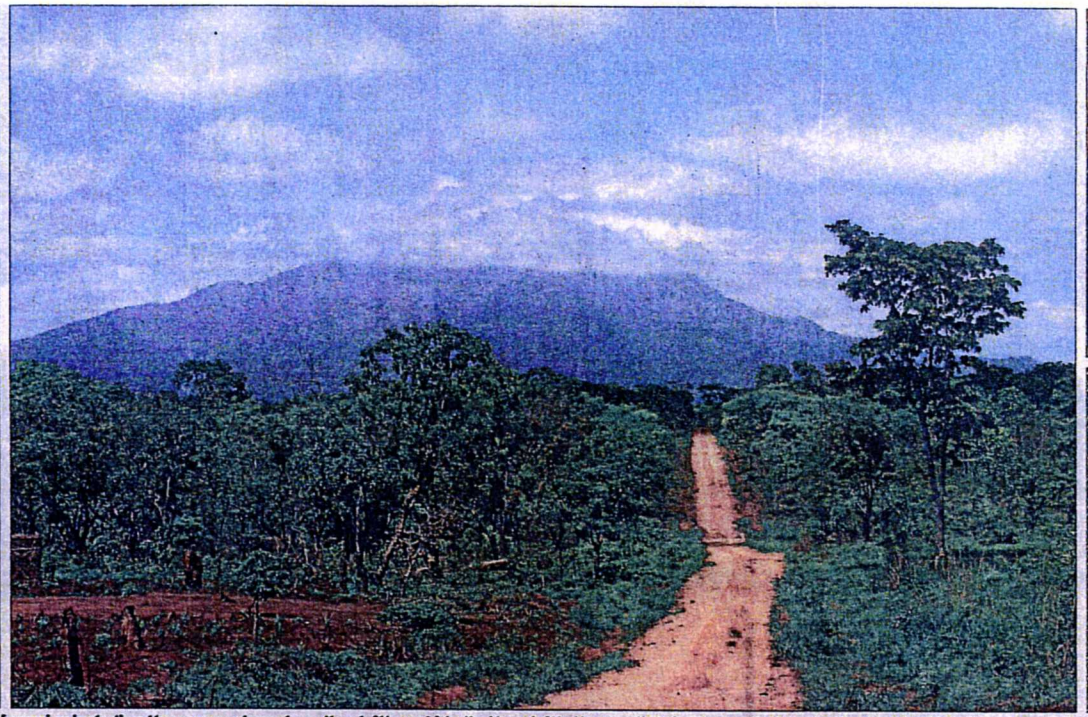
In pictures: see more of the newly discovered species in Mozambique
guardian.co.uk/environment/conservation

THE OBSERVER (UK), 21/12/08

Paradise found (with the help of Google Earth)

By Louise Gray
Environment Correspondent

TOM TIMBERLAKE & JULIAN BAYLISS/RBG KEW



Mozambique's Mount Mabu hosted a wealth of species including the pygmy chameleon (top left), orchids (bottom left), the small striped swordtail butterfly (top right) and a new member of the gaboon viper family (bottom right)

CONSERVATIONISTS have found a host of new species after discovering uncharted territory on Google Earth.

The mountainous area of northern Mozambique in southern Africa had been overlooked by science due to inhospitable terrain and decades of civil war.

However, while scrolling around on Google Earth, which allows the viewer to look at satellite images of anywhere on the globe, scientists discovered an unexpected patch of green.

A British-led expedition was sent to see what was on the ground and found 7,000 hectares of forest, rich in biodiversity, in the Mount Mabu region.

In just three weeks, scientists led by a team from the Royal Botanic Gardens in Kew, south-west London found hundreds of different plant species, birds, butterflies, monkeys and a giant snake.

The samples have been taken to Britain for analysis. So far three new butterflies and the new species of snake have been discovered, but it is believed there are at least two more new species of plants and perhaps more new insects to discover.

Julian Bayliss, a scientist at Kew, discovered Mount Mabu while using Google Earth to research a possible conservation project.

He was looking at areas of land 5,400ft above sea level. To his surprise he found patches of green that denote wooded areas, in places that had not previously been explored.

An expedition was organised this autumn involving 28 scientists from Britain, Mozambique, Malawi, Tanzania and Switzerland.

The group was able to stay at an abandoned tea estate but the scientists had to hack through difficult terrain and use 70 porters in order to carry out their investigations. Within weeks they had discovered three new species of butterfly and a new member of the gaboon viper family of snakes that can kill a human with a single bite.

They also found blue duiker antelopes, samango monkeys, elephant shrews, almost 200 different types of butterflies and thousands of tropical plants in the area.

Jonathan Timberlake, expedition leader, said digital imagery has helped scientists to discover more about the world. He believes there may be other small pockets of biodiversity around the world that are yet to be discovered that could be stumbled upon by searching on Google Earth, especially in places like Mozambique or Papua New Guinea, which have not been fully explored yet.

Mr Timberlake said the discovery of new species is not only important to science but also helps to highlight conservation efforts in parts of the world threatened by logging and development.

The Mount Mabu area itself is under threat as Mozambique's economy grows and people cut down the trees for fuel or clear the land to grow crops.

"We cannot say we have discovered all the biodiversity areas in the world, there are still ones to discover and it helps to find new species to make people realise what is out there," he said.

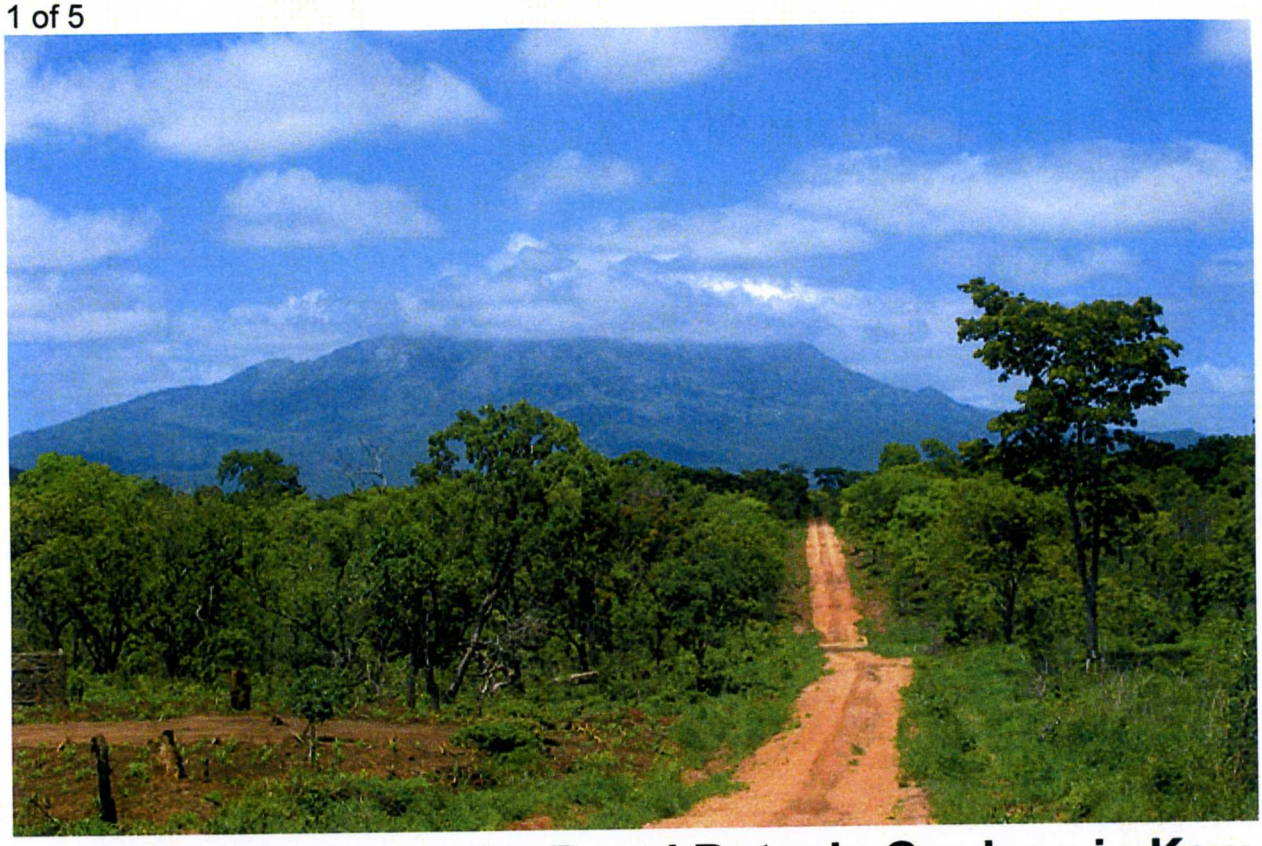
DAILY TELEGRAPH 22/12/2008

SKY NEWS
Website of the Year

Picture Gallery

Discovering Mount Mabu

1 of 5



Scientists based at the Royal Botanic Gardens in Kew have led the first extensive expedition to previously unmapped Mount Mabu in Mozambique.

12:05pm UK, Monday December 22, 2008

'Lost Eden' found amid African forest

Juliette Jowit
Observer

Mount Mabu was one of the few places on the planet that remained unmapped and unexplored, but now it has started to yield its secrets.

Until a few years ago this giant forest in the mountainous north of Mozambique was known only to villagers. But a British-led team has just returned from what is thought to be the first full-scale scientific expedition into the forest.

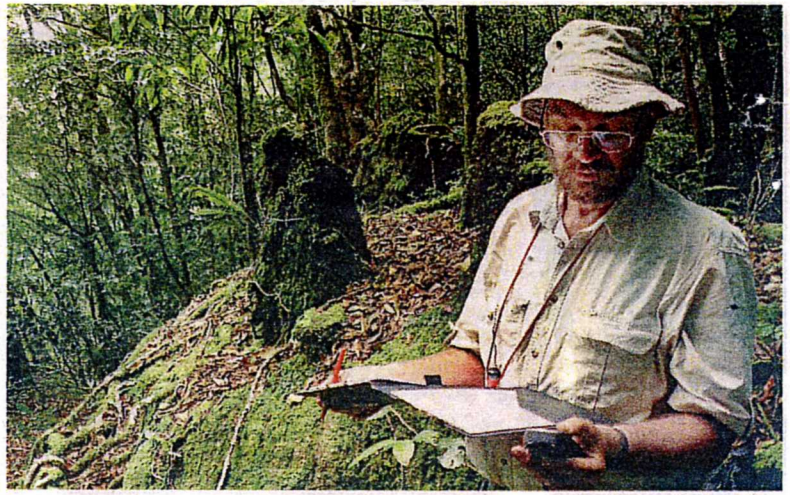
Below the trees, which rise 45 metres above the ground, they discovered a rich ecology, including what they believe are three new species of butterfly, a new adder snake and rare birds. They also expect to find new plants among the specimens they brought back.

Photographs show tropical creepers, giant snakes such as the gaboon viper, and other wildlife seen by the team, including small klipspringer and blue duiker antelope, noisy samango monkeys and an elephant shrew.

Back at Kew Gardens in London, where he is based, the expedition leader, Jonathan Timberlake, said: "The phenomenal diversity is just mind-boggling."

Mount Mabu was "discovered" in 2005 when Timberlake's team were looking for a conservation project. A locally based conservationist, Julian Bayliss, visited the site and studied satellite photos, which showed a forest of about 80 sq km. "It's then we realised this looked [to be] potentially the biggest area of medium-altitude forest I'm aware of in southern Africa," said Timberlake. "The literature I'm aware of doesn't mention the word 'Mabu' anywhere."

Late last year 28 scientists and support staff from the UK, Mozambique, Malawi, Tanzania and Switzerland, with 70 porters, drove to an old tea estate where the road ends and hiked into the forest. One highlight was emerging from the canopy on the peak of Mount Mabu, 1,700 metres up, where "hundreds upon hundreds" of male butterflies had gathered to attract mates by flying as high as possible.



New ground . . . Jonathan Timberlake on Mount Mabu Tom Timberlake

Outside the forest the land has been devastated by a civil war from 1975 to 1992, but inside the landscape is almost untouched. Ignorance of its existence, poor access and the forest's value as a refuge for villagers had combined to protect it, Timberlake said.

The scientists fear that with local people returning to the area, and Mozambique's economy booming, pressure to cut the forest for wood or burn it to make space for crops will threaten the ecology. Visiting and describing what they found was the first step to conserving the new species, Timberlake said. "If you know about them what right have you to destroy them? If you don't know about them, it was an accident; if you know about them, it's malicious."

Guardian Weekly (UK), 20/02/09

How Google found the land that time forgot

In the bicentenary year of the world's greatest botanist Charles Darwin, Environment Editor STUART WINTER meets the British expedition team following in his footsteps but using very modern methods

SURFING Google Earth is the 21st-century computer scientist's route to adventure. A swish of the mouse here, a few clicks there and the virtual traveller could be doing anything from looking at landmarks on the other side of the planet to prying into a neighbour's garden.

For scientists based at the Royal Botanical Gardens, Kew, it has become a vital tool, helping them locate a precious lost world of unknown plants and fascinating creatures.

When Britain's greatest scientific adventurer Charles Darwin set sail on HMS Beagle in December 1831 there were only patchy charts, complicated sextants and fragile chronometers to guide the way. In this, the bicentenary year of Darwin's birth and 150 years since the publication of On The Origin Of Species, an RBG Kew team is thrilled at its own discoveries in Africa.

Unknown plants, butterflies and reptiles and long-forgotten birds were all found in the impenetrable mountain forest of Mount Mabu. No Western scientists have ever travelled to its upper limits when it was identified by the team as a place to focus its conservation project in Mozambique.

For the past few years the scientists, under botanist Jonathan Timberlake, have been documenting this area of south-east Africa, funded by the Darwin Initiative, a British Government project established to support conservation work in countries with rich biodiversity but limited financial resources. With only the sketchiest of maps, Dr Julian Bayliss, a key member of the team, turned to Google Earth and, there on his computer screen, was the very kind of forest the team wanted to catalogue.

Further research followed at the RBG Kew's London headquarters using more detailed satellite imagery along with a "recce" by the African-based Dr Bayliss, and the go-ahead was given for the team to begin its epic exploration of Mount Mabu.

"By using Google Earth for our initial searches we were able to whet our appetites by finding areas in 10 minutes that would have meant travelling halfway round the world," says Jonathan Timberlake.

Late last year the 28-man international team returned with proof that the mountain is the type of biodiversity hot spot that would have delighted Darwin, a living museum of rare and unclassified species. "The diversity is mind-boggling," said Jonathan, who undertook three weeks' field work. "Kew is working to protect these sorts of areas and encourage local people to value the forest for its wildlife. By conserving the plant life we can help secure a future for all the creatures there." In a steamy Kew hothouse on a cold January day, Jonathan, 55, reflects on the wonders he witnessed in the forest. "We had to cut our way through part of it using machetes because there were no paths or tracks," says the botanist of the five-hour march to the forest from the team's base camp. "We had to mark the trail with tape to stop anyone getting lost."

There were also many dangers. Camouflaged and highly venomous snakes meant every step had to be carefully considered. Indeed, Jonathan's 15-year-old son Thomas, who joined the expedition, came across a species of poisonous forest viper that was to prove a highlight of the trip.

"Thomas found several snakes, including a forest cobra. He also found only the second example of a small forest viper, which was new to science. He was delighted," says his proud father.

"Three butterflies we found were also all species new to science. We also found birds such as Swynnerton's robin, which were only known from other parts of Africa.

"In all we collected 500 plant specimens which will be studied over the coming months so who knows what other discoveries we'll make?"

Aside from the remit of adding to mankind's collective scientific knowledge, the expedition leader also found time to appreciate the grandeur of Mount Mabu's vast 15,000-acre verdant forest from its rocky summit.

"One day I walked out of the forest cover and up to the rocky open areas where I could look over the seemingly unending forest landscape below," he recalls. "Male butterflies of many types and many brilliant colours gathered there in their thousands to find females.

"As I stood there on the edge of this deep precipice, swifts were whooshing past, almost touching me with their wingtips. Far above peregrine falcons were hunting and so I could see a whole food chain stretched out before me. It was magical."

Preserving nature's delicate balances is at the heart of RBG Kew's project in Mozambique. After its transition from Portuguese colony to independent nation, through a catastrophic civil war and calamitous flood, the country is now flourishing. Huge investment means development is blossoming so pressures on the land are bound to increase.

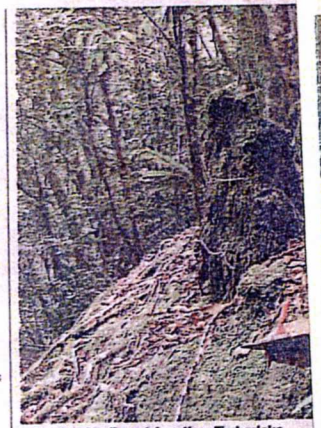
Jonathan sees his team's efforts in helping Mozambique make informed decisions on future land use as vital conservation work. Already, data gathered by the scientists has helped in tempering plans to destroy a wilderness in an important conservation area in order to grow biofuel crops.

"It is vital that scientists like us fill the gaps in knowledge so that Mozambique's leaders have the information when they need to make important decisions," says Jonathan.

While he applauds the work of his team who worked ceaselessly under Mabu's forest canopy, he also has praise for Google Earth.

"When we were looking for areas of Mozambique to study in depth we were faced with no historical literature and places only known to locals," he says. "From what we saw we knew the area was worthwhile following up with a big expedition.

"You could say Google Earth helped put Mount Mabu on the world map and our expedition has helped put this very special place on the conservation map."



LOST WORLD: Expert Jonathan Timberlake

catalogues the Mount Mabu forest, including (top right) the small striped swordtail butterfly

SUNDAY EXPRESS January 11, 2009

Sunday Express (UK), 11/01/09

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Mail Online

Lost World discovered (thanks to Google Earth)

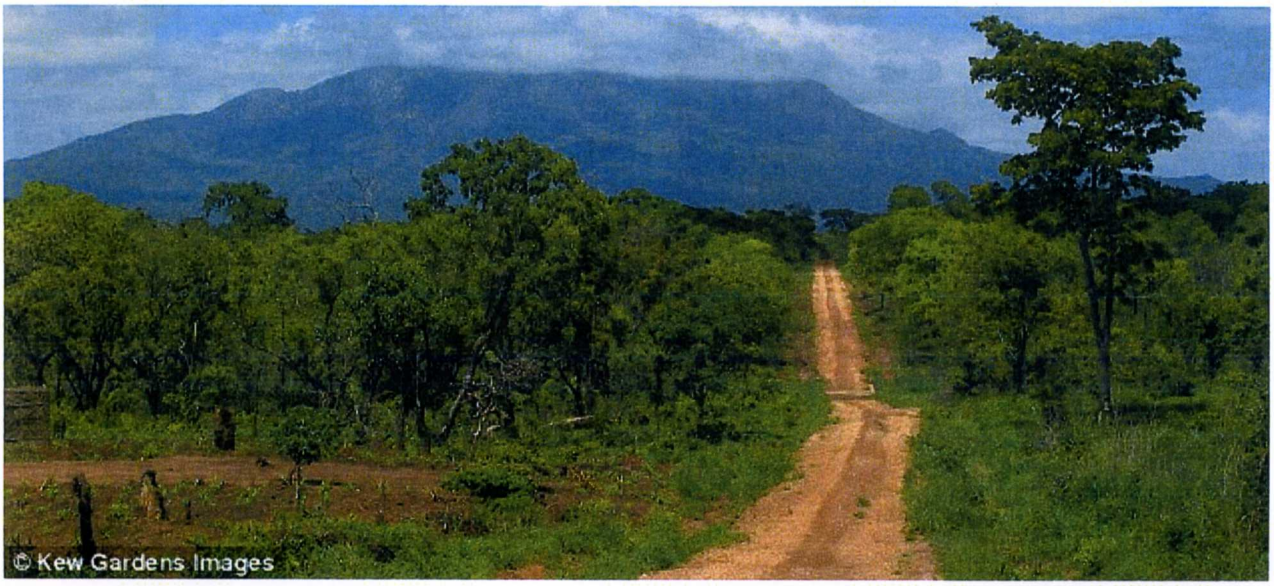
By David Derbyshire

Last updated at 4:08 PM on 22nd December 2008

In days gone by, explorers seeking a Lost World would spend a lifetime decoding ancient maps, talking to reluctant locals and hacking through dense jungles.

In the digital age, however, the job of an adventurer is more simple.

A team of conservationists from Kew Garden has just returned from an expedition to an uncharted and unexplored Eden in the heart of Mozambique after discovering it on Google Earth.



Mozambique's Mount Mabu hosts a wealth of species. The idyllic setting was discovered by a team of conservationists from Kew Garden after discovering it on Google Earth

The mountainous area of southern Africa - crammed with colourful birds, unusual insects and rare plants - had been overlooked by wildlife experts and map makers because of its difficult landscape and decades of war.

It only came to light when British researchers spotted an unexpected patch of green forest on the satellite map website.

An expedition visited the untouched paradise surrounding Mount Mabu and discovered a wealth of wildlife including pygmy chameleons, Swynnerton's robin and butterflies such as the Small Striped Swordtail and Emperor Swallowtail.

There were three new species of butterfly, a previously undiscovered adder, a rarely seen orchid, giant snakes - including the gaboon viper - and colonies of rare birds. More new species are expected to be discovered among the hundreds of plant specimens they brought home.

A pygmy chameleon (left) and New Atheris snake (right)

Jonathan Timberlake, the expedition leader, admits that he was surprised by the wealth of wildlife they discovered among the 150 feet tall trees.

'That's when the excitement comes out - when you come back home or start reading some of the background and realise you're breaking new ground,' he said.

The Kew team discovered the hidden paradise in 2005. The conservationists were searching for a location for a new project and were scouring Google Earth's images online for areas at least 5,400 feet above sea level.

The team found a rarely seen orchid

After spotting a green patch of forest in an area that had previously been unexplored by scientists, a British led expedition involving 28 scientists from Britain, Mozambique, Malawi, Switzerland and Tanzania was sent to the region.

They discovered 27 square miles of lush, rich forest crammed with exotic plants, insects and birds. Hundreds of exotic butterflies are there each day in the sunlight above the canopy, while peregrines and swifts flew around the trees.

The trees were home to loud samango monkeys, while the forest floor revealed small klipspringer antelopes - famed for their jumping ability - and blue duiker antelope.

'Nobody knew about it,' said Mr Timberlake. 'The literature I'm aware of doesn't mention the word Mabu anywhere. We have looked through the plant collections of Kew and elsewhere and we don't see the name come up.

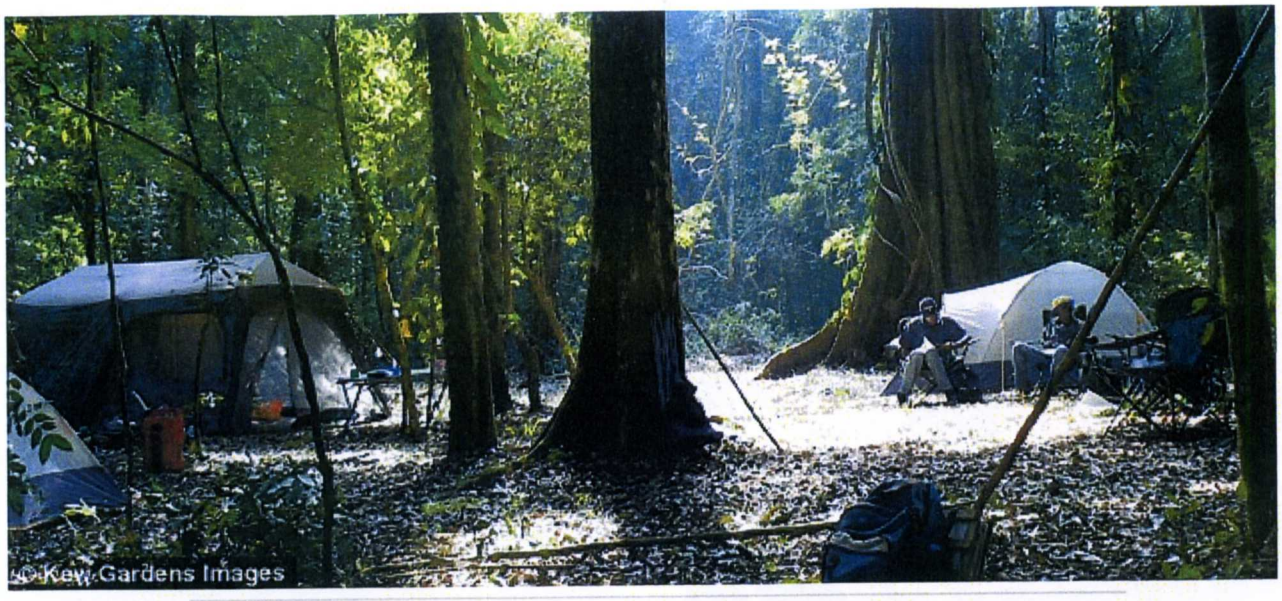
'It might be there under another name, but we're not aware of any collection of plant or animals or anything else taking place there.'

He added: 'The phenomenal diversity is just mind-boggling: seeing how things are adapted to little niches, to me this is the incredible thing. Even today we cannot say we know all of the world's key areas for biodiversity - there are still new ones to discover.

'This is potentially the biggest area of medium-altitude forest I'm aware of in southern Africa, yet it was not on the map, and most Mozambiqueans would not have even recognised the name Mount Mabu.'

Outside the forest the country's roads and buildings have been devastated by the 1975- 1992 civil war. But inside scientists found the landscape was almost untouched. Locals had kept quite about its location because they used it as a refuge when the fighting was too intense.

Scientists 'describe' around 2,000 new species each year. However, it is unusual to find so new species in one place.



Base Camp on Mount Mabu: The area came to light when the conservationists from Kew Garden spotted an unexpected patch of green forest on the satellite map website

Outside

On page 32
We are giving people the chance to invest in their own farming
Daisy's Dairy brings back the fresh pinta

In search of paradise lost

ALAMY

In a world of its own
A rare pygmy chameleon, like one found in the expedition to Mozambique

There were no dragons, but Google Earth brought the rare birds, butterflies and pygmy chameleons of a forest in Mozambique to the world and *Simon Barnes*

Here be dragons. That's what they used to write on maps. What it meant was a thrilling ignorance: an expanse of real, living land on which there could be absolutely anything. Nobody knew, there was nobody to ask, if you went there you might never return — and nobody would have a clue what happened to you.

The shortage of dragons is one of the great drawbacks of 21st-century life. Down the river they went, and I went with them, deeper and deeper into the jungle, and every day brought new wonders. Up to the plateau they climbed, and I climbed with them: there to find a land of living dinosaurs.

This was *The Lost World*, a great boyhood favourite, and admittedly it was fiction. But the notion that there really are lost worlds out there, worlds in which you might find absolutely anything, is one that matters. We hunger for lands of mystery: not necessarily to go there ourselves, but for the thrill of knowing that they exist. Unknown lands have been part of human life for most our history: for all but the past century or two. The concept of the lost world sits deep in our cultures, in ourselves.

But these days we place them in space. We assume that nowhere on Earth is far from a taxi and an airport lounge: that everywhere is mapped and known and understood. We have become smug: but for all that, we cannot get rid of a permanent nostalgia for dragonkind.

Flash back to a few years ago, and a night when I had an acute attack of funk. I was in a tent in Zambia. I can't tell you precisely where I was because we didn't know. We had a map, but the road we were travelling on wasn't marked. We were following a tributary of the Zambezi, but the relationship of the flowing river to the drawn one was approximate.

I had been awoken by the sound of drums and in the heart of darkness I was overwhelmed by the thought that no one knew where I was, including me, and that if I met with a mishap, no one would ever know what had happened. I was quite all right next morning.

The place we were in had never been properly surveyed in terms of ornithology, and much else, for that matter. It was so remote that even with my poor skills I was to make an infinitesimal contribution to science and to the great Zambian Bird Atlas project. If you seek evidence of this, you have only to look up cloud cisticola in the recently published *The Birds of Zambia*. This is a small brown bird, the sort of thing birders call LBJs, or Little Brown Jobs. But before we went there, no one had known that it lived within 500 miles of wherever it was we were.

We are running out of lost worlds, but they can still be found, and it is rather glorious to consider that there are still bits we haven't got our hands on. We haven't turned the whole world into a suburb of Stevenage quite yet. It was Google Earth that did it. We all know that Google Earth is great for finding your house and looking for the place where you had that lovely drink in Venice. But it can also find lost worlds, and scientists found one in Mozambique: a hitherto unknown area of genuinely pristine forest.

They had been scanning Google Earth in search of potential wildlife hotspots. The wooded mountain was something you could see from the road. But with the satellite images you could see the far side of the mountain: and there lies a great expanse of woodland. The forests of Mount Mabu are, of course, known locally, but they had never been mapped, never been surveyed scientifically.

So last autumn the Royal Botanic Gardens at Kew put together an expedition, which included people from BirdLife International. They set up base at an abandoned tea estate and from there they walked into the unknown. Now they have published their preliminary findings. No dinosaurs, alas, but the pygmy chameleon makes a good stab at filling the gap.

It is a place of thrilling diversity: perhaps the largest chunk of medium-altitude forest in Southern Africa, and yet even locally nobody knew much about it. When ▶

"In the heart of darkness no one knew where I was, including me

THE TIMES (UK), 14.02.2009

human beings went there, it was for refuge in times of trouble, times that Mozambique has known only too well. The exploration of biodiversity is one of the great arts of peace: it was time to uncover the secret wonders.

The expedition found three species of butterfly previously unknown to science, and a new species of adder. There are at least two new species of plant. Further revelation will have to wait the checking and analysis of 500 specimens. Meanwhile, it's time to get excited about the Thyolo alethe. This small brown bird is officially classified as endangered. I know it is hard to get excited about LBJs, but try to think of this. A bird that was thought to be clinging on, threatened by deforestation across its range, is suddenly common, at least in this strange lost forest.

The birders in the party found 126 species in total, including six other globally threatened birds. They are especially excited about Swynnerton's robin and the Namuli apalis. Their journey and their findings show us that the Earth still possesses areas rich in diversity that we still know nothing about. There are still a few dragons left.

Mount Mabu's forest still exists because of its remoteness, because it has been overlooked, because of Mozambique's troubles. But as Mozambique prospers, how long will it last? How long will it be safe from the demand for farmland, for wood to burn? It's wonderful to know that we can still write "here be dragons" on our maps, but we have to do so in smaller and smaller print.

Other lost worlds

Foja Mountains of western New Guinea
"As close to the Garden of Eden as you're going to find on Earth" were the words of the leader of a 2005 expedition to the largest, essentially pristine, tropical rainforest in Asia. A host of new species, giant flowers and rare wildlife were discovered amid the 1 million hectares of the mist-shrouded Foja forest tract, which remains almost completely untouched by human beings.

Serrania de los Yariguies, Colombia
A new species of butterfly was found by a curator from the Natural History Museum in December 2007 during the first exploration of the Serrania de los Yariguies in the high Andes. Blanca Huertas, the museum's butterfly curator, and her team were dropped by helicopter on to an isolated peak 3,000m above sea level – the first time that people have explored the highest elevations of the 100km-long mountain range.

Sagalassos, southern Turkey
This ancient mountaintop town offered up a stunning insight into the Roman Empire with the discovery in 2007 of a huge, exquisitely carved statue of Hadrian. It was the centrepiece of a blockbuster exhibition at the British Museum last year.

La Amistad, Costa Rica
The biggest forest reserve in Central America, and a Unesco World Heritage Site, is one of the least explored places on the continent. It was found to be home to three new species of salamander last year by a scientist from the Natural History Museum.

Sources: Birdlife International, Natural History Museum, British Museum

No hiding place
The Google Earth picture of Mount Mabu

Parte de Moçambique ignorada pela "Google Earth"

UMA zona montanhosa de Moçambique ficou muito tempo ignorada pela ciência, por não ser identificada devidamente no Google Earth, um mapa disponível na Internet com imagens satélites de qualquer parte do globo.

Ao realizar pesquisas no Google Earth, um grupo de cientistas detectou uma estranha zona verde, algures na província da Zambezia. Logo a seguir, uma expedição liderada pela Grã-Bretanha foi enviada ao local e encontrou cerca de sete mil hectares de floresta conhecida como Monte Mabu, rica em biodiversidade.

Em apenas três semanas, os cientistas, liderados por uma equipa da Royal Botanic Gardens, identificaram centenas de espécies diferentes de árvores, pássaros, borboletas, macacos e novas espécies de serpentes gigantes.

As amostras das espécies encontradas pelos cientistas encontram-se na Grã-Bretanha para efeitos de análise.

Até agora os cientistas dizem ter descoberto três novas espécies de borboletas e uma nova de serpentes, mas acreditam existir mais duas novas espécies de plantas e também mais insectos por descobrir.

O cientista Julian Bayliss diz ter identificado Monte Mabu numa altura em que estava a pesquisar um possível projecto de conservação no Google Earth. Ele estava procurando áreas de terra situados a 1.6 metros abaixo do nível do mar onde a queda da chuva possa resultar em florestas.

Para a sua surpresa, ele encontrou zonas verdes que denotavam a existência de áreas arborizadas em lugares supostamente não exploradas anteriormente. Depois de observar melhor o mapa, ele decidiu se deslocar para ver o local "in loco".

O local abriga uma biodiversidade extraordinária

A expedição foi realizada por 28 cientistas de Moçambique, Reino Unido, Malawi, Tanzania e Suíça.

O grupo permaneceu numa área abandonada e com dificuldades sérias de usar o seu equipamento para levar a cabo as suas investigações.

Eles identificaram três novas espécies de borboletas Lepidoptera e um novo membro da família de serpentes do Gabão capaz de matar um ser humano com apenas uma mordida.

Uma espécie de antílope azul, macacos-simango, elefantes, quase 200 diferentes tipos de borboletas e milhares de plantas tropicais constam de outras espécies supostamente descobertas pelos cientistas.

O líder da expedição, Jonathan Timberlake, disse que imagens digitais ajudam os cientistas a descobrirem mais sobre o mundo.

Igualmente, ele disse acreditar a existência de pequenas bolsas de diversidade à volta do planeta ainda por descobrir que podem ser aproveitadas através da pesquisa em Google Earth, particularmente em Moçambique e Papua-Nova Guiné, países ainda não explorados amplamente.

Segundo Timberlake, a descoberta de novas espécies não é apenas importante para a ciência, mas também porque ajuda os esforços de conservação das espécies em partes do planeta onde a natureza está sob ameaça devido à exploração madeireira e do desenvolvimento.

A fonte referiu que o próprio Monte Mabu está sob ameaça devido ao crescimento da economia do país, uso da madeira como combustível alternativo ou prática da agricultura.

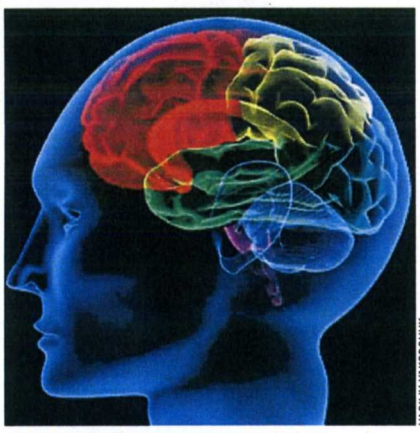
"Não podemos dizer que já descobrimos todas as áreas de biodiversidade do planeta.

Ainda existem algumas por descobrir e tal ajuda a identificar novas espécies para permitir que o público conheça os novos factos", disse ele. – (AIM)

MEDIZIN

Führt Fehlfunktion im Hirn zu Bulimie?

Warum schaffen es an Ess-Brech-Sucht Erkrankte nicht, die immer wieder aufbrandenden Attacken großen Heißhungers in den Griff zu bekommen? Bulimie-Patienten verschlingen bei akuten Fressanfällen große Mengen an Nahrung, die sie hernach wieder erbrechen. Betroffen sind besonders Mädchen und Frauen. Die Erkrankung kann in schwerer Depression und körperlichem Zusammenbruch münden. Wissenschaftler der Columbia University und des New York State Psychiatric Institute haben nun 20 gesunde und an Bulimie erkrankte Probanden einem Reaktionstest unterzogen und die Ergebnisse verglichen. Dabei gingen die essgestörten Versuchsteilnehmer deutlich impulsiver zu Werke als die gesunden. Bulimiker wählten häufiger und wiederholt falsche Lösungen, weil sie allzu hektisch entschieden. Die Erklärung hierfür liefert offenbar die parallel durchgeführte Untersuchung der Hirnfunktionen: Demnach war bei den Bulimikern die Funktion der frontostriatalen Bahnen gestört – jener Verbindungen zwischen Frontalhirn und Basalganglien, die Menschen ein kontrolliertes Verhalten ermöglichen.



VASILIY YAKOBCHUK

Hirnmodell

JULIAN BAYLISS

Insekt vom Mount Mabu

ARTENVIELFALT

Gegoogeltes Paradies

JULIAN BAYLISS

Stumpfschwanz-Chamäleon

Bis vor kurzem zählten die bewaldeten Hänge des Mount Mabu im Norden Mosambiks zu den letzten unerforschten Flecken der Erde. Jetzt haben Satellitenbilder des Computerprogramms Google Earth die Existenz dieses einzigartigen Tropenparadieses enthüllt. Forscher der Londoner Kew Gardens wurden auf den Wald aufmerksam, als sie in Afrika nach möglichen Gebieten für ein neues Naturschutzprojekt fahndeten. Das dunkle Grün des dicht geschlossenen Blätterdachs verriet das Artenjuwel. Vor wenigen Wochen haben die Wissenschaftler den schwer zugänglichen Ort zu Fuß erkundet. „Die Vielfalt ist phänomenal“, berichtet Expeditionsleiter Jonathan Timberlake. Die Biologen beschreiben neue Insekten- und Schlangenarten. Stumpfschwanz-Chamäleon, Blauböckchen und Olivnektarvogel kreuzten ihren Weg. Den 1700 Meter hohen Gipfel des Mount Mabu umflatterten Hunderte bunter Schmetterlinge auf Hochzeitsflug. „Niemand wusste bislang etwas davon“, sagt Timberlake. In den einschlägigen Archiven und Sammlungen werde der Berg nicht erwähnt. Ist die Satellitenentdeckung Fluch oder Segen für die Region? Fortan sei es zumindest kein Unfall mehr, sondern „böswillig“, wenn der Wald zerstört werde, sagt Timberlake.

ARCHÄOLOGIE

Burg der Nebelkrieger

Die Chachapoya waren ein kriegerisches Volk, das vor den Inka einst im heutigen Peru lebte. Jetzt haben Schüler und Lehrer auf einem Ausflug in den Anden, 800 Kilometer nordöstlich der Hauptstadt Lima, in der Provinz Utcubamba wahrscheinlich eine ihrer Festungen entdeckt. Hoch oben im Gebirge, auf eine Fläche von rund fünf Hektar verteilt, stieß die Gruppe auf mehrere kreisförmig gebaute Steinhäuser. Die von Dschungel überwucherten Gemäuer liegen oberhalb einer Schlucht. Der Lehrer Benedicto Pérez Goicochea vermutet, dass die Bewohner von hier aus nach Feinden Ausschau hielten. Auch Felsmalereien haben die Hobbyarchäologen in der Nähe gefunden. Große flache Steine zwischen den Hütten dienten wahrscheinlich dem Zermahlen von Nahrungs- und Heilmitteln. Gegen Ende des 15. Jahrhunderts wurde dieses Andenvolk, die sogenannten Nebelkrieger, von den Inka unterworfen.

Force hopes hinge on Canberra

DAVE HUGHES

Western Force wants the Federal Government to help upgrade Members Equity Stadium as figures reveal WA is at the bottom of the table for Commonwealth sports facility funding.

The Force expect to move to the stadium in 2010 and Perth's only significant rectangular sports venue needs upgrading to overcome a predicted shortfall in capacity for fans and corporate guests.

A Federal grant appears to be the most likely source of funds for a new grandstand because the State Government has a report suggesting it would not be economical to increase the capacity of Members Equity significantly.

WA fares pitifully for Federal sports grants compared with all the other States and territories.

Canberra allocated just $2.42 million to a variety of community projects, many of them in the marginal Labor seat of Hasluck.

By contrast, $9.1 million was allocated to Tasmania for sports infrastructure, $9.75 million to the Northern Territory, $45 million for Victoria, $50 million for South Australia, $55 million for Queensland and a whopping $99 million for NSW.

RugbyWA chairman Geoff Stooke said WA's representatives in Canberra, particularly in the Senate, needed to redress the inequity.

"It would be nice if the funding was distributed more fairly," he said. "After all, WA and Queensland are the powerhouses of the national economy.

"This is an opportunity for the Federal Government to invest in a much-needed project in Perth.

"It seems wrong that we are the only capital city in Australia without a major rectangular facility and we expect support from our Federal parliamentarians in this matter."

The Department of Sport and Recreation believes a bigger Members Equity Stadium would cost too much for most existing tenants to hire and would stretch the Force's finances.

Department head Ron Alexander said the major stadium task force had reached the same conclusion when investigating WA's big-league sports facilities.

"It's just not viable," he said. "Increasing Members Equity to hold 25,000 would require the community to subsidise the venue to the tune of $3 million or $4 million a year.

"I'd like to see a business case from the Force that shows how they will be profitable there. We've been waiting for two years for them to produce one."

He said the $25 million the State Government promised for improvements to Members Equity in the 2004 bid process for a rugby Super 14 team was no longer available.

"Rugby didn't want it because they told us after their first year they were staying at Subiaco Oval," he said. "It's off the table."

Conservationists zoom in on African forest rich in unknown species

A search on Google Earth leads scientists to a wonderland featuring new plants, birds, butterflies and monkeys

Conservationists have found hundreds of new species after discovering uncharted territory on the internet using Google Earth.

The mountainous area of northern Mozambique in southern Africa had been overlooked by science because of inhospitable terrain and decades of civil war in the country.

But while scrolling around on Google Earth, an internet application that allows the user to look at satellite images anywhere on the globe, scientists discovered an unexpected patch of green.

A British-led expedition was sent to see what was on the ground and found 7000ha of forest, known as Mt Mabu, rich in biodiversity.

In just three weeks, scientists led by a team from the Royal Botanic Gardens in Kew found hundreds of different plant species, birds, butterflies, monkeys and a new species of giant snake.

The samples the team took are now in Britain for analysis. So far three new butterflies and one new species of snake have been discovered but it is believed there are at least two more new species of plants and perhaps more new insects to discover.

Julian Bayliss, a scientist for Kew based in the region, discovered Mt Mabu while searching on Google Earth for a conservation project.

He was looking at land 1600m above sea level where more rainfall means there is likely to be forest.

To his surprise he found the patches of green that denote wooded areas, in places that had not previously been explored. After taking a closer look on more detailed satellite maps, he went there.

An expedition of 28 scientists from Britain, Mozambique, Malawi, Tanzania and Switzerland stayed at an abandoned tea estate but had to hack through difficult terrain and use 70 porters to carry out their investigations.

Within weeks they had discovered three new species of lepidoptera butterfly and a new member of the gaboon viper family of snakes that can kill a person with a single bite.

There were also blue duiker antelope, samango monkeys, elephant shrews, almost 200 different types of butterflies and thousands of tropical plants.

Expedition leader Jonathan Timberlake said digital imagery had helped scientists discover more about the world. He believed there might be other small pockets of biodiversity around the world that were yet to be discovered, especially in areas such as Mozambique or Papua New Guinea.

Mr Timberlake said discovering new species would help to highlight conservation efforts in parts of the world threatened by logging and development.

Virgin territory: Scientists have found 7000ha of forest, rich in biodiversity, known as Mt Mabu in Mozambique. Pictures: Julian Bayliss/Kew

Lizard family: The pygmy chameleon.

Graphium policenes: The small striped swordtail butterfly.

Bug's world: A hemipteran variety.

Killer snake: Gaboon viper.

Parents unaware son, 5, missing

MELBOURNE

A couple have told police they had so many children with them it took them 14 hours to realise their five-year-old son had been left at a Christmas lights display late at night.

Alexander was found alone at 11.30pm on Sunday in Vermont South. His parents realised he was missing at lunchtime yesterday.

Police said the Dandenong family took two cars with their eight children and a neighbour's children to the lights. Each parent thought the other had Alexander in their car. He was taken into Department of Human Services care yesterday morning.

Toddler 'poisoned'

A 23-month-old boy found dead in NSW may have been poisoned.

The child had a cardiac arrest at a property in Tambar Springs in northern NSW yesterday afternoon.

His twin brother and two other siblings, aged three and five, were also taken to hospital. Police said they were in a stable condition.

Body with hands tied found in river

MELBOURNE

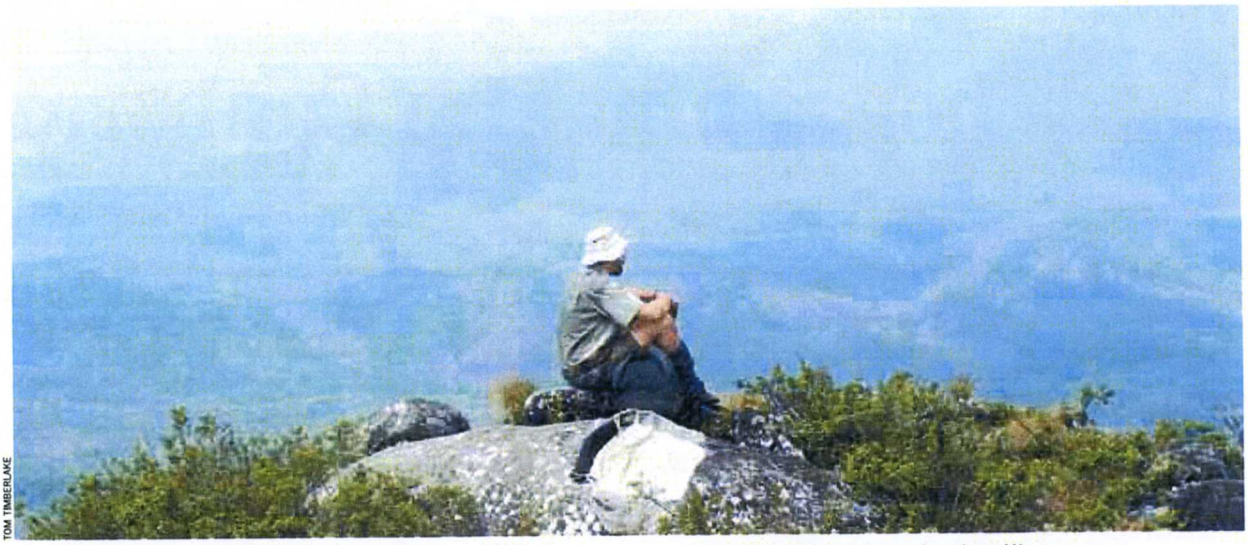
The body of a man whose hands were bound was pulled from a busy stretch of the Yarra River yesterday.

Police recovered the body, identified as Kidane Gebrezghi, near Melbourne's Westgate Bridge.

Victoria Police Acting Det-Sen. Sgt Wayne Cheesman said the man's hands had been bound in the front with plastic ties.

The cause of death was not known, but the man had an injury over his right eye.

Mr Gebrezghi, who was missing for up to a week, leaves a wife and an 18-year-old son.


TOM TIMBERLAKE

Ο επικεφαλής της επιστημονικής ομάδας από τους Βασιλικούς Βοτανικούς Κήπους Κιου, Τζόναθαν Τιμπερλέικ, ατενίζει το τοπίο από την κορυφή του όρους Μάμπου

Χαμένη Εδέμ σε άγνωστο δάσος της Αφρικής

Καινούργια είδη πανίδας και χλωρίδας ανακάλυψαν οι επιστήμονες στο όρος Μάμπου της Βόρειας Μοζαμβίκης

ΛΟΝΔΙΝΟ

Ηταν ένα από τα ελάχιστα μέρη του πλανήτη που είχε παραμείνει ανεξερεύνητο, ωστόσο τώρα το όρος Μάμπου, στη Βόρεια Μοζαμβίκη, άρχισε να αποκαλύπτει τα μυστικά του. Μυστικά που φανερώνουν έναν πραγματικό χαμένο παράδεισο σε ό,τι αφορά την ποικιλομορφία των ειδών που το κατοικούν. Οι εξερευνητές της αχαρτογράφητης αυτής περιοχής ήταν επιστήμονες των Βασιλικών Βοτανικών Κήπων Κιου, στο Δυτικό Λονδίνο, οι οποίοι έφθασαν στην «καρδιά» του Μάμπου με μια εντελώς τυχαία αφορμή: «ανακαλύπτοντας» τον εικονικό χάρτη του δάσους του όρους στο Google Earth. Ετσι ξεκίνησε μια αποστολή η οποία έφερε στο φως μια περιοχή με πολύ πλούσια χλωρίδα και πανίδα υπό τη σκιά δένδρων που φθάνουν τα 45 μέτρα στο ύψος.

Οι επιστήμονες εντόπισαν τρία νέα είδη πεταλούδων, ένα άγνωστο ως σήμερα είδος δηλητηριώδους φιδιού και νέους πληθυσμούς σπανίων πουλιών. Πιστεύουν επίσης ότι θα ανακαλύψουν νέα είδη φυτών μεταξύ των εκατοντάδων δειγμάτων που έφεραν πίσω μαζί τους στη Βρετανία μετά το ταξίδι τους στη χαμένη «Εδεμ» της Μοζαμβίκης.

Οι φωτογραφίες οι οποίες τράβηξαν οι επιστήμονες απαθανατίζουν ένα μόνο μέρος της ομορφιάς αυτού του άγνωστου μέχρι πρότινος όρους. Σε αυτές απεικονίζονται τροπικά ερπετά, γιγάντια φίδια όπως η οχιά gaboon, ορεότραγοι και άλλα είδη αντιλόπης, θορυβώδεις πίθηκοι samango και μυγαλές-ελέφαντες. Ωστόσο όλα αυτά δεν αποτυπώνουν σε καμία περίπτωση το εύρος του θαύματος που βίωσαν οι επιστήμονες στα απάτητα μονοπάτια του βουνού, όπως ανέφερε στη βρετανική εφημερίδα «The Observer» ο επικεφαλής της αποστολής **Τζόναθαν Τιμπερλέικ**. *«Ο ενθουσιασμός εμφανίζεται μετά την επιστροφή· όταν γυρνάς πίσω στην πατρίδα και αντιλαμβάνεσαι ότι έχεις βρει τόσα καινούργια είδη».*

Το όρος Μάμπου «ανακαλύφθηκε» το 2005 όταν η ομάδα του Τιμπερλέικ αναζητούσε κάποια περιοχή στο πλαίσιο ενός προγράμματος για τη διατήρηση της φύσης. Ο ειδικός σε θέματα διατήρησης του περιβάλλοντος **Τζούλιαν Μπέιλις** εντόπισε το όρος Μάμπου στο Google Earth και μελέτησε δορυφορικές φωτογραφίες που έδειχναν ένα δάσος με επιφάνεια περίπου 80 τετραγωνικών χιλιομέτρων. *«Τότε συνειδητοποίησα ότι αυτή η περιοχή ήταν πιθανώς η μεγαλύτερη περιοχή δάσους μεσαίου υψομέτρου σε ολόκληρη τη Νότιο Αφρική»*, ανέφερε ο Τιμπερλέικ και προσέθεσε: *«Ωστόσο, κανένας δεν γνώριζε αυτό το δάσος. Η βιβλιογραφία δεν αναφέρει πουθενά τη λέξη Μάμπου. Μελετήσαμε όλες τις συλλογές φυτών στο Κιου και αλλού και δεν είδαμε να αναγράφεται το Μάμπου σε καμία περίπτωση».*


JULIAN BAYLISS

Ενα από τα τρία νέα είδη λεπιδόπτερων που ανακάλυψαν οι επιστήμονες


JULIAN BAYLISS

Μια εντυπωσιακή νέα ποικιλία ημίπτερων εντόμων κρύβεται στο δάσος του Μάμπου


JULIAN BAYLISS

Ενας πυγμαίος χαμαιλέοντας ήταν μεταξύ των ειδών που εντόπισαν οι επιστήμονες


JULIAN BAYLISS

Ενας καινούργιος πληθυσμός πτηνών του είδους Nectarinia olivacea

Επειτα από μερικά διερευνητικά ταξίδια, τον Οκτώβριο και τον Νοέμβριο του 2008, 28 επιστήμονες και συνεργάτες τους από τη Βρετανία, τη Μοζαμβίκη, το Μαλάουι, την Τανζανία και την Ελβετία ταξίδεψαν στην «καρδιά» αυτού του άγνωστου δάσους όπου κατασκήνωσαν επί τέσσερις εβδομάδες. Ο Τιμπερλέικ αφηγείται μια από τις ανεπανάληπτες στιγμές αυτού του ταξιδιού, όταν οι επιστήμονες είδαν κοντά στην κορυφή του όρους, σε υψόμετρο 1.700 μέτρων, εκατοντάδες αρσενικές πεταλούδες να έχουν συγκεντρωθεί κάτω από το φως του ήλιου και να πετούν όσο ψηλότερα γίνεται προκειμένου να προσελκύσουν τα θηλυκά.

Γύρω από αυτό το δάσος-«θησαυρό» βιοποικιλότητας η γη έχει καταστραφεί εξαιτίας ενός εμφυλίου πολέμου που διήρκεσε από το 1975 ως το 1992. Ωστόσο κάτω από τα δένδρα του Μάμπου το τοπίο είναι – τουλάχιστον ακόμη – παρθένο. Μια εικόνα που οι επιστήμονες φοβούνται ότι μπορεί σύντομα να αλλάξει εξαιτίας της επιστροφής των ντόπιων στην περιοχή και της «έκρηξης» της οικονομίας στη Μοζαμβίκη, η οποία όπως είναι επόμενο θα επιβάλει να κοπούν δένδρα για να χρησιμοποιηθεί το ξύλο, αλλά και για να δημιουργηθεί χώρος για την ανάπτυξη φυτειών.

Ο Τιμπερλέικ πιστεύει πάντως ότι η επίσκεψη σε αυτό τον χαμένο παράδεισο και η περιγραφή του από τους επιστήμονες θα αποτελέσει το πρώτο βήμα για τη σωτηρία του. *«Εάν γίνει γνωστός ο πλούτος ενός τόπου δεν είναι τόσο εύκολο να καταστραφεί. Με ποιο δικαίωμα θα το κάνει κάποιος αυτό; Εάν δεν γνώριζε τι είδη φιλοξενεί αυτή η γη θα έλεγε ότι η καταστροφή της ήταν ατύχημα. Εάν όμως γνωρίζει για αυτά, τότε θα μιλούμε για μια μοχθηρή πράξη».*

Darwin project discovers virgin rainforest in Mozambique

Project ref: 15-036
Paul Smith & Julian Bayliss
RBG Kew

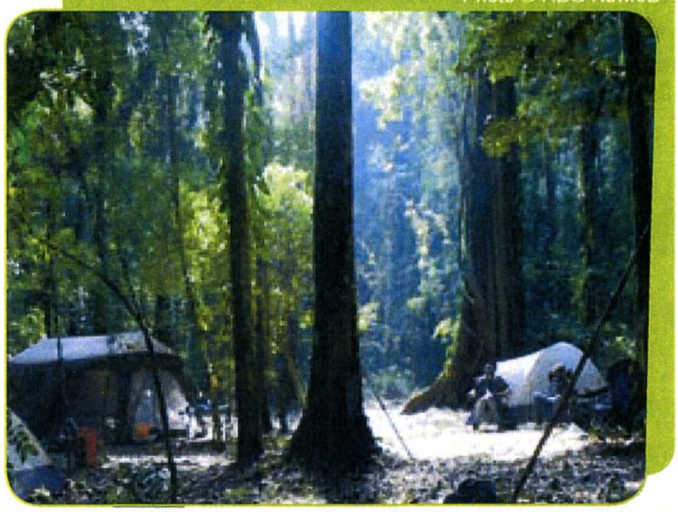
To find a large geographical area that has not been thoroughly investigated for its biodiversity is a very special, rare and exciting occurence for conservation biologists. Through the Royal Botanical Gardens Kew (RBG Kew) Darwin Initiative's project 'Monitoring and Managing Biodiversity Loss in South-East Africa's Montane Ecosystems' this is exactly what happened.

Mozambique is a country that has been inaccessible for many years owing to its independence struggle, shortly followed by a civil war. Together, these lasted for over 15 years, leaving many areas depopulated and with a long term threat in remote parts from land mines. Since the war ended, the southern half of Mozambique has seen considerable growth in comparison to northern areas and, as a result, the north still harbours significant areas of natural wilderness. Many parts of northern Mozambique have simply not been investigated before and potentially hold numerous biological secrets. Of particular interest are the high altitude areas over 1500 metres supporting a high diversity of flora and fauna and largely overlooked in the past.

Mount Mulanje in neighbouring southern Malawi, is the second highest mountain in southern Africa, rising to over 3000 metres and situated on the border in full view of similar mountains in Mozambique. In contrast

Namuli Hills
Photo © RBG Kew/AMcRob

Mabu Camp
Photo © RBG Kew/JB



to the unexplored mountains of Mozambique, Mulanje has received considerable biological attention. Since the discovery of the Mulanje cedar (*Widdringtonia whytei*) in 1888, it has constantly been visited by experts in virtually all fields of biology. With this in mind, an idea was conceived in 2005 to develop à trans-frontier project to investigate the degree of similarity in biodiversity between these mountains, using Mount Mulanje as a base line.

At this time, RBG Kew were working on Mount Mulanje through their Millennium Seed Bank Project and took the lead in developing a Darwin Initiative project. The Mulanje Mountain Conservation Trust (a World Bank–GEF Trust Fund) acted as a regional host in Malawi, whilst in Mozambique the main partner was the Mozambique Agricultural Research Institute (IIAM), which houses the National Herbarium and is responsible for investigating soil and forest resources. Additional partners were BirdLife International, based in the UK, which promotes bird conservation worldwide and the Forestry Research Institute of Malawi.

The Darwin Initiative is very well suited towards promoting conservation biology in developing countries due to its particular emphasis on capacity building and the training of host country scientists. It is essential to create a knowledge-base and awareness of the value of biodiversity within countries such as Mozambique and Malawi and this is especially important in the case of Mozambique where large areas of natural wilderness still remain. A series of expeditions were organised over the course of three years; all but one were to northern Mozambique. During each expedition, an international scientific team representing the project partners converged

on the selected sites over the course of several weeks. Plant taxonomy, habitat characterisation techniques, biodiversity assessment, and the classification of remotely sensed images were undertaken as part of the training programme. The teams were also rewarded with incredible sights of natural beauty.

The results have exceeded the project's greatest expectations. To date, there have been numerous discoveries of new species. Currently we are dealing with 6 new species of vascular plants, 8 new species of butterfly, 3 new species of snake, 2 new species of chameleon, 2 potential new species of bat and a range of small mammals that need further investigation. The greatest find, however, came from Mt. Mabu in the form of potentially the largest tract of mid-altitude forest in southern Africa. Further to these results, funding is being secured by IIAM to address the conservation of Mt. Namuli, Mozambique's second highest mountain.

This Darwin Initiative project has set the standard for future work in these areas (and others) in northern Mozambique. It has demonstrated that there are still large, unexplored areas left in this world and, with the appropriate guidance through the expert staff at IIAM, we will demonstrate to policy makers the need for further conservation efforts in the montane ecosystems of northern Mozambique. For more information, see the full article in the **Guardian**

Fiji's Community Protected Areas provide a model for other Pacific nations

Project ref: 15-019
James Millet
Birdlife International

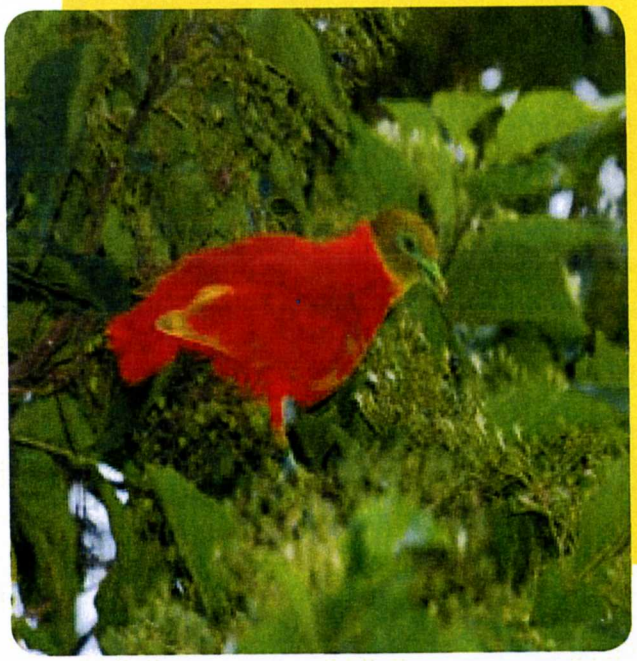
A conservation initiative on the beautiful and remote Natewa Peninsula in Fiji is being used as a demonstration project for community conservation to train conservationists from other Pacific Island countries.

The project, to develop a community managed protected area, was initiated in 2005, after the peninsula (on the northern Fijian Island of Vanua Levu) was identified as the Natewa and Tunaloa Important Bird Area (IBA). This IBA contains untouched old growth forest and is home to the subspecies *Kleinschmidti* of the endemic Silktail, *Lamprolia victoriae (*Near Threatened), Shy Ground-dove, *Gallicolumba stairi* and Black-throated Shrikebill, *Clytorhynchus nigrogularis* (both vulnerable) and many other Fijian endemics.

In 2005, a Site Support Group made up of landowning clans was formed and agreed to protect their forest from degrading activities, including commercial logging and agriculture.

A workshop was held between 24 – 26 February 2009 in Navetau Village on the Natewa Peninsula. The meeting was attended by over 30 local people and, during the meeting, 11 landowning clans or mataqali agreed to sustainably manage over 6000ha of land for ten years.

Male Orange Dove, Nabogiono, south Taveuni
Photo © Paddy Ryan



They also agreed an interim management plan.

"This is a really exciting grassroots initiative", said Tuverea Tuamoto, Conservation Officer with the Birdlife Fiji Programme. "The landowners are taking the initiative by developing the protected area, and we are working in partnership with government departments to support them".

The workshop was also a training course for conservationists from other Pacific islands. Participants