



RNC Alliance newsletter update

March 2010

Dear RNC Members

Happy 2010 and welcome to our newsletter update where we will highlight some of the significant RNC events of 2009 and those underway for 2010.

Please feel free to forward this newsletter to other interested parties. If they would like to join the RNC Alliance please ask them to visit our website www.rncalliance.org and click on "Register" under the "Sign in" heading. And to find out more about us visit the "RNC Alliance" link at the top of the Categories list on our website.

Don't miss attending, the 7th Congress of SER-Europe on Ecological Restoration and Sustainable Development, to be held 23-27 August, 2010, in Avignon, France - see www.seravignon2010.org - RNC thinking will be prominently featured in the program, and discussed in various fora. Also the new French version of Clewell and Aronson's 2007 book will be presented there as well. For more information see - RNC Europe - below.

Read on for 2009 - early 2010 updates and highlights of on-going Projects, Partnerships & Prospects, and also Publications. Hope you enjoy reading our update. Also, remember to keep us informed of your activities in terms of the 4 P's:

- Projects
- Publications
- Partnerships and
- Prospects for RNC as a way of changing the world for the better.

Thank you and regards

James, Bev and all of us who share an interest in RNC

RNC Website

Don't forget to keep checking our website for new updates and for useful information. See the new Portuguese version of our website and our new section on Brazil below. Our website also has articles, student reports and news items in English, Spanish, French and Chinese.

If you have RNC articles or reports in other languages we can accommodate them under Articles in other languages, subject to approval.

Do continue to send relevant articles, reports & personal stories (with photos) to us at info@rncalliance.org

RNC in the Middle East, Saudi Arabia and Kuwait

James Aronson continues to work in the Kuwait restoration program, in a terrestrial restoration team under contract with the UNCC, which also includes Klaus Kellner, John Peacock, and Faisal Tawa.

RNC in Madagascar

Chris Birkinshaw - chris.birkinshaw@mobot-mg.org

Missouri Botanical Garden is now facilitating community-based conservation at eleven priority areas for plant conservation (PAPCs) in Madagascar.

See: www.cepf.net/Documents/final_missouri_botanical_garden.pdf

These sites are distributed throughout the country and have a total area of 59,000 ha. They vary enormously in size (from the 130 ha Ankafoabe Forest to the 18,100 ha Anadabolava-Betsimalaho Complex), vegetation type (humid forest, sclerophyllous woodland, spiny ticket, dry deciduous forest, littoral forest, and grassland) and threats (shifting cultivation, wild fires, selective exploitation of timber, vanilla production and hunting). All but one of these sites (the tiny Ankafoabe Forest) is in the process of being designated as a new protected area under the Malagasy government's initiative to triple the area of the country managed primarily for conservation.

The activities at each of the PAPCs can be organized around the following themes:

- 1) management of natural resources (including sustainable exploitation by local people, fire control, restoration, and control of invasive species);
- 2) awareness-raising;
- 3) research and monitoring; and
- 4) poverty reduction among local stakeholders (in collaboration with development organizations).

At six of PAPCs (Agnalazaha, Ambalabe, Analalava, Ankafoabe, Ibity Massif and Pointe à Larrée) we have established tree nurseries (see *photo right*) that produce seedlings of native trees for forest restoration, fruit and spice trees to provide food and income for local people, and fast-growing alien species to provide alternative sources of fuel wood and timber from native trees. In 2009, 23,887 seedlings of native species produced by these nurseries were planted in formerly forested areas (that are now anthropogenic grassland, bush-land and thicket) within or adjacent to the conservation sites.

At Agnalazaha, Ambalabe, Ibity Massif and Pointe à Larrée the approach would be best classified as reforestation using native species, but at Analalava and Ankafoabe (see *photo below - left*) we seek to restore vegetation that closely

resembles in flora and structure the original forest and are doing this by describing natural regeneration at each site and facilitating this process by propagating and planting the pioneer species (e.g. *Harungana madagascariensis*, see *photo below - right*) that constitute the first step of natural forest



recovery. At all of the six sites we monitor the survival and growth of the various tree and shrub species we plant, and at Ankafobe and Analalava we are conducting experiments to compare the effect of adding home-made compost to the planting holes of seedlings on their growth and survival. At the model nursery at Analalava we are also experimenting with the propagation of native tree and shrub species by cuttings. At five of the six sites, weather stations have been installed and are providing data that assists with the planning of activities and the interpretation of information concerning seedlings survival and growth. Often local people are active participants in our restoration and reforestation activities (see photo - right.)



In 2009, funding was obtained to develop reforestation/restoration projects at three more PAPCs: the Anadabolava-Betsimalaho Complex, the Ankarabolava-Agnakatrika Forest, and Oranjia. Among these sites, the planned activities at Ankarabolava-Agnakatrika Forest will classify most closely as restoration. The aim of this restoration is to promote gene flow within the resident population of for the critically endangered lemur *Eulemur cinereiceps* by improving forest integrity through the creation of forest corridors between currently isolated forest fragments. Recently, weather stations have been established at this site and at Oranjia.

In addition to the practical experiments conducted by MBG to improve our methodologies for reforestation/restoration, in 2009, several researchers have conducted work with the support of MBG that will also inform our restoration endeavors. Swanni Alvarado has continued her doctoral research at the fire prone Ibity Massif on the impact of fire on various plant species and on the vegetation in general. Melissa De Wilde terminated her research on the resiliency of the transitional forest after clearing and cultivation along the edge of Andohahela National Park (a site managed by Madagascar National Parks) and successfully defended her DEA in June 2009.

In October 2009, two Malagasy graduate students, Noromiarilanto Fanambinantsoa and Ramanoelina Harijaona, began DEA studies at Andohahela. The first student will study the utility of transferring soil samples containing seed bank from intact forest to pastures as a tool in forest restoration. The second student will study the germination potential of the seed bank and the seed rain under controlled conditions. All these students were or are being co-supervised by Elise Buisson from l'Université d'Avignon et des Pays du Vaucluse, France and all but Melissa are co-supervised by researchers at the Université d'Antananarivo.

RNC in Latin America

ECUADOR

In May 2009, together with Nikolay Aguirre, of the Universidad de Loja, Ecuador, James Aronson, taught a two-week module on ecological restoration and RNC in Ecuador for 36 future conservation professionals from nine nations, including seven from Latin America. Seven additional students participated in the program. They were enrolled in an undergraduate program in "Restoring Natural Capital" at the Universidad Alfredo Pérez Guerrero, Extensión Gualaceo.

This took place in the context of a new international MSc. program called "Biodiversity in Tropical Areas and its Conservation." This innovative one-year degree course, of which Jesus Muñoz of Madrid is the director, was created by the International University Menendez Pelayo (IUMP) and the National Research Council of Spain, in collaboration with the Universidad Central del Ecuador. One week of the restoration and RNC module was spent in the cloud-forest life zone in southern Ecuador, in and around the town of Gualaceo, where our friends at the



Ecuagenera Nursery provided great support and hospitality. The second week was spent in the lowland tropical forest of eastern Ecuador, in the Amazonian cordillera of Cutucu-Shaimi.

The students taking part in this innovative course were provided training in the use of reference systems, and in writing grant proposals for RNC projects. The course will be repeated this year with the same personnel. Additionally, an RNC project for the Cutucu-Shaimi region is under development. An article describing the course is in press with the journal *Ecological Restoration*, as part of a special Theme on Education and Outreach that was organized and guest-edited by Aronson. All of the student group reports produced in the course are or will soon be available on the RNC website under "Categories" and "RNC Students".

MEXICO

Ties with Samuel Levy continue and have intensified, with focus on the Ph.D. program of Francisco Roman, for which Levy is the thesis director and Aronson is a member of the advisory committee. Another non-Mexican member of that committee is Ricardo Ribeiro Rodrigues from the University of Sao Paulo campus in Piracicaba, Brazil (see below). This PhD program is very strongly RNC-oriented, and two joint publications are currently in review.

In January 2010, Paddy Woodworth visited Lacandon Maya and Tzeltal villages in Chiapas with Samuel Levy, as part of his research for his forthcoming book on restoration (see below). He learned how the remarkable techniques for sustainable agriculture practiced by the former can be transferred to the latter as techniques for restoring degraded pasture to rainforest.

COSTA RICA

In late July, early August, 2009, Aronson visited several schools, research institutes, stations and parks in Costa Rica, where research and outreach on restoration is taking place.

These visits included the very well known Tropical Agricultural research centre, CATIE in Turrialba, the Instituto Nacional de Biodiversidad (InBIO) in Santo Domingo de Heredia, and the Organization of Tropical Studies research institute in Las Cruces. In Las Cruces Aronson was kindly hosted by Zak Zahawi, Director of the station, and shown projects underway in collaboration with restorationist Karen Holl.

Aronson also visited a primary and secondary school in Monteverde where a restoration education program is getting under way, and also the vast education program of the Área de Conservación Guanacaste (ACG), headquartered in the Santa Rosa National Park famous for the innovative, and long-standing restoration work initiated by Daniel Janzen and Winny Halwachs. Visits were made to the various restoration projects underway there, as well having excellent discussions with the education and bioliteracy department.

Three different articles from Costa Rica were solicited for the special section on the theme of Education and Outreach that will appear in *Ecological Restoration* in June 2010. Possible collaboration with Las Cruces and ACG is under discussion. At CATIE, a meeting was held with Daniele Celentano, a Brazilian MSc student who wishes to do a PhD on RNC in the Brazilian Amazon.

In January 2010 Paddy Woodworth also visited Daniel Janzen and Winnie Halwachs in Guanacaste, and Zak Zahawi in Las Cruces, researching material for his book.

BRAZIL

In November 2009, Aronson provided a plenary conference on RNC at the 3rd Ibero-American and Caribbean Network of Restoration Ecology (RIACRE) Conference, held in Curitiba, Brazil. Afterwards, he travelled to Piracicaba, where he spent four days with the restoration ecology unit of the Universidade de São Paulo/ESALQ (www.lerf.esalq.usp.br), a very dynamic lab led by Ricardo Ribeiro Rodrigues, mentioned above in connection with RNC network members in Mexico.) Discussions were held about opportunities for collaboration with the RNC Alliance, and a follow-up visit took place in early March 2010, after Aronson gave the keynote talk at a seminar on Opportunities for Ecological Restoration organized by CEMIG, a large electricity company based in Belo Horizonte.

Having recently finished his PhD in restoration ecology, Pedro Henrique Santin Brancalion (pedrohsb@yahoo.com.br) has kindly agreed to coordinate RNC Alliance correspondence in Brazil,

provide updates and new publications for the RNC Alliance website (see Portuguese version of our website www.rncalliance.org). We welcome Pedro and see great prospects for synergy and collaboration in Brazil in the near future.

RNC in the Pacific

AUSTRALIA

RNC was emphasized by plenary speakers and discussed in several panels at the World Conference on Ecological Restoration held in August in Perth, Australia. Nearly one thousand delegates from more than 50 nations attended the conference, which was organized by the Society for Ecological Restoration International.

RNC Coordinator Andre Clewell travelled from Perth to Sydney after the conference and gave presentations to groups ranging from a few local citizens who volunteer their time as bush regenerators on public lands to as many as 300 professionals at the Restoring Biodiversity 2009 Industry Forum.

Clewell, Tein McDonald (Editor of the journal Ecological Management & Restoration), along with other Australian bush regenerators spent several days in the interior of New South Wales planting trees to combat salinization. Transpiration from groves of trees in pastures interrupts soil saturation low in the soil profile and prevents deep saline groundwater from diffusing to the soil surface where it kills range grasses. The planting effort replaces trees that were cut down when pastures were cleared, which allowed “scalds” (salt barrens) to form in paddocks.

Clewell and McDonald toured two sheep farms whose owners had successfully converted their conventional hi-tech farming operations to ecologically sustainable agriculture. The conversion stimulated significant increases in both forage and profits after native perennial range grasses replaced non-native annual grasses that required frequent and intensive applications of agrichemicals. This restoration of native range provided compelling evidence for the validity and importance of RNC principles.

RNC FOR URBAN AREAS - HABITAT NETWORK

This project, being run by Bev Debrincat and Louise Brodie (International Environmental Weed Foundation - see www.iewf.org - co-ordinator RNC Pacific), continues to expand in Sydney and further afield. The Habitat Network has grown quickly to over 300 members (including households, businesses, community groups and organizations). All members are planting local native vegetation as habitat in their own gardens and on public lands (see *photo-left*) to help save dwindling populations of small native birds. The message is being spread through organized events such as planting days, bushwalks, RNC and habitat-oriented talks, nursery visits, stalls and networking.

This coordinated planting effort encourages community coherency (social capital), enlarges our natural areas and increases public awareness of the need for vegetation corridor links between natural areas and biodiversity.



As an expansion of this project we have organized a “Growing Community Network” of groups to seek government permission to develop community organic vegetable gardens and a community native plant nursery in the local government areas.

NEW ZEALAND

Paddy Woodworth visited the North Island in February/March 2010 at the kind invitation of Bruce Clarkson, Chair of the Dept of Biological Sciences at the University of Waikato in Hamilton, on a trip partly organised by the Department of Conservation. He visited a wide variety of impressive restoration projects, including several ‘mainland islands’, where endangered native species – primarily birds, reptiles and insects, but also plants - are restored through the exclusion and eradication of alien mammals – ranging from mice through stoats to deer.

RNC in Europe

In November, 2008, James Aronson gave a talk on RNC and participated in a European conference on Biodiversity and Compensations, organized by the European Platform for Biodiversity Research (EPBR) 2008 Week, National Museum of Natural History, Paris, France. This led to an invitation to discuss RNC at an International Workshop held in Paris in December 2009 on Economic instruments to support water policy in Europe - paving the way for research and future development.

Aronson participated in the Seminar on "Investing in Restoration pays" organized by R. de Groot and D. Lamb, at the IUCN's World Conservation Conference, Barcelona, Spain, in October 2008, this led to him being invited to participate in the important initiative of the UNEP and the European Commission called The Economics of Ecosystems and Biodiversity (TEEB).

Aronson participated in the TEEB lead authors meetings held in Bonn, Germany in January 2009, and both he and James Blignaut participated in the second lead authors meeting, held in Ispra, Italy in July 2009. They were contributing authors to the first two chapters of Volume One (see www.teebweb.org), and were lead authors of Chapter 9 of Volume 2, downloadable at www.rncalliance.org under "New Publications".

On September 30, 2009 Aronson provided the Keynote speech to inaugurate the fourth year of the Inter-University Masters program in Ecosystem Restoration, at the Universidad de Alcalá de Henarez, near Madrid, Spain. Collaboration with Luis Balaguer of this program is underway for preparation of an introduction textbook on ecological restoration and RNC that is to be prepared in 2010, together with Carolina Murcia, of Colombia.

In further news related to publications, a French translation of Clewell and Aronson's 2007 book: *Ecological Restoration: Principles, Values, and Structure of an Emerging Profession* (see www.rncalliance.org under "New Publications".) was prepared in 2009 and will be published in June 2010 by the distinguished French publisher Actes Sud.

Furthermore, following the first meeting of the French network on Ecological Restoration, REVER, a special issue on restoration was published in the professional journal, in which RNC personnel provided both the introductory essay and a short article about RNC (see articles in French on our website.) Aronson is also helping organize the upcoming SER 2010 conference to be held in Avignon, France in August 2010. Appropriately, the conference theme will be "Ecological Restoration and sustainable development." Visit www.seravignon2010.org for more information. See also www.reseau-rever.org for information about the francophone network on ecological restoration co-ordinated by Elise Buisson and Thierry Dutoit of the University of Avignon.

Finally, Aronson worked with Sasha Alexander, Special Project officer of the Society for Ecological Restoration International (SER) to produce a Technical Document called "Ecosystem Restoration and Species Recovery". In November, 2009, this document was submitted to the Secretariat of the Convention on Biological Diversity (CBD) for use while preparing the upcoming Convention of the Parties (COP) 10 meeting that will be held in Nagoya, Japan in October, 2010. In addition, a side event is being planned which SER will co-host with IUCN World Commission on Protected Areas, and the Ramsar Convention on Wetlands, in conjunction with the RNC Alliance and TEEB. The theme of this side event is "*Restoring ecosystem services for sustainable development and climate change*".

Publications

BOOKS

If you haven't a copy yet you can follow the links from www.rncalliance.org to buy your copy of: *'Restoring Natural Capital: Science Business and Practice'* (2007) (Aronson, Milton and Blignaut, editors) which is the first full-length book on RNC, available from distinguished not-for-profit publisher Island Press.

Clewell & Aronson's *'Ecological Restoration: Principles, Values, and Structure of an Emerging Profession'*, publisher Island Press.

Aronson, J., J.S. Pereira & J. Pausas, eds. (2009). *'Cork Oak Woodlands in Transition : Ecology, Biogeography, and Restoration of an Ancient Mediterranean Ecosystem'*, publisher Island Press.

See also the new Blondel J., Aronson J., Bodiou J.-Y., & Bœuf, G. 2010. *'The Mediterranean Basin -*

biological diversity in space and time'. 2nd edition, Oxford University Press. In this new edition, restoration and RNC are given ample coverage in the context of the rapidly changing Mediterranean region.

COMING SOON

Clewell, A. F. & Aronson, J. In press. '*Restauration Ecologique: Principes, Valeurs, et la Structure d'une Profession Emergente*'. Actes Sud. Arles, France (to appear in June, 2010).

Bautista, S., J. Aronson & R. Vallejo, eds. (in press) '*Land Restoration to Combat Desertification: Innovative Approaches, Quality Control, and Project Evaluation*'. CIHEAM, Zaragoza, Spain. Authors of chapters include Andre Clewell, James Aronson & James Blignaut.

SCIENTIFIC PAPERS & CHAPTERS

Aronson, J., D. Renison, O. Rangel-Ch., S. Levy-Tacher, S., C. Ovalle, & A. Del Pozo. 2007. '*Restauración del Capital Natural; Sin reservas no hay bienes y servicios*'. *Ecosistemas* 16(3): 15-24 (In Spanish with English Abstract).

Blignaut, J.N., Marais, C., and Turpie, J. 2007. '*Determining a charge for the clearing of invasive alien plant species to augment water supply in South Africa*'. *Water SA*. 33(1):27-34.

Blignaut, J., J. Aronson, M. Mander & C. Marais 2008. '*Investing in natural capital and economic development: South Africa's Drakensberg Mountains*' *Ecological Restoration* 26:143-150.

Blignaut, J.N. and J. Aronson. 2008. '*Getting serious about maintaining biodiversity*'. *Conservation Letters* 1: 12-17.

Libanda, B. and Blignaut, J. 2008. '*Tourism's local benefits for Namibia's community-based natural resource management areas*' *International journal for ecological economics and statistics*. 10(W08):40-52.

Turpie, J.K., Marais, C. and Blignaut, J.N. 2008. '*Evolution of a Payments for Ecosystem Services mechanism that addresses both poverty and ecosystem service delivery in South Africa*'. *Ecological economics*. 65: 788 – 798.

Van Heerden, J.H., Blignaut, J.N. and Horridge, M. 2008. '*Integrated water and economic modelling of the impacts of water market instruments on the South African economy*'. *Ecological economics*. 66(1):105-116.

Neßhöver, C., Aronson, J., J.N. Blignaut, D. Lehr, A. Vakrou, and H. Wittmer et al. 2009. '*Investing in Ecological Infrastructure*' Chapter 9 in P. Ter Brink et al. Eds, *The Economics of Ecosystems and Biodiversity (TEEB)*, TEEB for National and International Policy Makers (D1) - www.teebweb.org.

Blignaut, J.N., Ueckermann, L. and Aronson, J. 2009. '*Agriculture production's sensitivity to changes in climate in South Africa*'. *South African Journal of Science* 105: 61-68.

Aronson, J. 2008. '*La restauration écologique*'. *L'Encyclopaedia Universalis*. Volume on Conservation of Biodiversity edited by R. Barbault (In French).

Clewell, A. 2009 '*Guidelines for reference model preparation*'. *Ecological Restoration* 27:244-246.

Clewell, A., & T. McDonald. 2009. '*Relevance of natural recovery to ecological restoration*'. *Ecological Restoration* 27:122-124.

Clewell, A. 2009. '*Intent of ecological restoration, its circumscription, and its standards*'. *Ecological Restoration* 27:5-7.

Aronson, J., J. Blignaut, R.S. de Groot, P.P. Lowry II, A. Clewell, P. Woodworth, R. M. Cowling, D. Renison, S. Levy-Tacher, D. Tongway, S. Milton, O. Rangel-Ch., M. de Wit, J. Farley, C. Fontaine, B. Debrincat, and C. Birkinshaw 2010. '*The Road to Sustainability Must Bridge Three Great Divides*'. *Annals of the New York Academy of Sciences* 1185: 225-236. Special issue, *Ecological Economics Reviews*.

COMING SOON

Aronson, J., Blignaut, J.N., Milton, S.J., le Maitre, D., Esler, K., Limouzin, A., Fontaine, C., de Wit, M. W., Mugido, W., Prinsloo, P., van der Elst, L., and Lederer, N. (in press). '*Are socio-economic benefits of restoration adequately quantified?*'. A meta analysis of recent papers (2000-2008) in Restoration Ecology and 12 other scientific journals (Restoration Ecology 18:000-000).

To appear in March, 2010

Special theme on Education and Outreach in Ecological Restoration. 11 articles assembled by Guest editor : James Aronson. (To appear in June 2010 in Ecological Restoration).

Aronson, J., and J.N. Blignaut (in press). '*La restauration du capital naturel : un outil clé dans la quête d'un futur durable*'. In : P.H. Gouyon & H. Leriche, Eds. Aux Origines De L'environnement. Fayard, Paris.</p>

de Groot, R; (in press). '*Mère Nature: Les services que les écosystèmes naturels rendent à la société humaine*'. In : P.H. Gouyon & H. Leriche, Eds. Aux Origines De L'environnement. Fayard, Paris.</p>

Blignaut, J, Mander, M, Schulze, R, Horan, M, Dickens, C, Pringle, C, Mavundla, K, Mahlangu, I, Wilson, A, McKenzie, M, McKean, S. (in press). '*Restoring and managing natural capital towards fostering economic development: Evidence from the Drakensberg, South Africa, Ecological Economics*.'

de Groot, R., B. Fisher, M. Christie, J. Aronson, L. Braat, R. Haines-Young, J. Gowdy, E. Maltby, A. Neville, S. Polasky, R. Portela, and I. Ring (in press) '*Integrating the ecological and economic dimensions in biodiversity and ecosystem service valuation*'. Chapter 1 In: Pushpam Kumar et al. Eds, TEEB vol. DO - The Economics of Ecosystems and Biodiversity, TEEB for Scientists. Visible at: www.teebweb.org

Elmqvist T.E., Maltby E., Barker, T., Mortimer, L., Aronson J., De Groot R., Fitter A., Mace G., Norberg J., Perrings C., Sousa Pinto I. and Ring I. (in press). '*Biodiversity, ecosystems and ecosystem services*'. Chapter 2 in Pushpam K. et al. Eds, The Economics of Ecosystems and Biodiversity (TEEB), TEEB for Scientists. Visible at: www.teebweb.org

POPULAR ARTICLES

James Blignaut is an associate editor and responsible for a column in an African Agriculture magazine called The Farm Africa. His contributions to this magazine can be downloaded from our website. They all deal with the interface between Agriculture, economic development and the prudent use of resources.

Paddy Woodworth is currently researching a book assessing the actual and potential impact of ecological restoration projects around the world, provisionally titled Restoring the Future: the Race to Restore a Damaged Planet, due from Chicago University Press next year.

Articles published in 2007/10 include:

'*Green on Red*', a report on the 2nd conference on ecological restoration in Santa Clara, Cuba, and on an ecological restoration education project on the island. Irish Times 26 May, 2007.

'*Back to Nature*', a report on the No Child Left Inside session at the ESA/SERI conference in San José, USA. Irish Times, 5 January 2008.

'*Restoration Works*', a report on post-mining restoration of the Jarrah forest in SW Australia by Alcoa. Irish Times, 24 September 2009.

'*Dreamtime in Gondwanaland*', a report on the Gondwana Link, a project which aims to restore and reconnect eight ecosystems across 1000 km in SW Australia. Irish Times, 24 October 2009.

'*A Personal Assessment of the SERI Conference in Perth and What It Reveals about the Society*', Ecological Restoration, March 2010.

2010

Aronson, J. 2010. '*Restauration, réhabilitation, réaffectation. Ce que cachent les mots*'. *Espaces Naturelles* 29 : 22-23.

Aronson, J. 2010. '*La restauration du capital naturel, un enjeu humain, culturel, économique et écologique*'. *Espaces Naturelles* 29 : 33.

Alexander, S. and J Aronson (lead authors). 2009. Society for Ecological Restoration International (SER) Technical Document on the Implementation of Article 8 (f) '*Ecosystem Restoration and Species Recovery*'. Submitted to the Secretariat of the Convention on Biological Diversity (CBD). Available at www.ser.org

Blignaut, J.N., De Wit, M, Esler, K, Milton, S, Le Maitre, D, Mitchell, S, Van der Elst, L. 2010. '*Restoration in South Africa – a case study*'. *Quest* 6(1):14-18.

WEBINARS and INTERNATIONAL CONFERENCES

30 September, 2009. Universidad de Alcalá de Henarez, Spain. J. Aronson gave the opening address to inaugurate the fourth year of the Inter-University Masters program in Ecosystem Restoration, Alcalá de Henarez, Spain.

10-12 November 2009. J. Aronson was a plenary speaker, at the 3rd Ibero-American and Caribbean Network of Restoration Ecology (RIACRE) Conference, Curitiba, Brazil.

9-10 December 2009. Aronson was invited speaker, round table participant and session chair. International Workshop on Economic instruments to support water policy in Europe. Paving the way for research and future development. ONEMA, the Office National de l'Eau et des Milieux Aquatiques. Paris, France.

2010

28-29 January 2010. Member Scientific Organizing Committee, Second Annual Symposium of REVER, the French Network on Ecological Restoration. Brest, France. See www.reseau-rever.org

23-27 August 2010. The 7th Congress of SER-Europe on Ecological Restoration and Sustainable Development, in Avignon, France - www.seravignon2010.org



Left: Andre Clewell assisting with bushland restoration work in Sydney Australia, August 2009.

Below: James Aronson gives an informal lecture - in the field in Ecuador, May 2009

