# **TEMs Links**



March 2005

VOLUME 6 ISSUE 1

### CC's Corner

Dear All

Welcome all to another bumper issue of TEMS Links. Current students are now up to their eye-balls in assignment work and having a wonderful time on their TEM units, aren't you all (!)



Welcome to a new cohort of students, Danny Noonan, Graeme Armstrong from Gayndah (Qld), Dr Ingvar Anda from Perth (WA), Jennifer Descalso from the Philippines, Carmen Crossing from Flinders Chase National Park (SA), Matt Gillis, based in Darwin, working for NT Parks and Wildlife, Andrew Bengsen, Townsville City Council, Kirsten Pearce, CALM in the Kimberley Region (I couldn't spell Kununurra Kirsten), Jan Riley who is based in Darwin with the Institute of Advanced Studies at CDU and Mirjana (Mim) Jambrecina who is based at Yulara (NT), and is with the Commonwealth Dept of Environment and Heritage. This a terrific spread of people, places and backgrounds!

In addition we wish well the 16 students who are graduating from the program at the May graduation ceremony this year. A number have taken the exit awards Graduate Certificate and Graduate Diploma, and several students plan to come back to add on more units and a research program for their Masters degree.

We will endeavour to keep in touch with this growing alumni – Penny Wurm and Cheryl Arnott have been busy compiling recent activities of some of our graduates — makes very interesting reading. Welcome aboard to Cheryl Arnott, who is a full-time member of the Savannas CRC team based in CDU, Darwin. Cheryl will be devoting some of her time to the newsletter and research activities for the CRC Savanna Education project.

A new unit is now available as an elective that TEM students can take, Field Studies in Tropical and Desert Landscape Processes (SES360), involves studies along a continental-scale biogeochemical gradient. The unit hinges upon a 10 day field trip that travels along the environmental gradient from Alice Springs to Darwin stopping at 3 locations. At each location, local variations in landform, soil and vegetation will be assessed, with an emphasis on the use of computer based technologies in the field

A slightly fuller detail is given in Unit Repository and more detail is available from Dr Guy Boggs (School of Science & Primary Industries, CDU, guy.boggs@cdu.edu.au).

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#### **TEMS LINKS**

- Aims to keep students of Tropical Environmental Management Program in touch with each other and with staff in the course
- Contributions from students and others are always welcome, and should be sent to

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In other news, our Dean of Faculty Prof Greg Hill has moved up the food chain to become Deputy Vice Chancellor of the University of Sunshine Coast, Queensland. Greg was with the University for 10 years and was instrumental in developing the TEM program in collaboration with the Savannas CRC. This is a promotion for Greg, who has a vast experience of the challenges that small regional Universities face and we wish him well.

Speaking of challenges, the Northern Territory has many challenges ahead as it strives to sustainably manage its natural resources, water resources being a hot topic. The north is in the enviable position of having these challenges in the future rather than having to try to rectify the mistakes of the past and such issues will be discussed at an upcoming conference *Groundwater Surface Water Interaction in the Tropics*, May 26-27, <a href="http://www.iah.asn.au/conference.html">http://www.iah.asn.au/conference.html</a>. Few things in life are free but for students this conference is indeed FREE, so bring your student card if your in Darwin then or are a local student. A information and a registration form is provided at the end of the newsletter for those interested.

Enough from me, hope your semester goes well, Regards, Lindsay Hutley Course Coordinator CDU, Darwin

#### Welcome to Cheryl Arnott

Following the departure of Lynda Prior to full time position in the Key Centre for Tropical Wildlife Management in the Institute of Advanced Studies (see last edition of *TEMsLinks*), Cheryl Arnott is now the editor-intraining of *TEMsLinks*. Those on Campus may have seen Cheryl in B42. Cheryl has previously in Research Branch and the Education Faculty and has been at CDU for many years, her primary duties are as Assistant to TS-CRC CEO. If you have articles or items for future editions Cheryl will be pleased to hear from you.

Penny Wurm

Higher Education Project

Tropical Savannas CRC: http://savanna.cdu.edu.au/

MTEM Projects' Coordinator: http://learnline.cdu.edu.au/units/sbi520\_544/index.html

#### Hello All

As Penny has mentioned, I am new to the *TEMsLinks* team. I look forward to continuing the good work of Lynda in producing a new issue 3 times a year. And maybe meeting some of you TEM students and graduates, through your articles or in person. Your stories indicate the many interesting and varied paths that you travel—both before and after graduation and are a good advertisement for TEM courses.

Cheryl Arnott Assistant, CEO Tropical Savannas CRC http://savanna.cdu.edu.au/

### Volunteering — in Gregory National Park

Russell Carlisle is a student in the Bachelor of Environmental Science and completed a stint in Gregory National Park as a volunteer in the Devil's Claw control program

When I first came across the advertisement for the Devil's Claw Festival I was keen to be involved but was a bit dubious about the title "Festival". I even looked the word up in the dictionary thinking the term "working bee" would have been more appropriate.

As it turned out the "Festival" is aptly named. It's a two week volunteer work activity with the NT Parks and Wildlife at Gregory National Park, Australia's second largest National Park and the smaller brother of Kakadu with far less tourist activity.

Devil's Claw is a weed that lives in the Park's river system and prevents the growth of native plants and causes injury and infection to native animals.

The aim of the activity is to traverse by foot, sections of the Wickham and East Baines Rivers, looking for young germinating Devil's Claw weed; a class A weed that aggressively shades out native vegetation along the riparian zone of waterways.

It can get pretty hot but most of the walking is done in the early morning so it's not too bad. There are some safe waterholes to swim in which are a god-send, fantastic scenery, a great crew from the Parks and Wildlife at Timber Creek and even the odd cold beer or two.

The festival is held biannually for two weeks around April and December though you can do just one week if you can't commit for the two weeks.

Fun, interesting, hard work, social and rewarding; do yourself a favour and get along to the next Devil's Claw "Festival".

The Devil's Claw Festival is a volunteer environmental project that does make a difference. You see, it's the volunteer's job to help eradicate the weed!

Russell Carlisle



Russell Carlisle at work on the removal of the class A weed, Devil's claw along the Wickham River

If you've got some spare time and feel like a bush trip packed with adventure and fun, why not come to Gregory National Park and participate in the Devil's Claw Festival.

The Festival runs 4-15 April 2005 and volunteers should be physically fit and enjoy spending time in the bush. Northern Territory Parks and Wildlife Service will provide food and transport around the Park.

If you're interested, please call Aaron Ledgard on 8975 0833 or 8975 0888. But be quick, as places are limited!



Devil's claw fruit



Devil's claw foliage

#### TEMS' Guinea Pig Survives Against All Odds

Wendy Gillespie, TEM graduate writes of her projects since graduating.

I write to you as a contemporary environmental activ- and in 1998 I innocently rescued the first incapacitated ist cocooned in a subtropical rainforest and heath hide- young male pelican. away in South East Queensland. In hindsight return to my home state of Queensland may not have been a wise career move. The primary attractions for return were regular surfing and being able to see pelicans in the coastal environment, a relative rarity in the NT. Seven adventurous and diversely fulfilling years had been spent in the Territory sailing, studying commercial music, and invigorating the naturalist in me highlighted by being one of the first MTEM graduates.

The journey since graduation has been personally challenging, with many opportunities to work within the Queensland public sector to promote wildlife and environmental management foregone. Instead an NGO environmental destiny has emerged, and I have also availed of the opportunity to work within academia as a part-time tutor in "Science and Sustainability" at Sunshine Coast University. Simultaneously before the end of the millennium I worked in a full-time capacity with Barung Landcare as Community Coordinator for the Recovery of the Mary River Cod, and held a range of honorary roles with Noosa's catchment group.

Ironically a career in environmental management appears not to have been my destiny. The fork in the road came when enjoying Noosa's "lifestyle" and the pelicans that I had returned to Queensland to appreciate. During the early days following return it became evident that pelicans in a peak tourism environment were not having as much joy as those who gained appreciation from their presence. Debilitation from multiple fishing tackle attachments was a common sight

Today I am undoubtedly in the Queensland government's "list of environmental extremists" i.e. contemporary wildlife welfare activists ever more vocal in an accelerated climate of tourism, development, fishing and consequent deafening media censorship. Environmental activism can be an expensive hobby as it generally leads you into a highly focused career-free financially challenged zone where friends can be counted on one beak.

From our naïve tackle-disentangling beginnings in 1998 a local waterbird rescue service blossomed. It soon burgeoned into a rescue, injury prevention and education program that serviced South East Queensland due to the evident void in on-ground government wildlife welfare response.

Along the way through necessity, we became media savvy with a strong TV, radio and print media presence. Our sixth Totally Wild segment shall be filmed this month featuring "Noosa's Most Famous Pelican" who has been flight-impaired for 27 years. Until 2003 our cost recovery lifeline as a community group was Coastcare, with five projects completed on a local, regional and statewide basis to our credit. We are hoping that corporate sponsorship from the new commonwealth NHT driven program may assist us in our next phase of engendering wildlife welfare through an innovative secondary schools program.

As a wildlife welfare group we rode the early wave of

menial government grants and bureaucratic favor, with the Environment Minister launching our Pelican Club for Kids. Green politics is an interesting phenomenon with abrupt media censorship appearing to coincide with the global events of 2001. The consequent concerted push for regional tourism and holidaying at home in safety, included the inherent media charge of "green washing". Environmental issues and for that matter social and economic issues stopped reaching the greater masses on the Sunshine Coast so that the clean and green image would attract greater visitation. With no impacts?



Wendy and a fellow rescuer at work at Noosa

The joy of celluloid is that our myth, legend and our key injury prevention and humane care taking messages live on. Examples include a segment in the Aussie Animal Rescue Series which has repeatedly aired nationally and globally, as have the many Totally Wild segments aimed at future environmental care takers.

A copy of the documentary "Plight of the Pelican" by Ben Cropp programmed to air nationally last month has been provided for TEM viewing. A less politically correct documentary shall be made with the years of footage into the medium term future.

During the seven years of on ground experience over 1000 pelicans have been directly assisted many of them juveniles at particularly high risk in a human environment during their first two years in amongst the Sea Change. We have also had the special experience of seeing hundreds of other resident waders and seabirds in distress, including giant petrels and albatross treated and returned to the wild. Our statistical, photographic, film, and artistic records have been inspired and historical records enhanced and accelerated with the timing of the extended drought.

These combined and varied experiences have motivated me to return to undertake formal research that shall contribute towards the conservation of Australia's pelican. So by the time you read this article I shall have completed the necessary administrivia that shall enable me to continue the journey as an environmental care taker. A research doctorate focusing in the area of "pelican population genetics" is envisaged, and I am keen to work with "Environmental activists never die. They repeatversity. Returning to where I first commenced this can refocus for the flame to burn brighter!" exciting and fulfilling journey as an undergraduate in environmental science over two decades, is an additional and unanticipated aspect of this adventure.



Some of the injuries that are evident







the CRC for Riverine Landscapes at Griffith Uni- edly suffer burn out but get recycled so that they

Web site address:

www.waterbirdrescue.org.au, email: wendy@... or ops@...

#### Feel free to phone: 07 5485 3054, PO Box 604 **TEWANTIN QLD 4565**

PS: "None of the Tourism levies on the Sunshine Coast & beyond in Queensland are being reinvested in environmental/wildlife sustainability. In Noosa all money is used for marketing i.e. \$1.5 million per annum extra taken from our community". Our organization in its 7th year cannot gain any funds i.e. denied funding in Noosa since 2001 as we are too active and vocal.

#### A TEMs Young Achiever

Janelle Fisher, and MTEM graduate, has been nominated as a finalist in this year's Northern Territory Young Achiever Awards. Janelle, a 25 year old from Palmerston, is nominated for three awards for her work as an Occupational Therapist who has since undertaken a Masters in Tropical Environmental Management.

Janelle has researched the interaction between pollens and hay fever in the Darwin region – the first ever description of Darwin and Tropical Australia's aerobiology. Her project is part of a larger ARC Grant and was conducted concurrently with the "Darwin Smoke Project", a large study on smoke pollution and human health in the Darwin Region.

The purpose of these awards is to acknowledge, encourage, reward and most importantly promote the positive achievements of young Territorians aged between 14 and 26.

The Awards recognise the achievements of the Northern Territory's youth in eight categories, they are: Community Service; Sport; Arts; Environment; Career Achievement; Science & Technology; Regional Initiative and Excellence in Youth Leadership.

Presentations for 2004 will be made 9 April, to coincide with National Youth Week.



Janelle Fisher

#### **TEMs Island Adventurer**

Kirstin Pearce, a current TEM student, has been working on Adele I sland on Ashmore Reef off the WA coast. She has been part of a massive operation to try and eradicate *Rattus exulans*, or Pacific rat.

Kirstin "went back to the Island again recently on a customs boat and put out 2 trap lines, which caught "6 fat and happy rats". Nonetheless the Island, should get Ramasar listing, is at the "absolute top of the wow factor list for birds. Boobies, frigates, terns, noddys, etc... endless birds and in massive numbers, and in the greatest density. *Spinifex longifolius* is one of the less pleasant aspects of the place."

It is understood that the rat arrived on the Island from Indonesia, and does not live on the Australian mainland. It is a threat to native seabirds that breed on the island. The population of which is estimated at up to 8000. The rats are known for taking the eggs and chicks of seabirds, especially on Pacific atolls.

Other work being carried out on the I sland involves turtle logging stations at Lacepedes, a French-named group of four islands 150 kilometres north of Broome.



Kirstin putting in CALM signs (hence bucket for water to make cement) on Adele I sland

#### From the Great Barrier Reef to the Incas

Deb Bass, a MTEM graduate, sends news of her travels over the last few months.

"I had a goal to finish my thesis for MTEM last June before taking 4 months leave from my work at the Great Barrier Reef Marine Park Authority. The thought of travelling to Peru to hike the Inca Trail and exploring the Galapagos I slands were what kept me focused on finishing my thesis. After studying for two and a half years part time, my holiday plans seemed like a fitting reward to make up for the loss of seemingly endless weekends spent at a computer! So thanks to the weekly pep talks with Penny I did finish my thesis and headed off to the wilds of South America last September.

Since I returned to work at the GBRMPA in January I was encouraged to take a new position to coordinate the engagement of the community in marine monitoring as part of the Reef Water Quality Protection Plan (RWQPP). The Reef Water Quality Protection Plan was developed in 2003 as a joint initiative of the Queensland and Commonwealth Governments. The by no means small goal of this plan is to halt and reverse the decline in water quality in the waterways entering the Great Barrier Reef waters, over a ten-year period. In order to measure if this goal is being achieved, a large coordinated program of water quality and ecosystem monitoring is being done. Part of this monitoring program will be to involve the community in sampling and to provide them with information about the monitoring results.



Deb in her new job doing some sampling during floods

It is my role to facilitate community involvement in the monitoring programs and also provide a communication and information link. I was asked to apply for this job because of my previous position in coordinating community advisory groups but largely due to the work I did for my thesis in evaluating the community-based monitoring program, Seagrass-Watch. I've already been able to put some of the lessons I learned from my study into practice in this new position to ensure we don't make the same old assumptions about involving the community that are so often made by Government agencies.

So I can genuinely say it was all worth it, Machu Picchu was awesome and well, my new job is pretty fun too. My boss reckons the only way he can tell the difference between the work and the holiday photo is because of the GBRMPA cap!"



Post thesis: reaching Machu Picchu



### Thesis Submissions

By Penny Wurm MTEM Research Projects Coordinator penny.wurm@cdu.edu.au

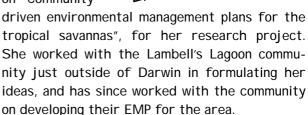
Since the last edition of TEMsLinks the following theses have been submitted and/or examined. A big congratulations to you all!

Menadue investigated protocols for "Delineation of conservation zones in Bradshaw

field training site". has concluded her project with a seminar presentation to the staff who manage Bradshaw. (Note: Kelly actually handed in just as the November edition of TEMSLinks went to press.)



Eddle-**Fiona** ston worked on "Community



Janelle Fisher - joined the team working on a large ARC grant, and tackled "The Darwin pollen Keith Tayler's thesis focused on "The Northern



munity", under the supervision of Dr Fay Johnston in Darwin and Dr Simon Haberle at ANU.

and hayfever study: a description of the aerobi- Territory Extractive Industry - A Review of ology over Darwin during a six Industry Performance Against Accepted Ausmonth period and its relation- tralian Standards of Best Practice in Mined ship with hayfever in the com- Land Rehabilitation". Keith's employment in the



Department of Mines and Energy means he is in a good position to lobby for the results of his research to be picked up and used.

### **Position Vacant Environment Centre NT**

#### **Darwin Administration Officer**

The Environment Centre NT is a community organisation formed in 1983 to advocate for environmental protection across the NT.

A suitably qualified person is sought to coordinate office management and financial records. This part time (3 days/wk) position is for an initial 6 month period, with a view to extension.

Salary \$42 - \$44,000 pro rata, and 9% superannuation. Please send applications and references to ECNT.

Email: ecnt@octa4.net.au

Postal: Environment Centre NT, GPO

Box 2120, Darwin, 0800.

Call 8981 1984 or visit www.ecnt.org Applications close Friday 22 April 2005



#### Groundwater Surface Water Interaction in the Tropics—26 and 27th May, 2005—Darwin

Groundwater and surface water systems interact to produce riverine ecosystems that are in excellent condition in northern Australia. All the perennial rivers of northern Australia are sustained by groundwater inflows during the dry season.

There is also an increasing recognition of the potential for land use change to impact on recharge to an aquifer. As a resource nears full allocation, changes in recharge due to land use change become more important.

The aim of the seminar is to provide information that will help understand the processes occurring and hence guide the development of land and water management practices that will prevent adverse impacts on the ecosystems sustained by spring flows into tropical river systems.

Northern Australia is underlain by large sedimentary basins that are host to aquifers that have developed in carbonate units. The aquifers provide large spring flows into a number of river systems. The organisers are keen to attract presentations that address karst in tropical environments.

The seminar will consist of a workshop on Thursday the 26 May and presentation of papers on Friday the 27 May.

#### Workshops

The two half-day workshops will focus on techniques that can be used to quantify groundwater surface water interaction in the tropics.

#### Groundwater Chemistry and Environmental Isotopes in Groundwater - Peter Cook

An introduction to the principles of sources of dissolved ions, chemical processes leading to observed variations in groundwater chemistry, how chemistry and environmental isotopes can be used to trace groundwater flow and recharge, and groundwater dating methods.

#### Recharge / Discharge Determination - Peter Cook (CSIRO), & Lindsay Hutley (CDU)

Quantification of recharge is basic to assessment, development and optimal utilisation of groundwater resources. Quantification of discharge is usually associated with water pollution problems, for example salinisation and desertification. For optimal utilisation and resource protection, recharge and discharge need to be quantified in relation to their location and influencing factors.

#### **Presentations**

Papers for presentation on the 27 May are sought for the following four sessions:

The spatial aspects of connection for the river-aquifer systems of northern Australia and the identification of groundwater dependent ecosystems and their level of dependence.

The temporal aspects of connection including the lags, attenuation and seasonal variation in extraction impacts, including the use of buffer zones for maintenance of spring flows and quality.

Aspects of legislation and water allocation plans that explicitly recognise that, in highly connected systems, rivers and aquifers are 'one resource'.

Involvement of the broader community in the management of groundwater resources.

IAHNT is keen to involve schools in the presentations on the 27 May. To encourage that involvement IAHNT will be awarding a prize of \$1000 each to two school groups who will be selected to give a presentation on groundwater surface water interaction.

The registration fee for the seminar is \$200 for all attendees other than students. This fee includes attendance at the two workshops. **There will be no registration fee for students.** 

### **TEM Graduate updates**

Carlos Ximenes (MTEM, International Student from Timor Leste) is working as Chief of Staff for the Minister of Development and Environment, Ministry of Development and Environment, Timor Leste. In this capacity he travelled to Nairobi (Kenya) in March for a seminar organized by United Nations Environmental Program (UNEP). It was a Ministerial meeting, however the Prime Minister nominated Carlos to represent him. From the 27th until 30 of March, Carlos travels to South Korea for a Ministerial Conference in Environmental and Sustainable Development also representing the Minister organised by UNES-CAP.

Johanna Karam (MTEM) was in Darwin again briefly to pack up all my things before being called off to help out in Aceh for a few weeks. Jo said this was extremely hectic and tiring. She is now back in the much more reasonably paced East Timor and settling back into her regular work with Oxfam Australia in Oe-cusse.



Monica Gomez (GDTEM, International student from Columbia) is scheduled to start work with a NGO in Mexico where she is now living. Her work will be the development of a management plan for a nature reserve in Quintana

Roo, Mexico.



After returning to Denmark, **Jannie Linnebjerg** has been having high adventure at the Mauritian Wildlife Foundation, Black River, Mauritius. Jannie was an exchange student from Aarhus University, along with Pernille Madsen and Soren Faurby in Semester 1 2004.

Marianne Damholdt (GCTEM, international student from Denmark, affectionately know to her TEM colleagues as Muzza) has just returned to Denmark after 3 months in Vietnam, where she is doing her Masters project with the University of Aarhus. The outcome will be a management plan for a land crab species, the same as the red crab of Christmas Island. Her research site is on a group of small islands in central Vietnam, where the local people collect them to eat or sell, so the crab numbers are decreasing. It seems that in Vietnam this may be the only place they are found. Keith McGuinness may be pleased to learn that Muzza is reading some of his papers to learn more about crabs. Muzza wonders that she may one day return to Oz in her pursuit of knowledge of the crab. She is off to Poland in May to attend a wildlife management course in the last wild (Primary) forest in Europe. And then back to Vietnam in July. She hopes to complete her Masters by January.

Amaral Chibeba (MTEM, International student from Mozambique) has emailed us recently to report on his new position since returning home to Mozambique. In November 2004 Amaral was appointed as the Cashew Production and Marketing Project Manager on a project covering three districts in Nampula, in the north of Mozambique. This is a four year project worth about 1,500,000 Euros. The project aims to increase the income of rural households by improving their cashew yield by reducing pests.

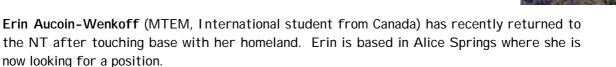
Kelly Menadue (MTEM) is now happily working with the Tropical Savannas CRC as a Regional Fire Research Project Officer, on the Fire Knowledge Project. Kelly reports: "I am currently collating and summarising approximately 300 journal articles that are of relevance to fire in the savanna region of the NT into a plain language format for the new land manager's web site . [I am also] finishing off Mark [Gardiner]'s fire-obligate seeder work - writing information sheets for the 10 bushfire council regions about what species are located in

their region and the type of land system that they are in. Also, about to start going out and talking to land managers and traditional land owners about their experiences with fire (good and bad) for the new land managers web site. In addition this I am producing fire history maps for interested land managers and attending landcare group meetings. "

For more information about the project see: <a href="http://www.savanna.cdu.edu.au/">http://www.savanna.cdu.edu.au/</a> internal/fire\_knowledge\_proj.html

Michelle Press (MTEM, International student from Florida) recently emailed to say "I was invited to come to the International Whale shark conference in Perth in May. Of course I couldn't come to Aus without visiting Darwin so I will be sure to stop by and say hi. I will be in the NT from May 14-19th."

Makoto Hasebe (MTEM, International student from Japan) has started a new job in April, back home in Japan, this time he will be in Siretoko Nature Park in north eastern Hokkaido. The Park is likely to be listed as a World Heritage site in the near future. His work will focus on wildlife management, especially deer and bear that inhabit the area. Makoto also said (without any prompting from us!) that his MTEM qualification helped him get the job.



**Penny Marchment** recently emailed from Perth to update us on her employment since completing her GDTEM in Darwin. Penny wrote:

"It's been exactly 1 year since I left Darwin, and I'm still considering doing a MTEM!

I've been working for an environmental employment agency called Ecojobs since March - weed management, reveg. etc. I was employed, fulltime, from mid-May to mid-October at Bold Park, a coastal bushland conservation area of  $\sim$ 430ha adjacent to Perry Lakes in Floreat/City Beach.

The Botanic Gardens and Parks Authority - which also manages King's Park - recently offered me a fulltime 2 year contract there, which I began on Wednesday 10th Nov. So I'm now officially a Government employee (Environmental Field Operator, Level 2.1),

and totally happy with the financial rewards and training incentives afforded by the position (firefighter training and reptile handling courses coming up soon). I also grew up in the area and am totally familiar with the surrounds."

#### **Land Clearing**

Information provided by Gary Scott of the Environment Centre of the NT

Recent information on land clearing in the Top End, which will feed in to the Ecological Society of Australia Clearing position statement. NT figures, including the breakdown of vegetation types cleared, can be found on the Australian Natural Resources Atlas website.

http://audit.ea.gov.au/ANRA/vegetation/vegetation\_frame.cfm?region\_type=AUS&region\_code=AUS&info=veg\_clearing

The latest figures provided in the Draft Parks and Conservation Masterplan are still from the 2001 National Land and Water Resources Audit unfortunately. They would not therefore include clearing for plantations on Melville Island. As far as we know, there has been 5000 ha of native vegetation cleared on Melville Island thus far, but there is 26000 ha currently approved for clearing. And Sylvatech has advertised in the newspaper about its expansion plans which could see 100,000 ha eventually cleared.

Figures on land clearing approvals in the NT for both 2003 and 2004 are available on the DIPE website. Of course this does not mean that all of these areas have been or will be cleared. <a href="http://www.ipe.nt.gov.au/whatwedo/nativevegetation/register.html">http://www.ipe.nt.gov.au/whatwedo/nativevegetation/register.html</a> In 2003 there was 8281.7 ha of native vegetation approved for clearing. In 2004 the area approved for clearing declined to 2354.7 ha, mainly due to the moratorium in the Daly region. As I understand it DIPE is currently using remote sensing to update the 2001 data, so new figures may be available this year (well ought to be at least).

Also: http://www.deh.gov.au/land/vegetation/policies.html for information on the National Vegetation Framework and Bernadette O'Leary (bernadette.o'leary@deh.gov.au) regarding the call for comments on the NVF by 13 May 2005



### New biodiversity 'facts and figures' website



The Science and Development Network (SciDev.Net) has launched a useful online resource that provides crucial data about the current state of the world's biodiversity. This new biodiversity 'facts and figures' section includes recent estimates of extinction threats, detailed assessments on the economic and ecological value of biodiversity and provides the latest information on conservation efforts.

The data brings together the best resources available including Conservation International, the Food and Agriculture Organization of the UN, the World Conservation Union's 2004 Red List of Threatened Species, the World Wildlife Fund Living Planet Report, and the Earth Trends database of the World Resources Institute.

We hope you will find this new resource useful and informative and welcome comments and feedback (email:biodiversity@scidev.net). We would also appreciate it if you could let friends and colleagues who are interested in biodiversity know about this new section www.scidev.net/biofacts.

#### Graduation

Dates	Time	Location	Faculties Attending
26 May 2005	TBC	Graduation Courtyard	Faculty of Law, Business and Arts and the Institute of Advanced Studies
27 May 2005	TBC	Graduation Courtyard	Faculty of Education, Health and Science and Faculty of Technology
17 June 2005	TBC	Alice Springs (subject to availability of facilities)	All faculties

#### **MTEM Theses**

Did you know that copies of some of the best completed MTEM Theses are lodged in the Short Term Loan section of the CDU Library? They are listed under unit code SBI520 in the library catalogue, but are a bit hard to find—they are in the Personal Copy collection (lodged there by Dr Penny Wurm). After June this collection is being reorganised and we'll keep you posted about the new arrangements.

The CDU Foundation & Alumni Office is to change its name to the External Relations Office. This is in order to better reflect the broader activities of the area, which will still include both Foundation and Alumni, and to better promote its services within the university.

The Alumni has been set up to support and promote the interests of our graduates, and to foster an environment where members can contribute to the future of the University. The Alumni provides a professional and social connection for all people who have contributed to Charles Darwin University whether as a student, staff member or friend of the University or one of its predecessors - e.g. Northern Territory University, Centralian College, Darwin Institute of Technology (DIT), University College of the Northern Territory (UCNT) & Darwin Community College (DCC).

For more information please visit the website: http://www.cdu.edu.au/externalrelations/

#### Baby News - Long Term TEM Recruitment Program

#### Mark and Mandy

Mandy Trueman, a
MTEM student, and her
partner Mark Gardener
are the proud parents
of baby Molly, who was
born 28 January 2005.
Mandy says that she is "
enjoying my new role as
mother - it is sometimes
hard work, but in other
ways it is quite relaxing
too... and just.......
well....... natural."



#### **Justin & Rhonda**

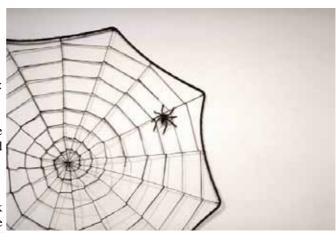
Justin Perry reports that his partner Rhonda gave birth to a beautiful little girl in the morning of Monday 21st March. Justin says, "We called her Nicola Manouk (incorporating Rhonda's Italian and Dutch heritage) and she's been a breeze so far." Hopefully Nicola Manouk will be a marvelous assistance to Justin in the field during his study of the threatened Carpentaria grasswrens.

### **WEB-SITES**

For an update on Tropical Savannas CRC visit: <a href="http://savanna.cdu.edu.au/">http://savanna.cdu.edu.au/</a>

For tracking of live fires and historical data the Natural Heritage Trust and TS-CRC supported North Australian Fire Information website at: http://www.firenorth.org.au/nafi/init.jsp

The Science and Development Network (SciDev.Net) has launched a useful online resource that provides crucial data about the current state of the world's biodiversity www.scidev.net/biofacts



Subscribe to the NTECOL discussion list http://lists.cdu.edu.au/mailman/listinfo/ntecol

#### **Book Review of Yalanji-Warranga Kaban**

Hill R. et al. (2004). *Yalanji-Warranga Kaban. Yalanaji People of the Rainforest Fire Management Book*. Little Ramsay Press, Cairns.

This book by Rosemary Hill and members of the Yalanji-Warragna community, whose country lies between Cooktown and Cairns in north Queensland, is the result of collaborations which underpinned Rosemary's PhD research at James Cook University.

Although principally rainforest, the Kuku Yalanji lands include smaller savanna patches that are maintained using fire, and which comprise an important source of resources. In the absence of fire, the rainforest encroaches into the savannas.

The book focuses on the people who use fire to nurture the landscape, and situates fire in a cultural and social context, as much as it describes the use of fire and the landscape itself.

The book has a heart-felt and intimate tone, and is similar in style to *Country of the Heart* by Deborah Bird Rose and the MakMak Clan from the Finniss River area, NT. The Yalanji book is beautifully illustrated with maps and art work, and photographs by Steven Nowakowski and Rosemary. I felt like I had been there again after browsing through the book.

The book has been prepared for a Yalanji audience, as well as a wider readership, and the text is in both English and Kuku Yalanji. Funds raised by selling the book will be returned to land and sea management and language programs run by Kuku Yalanji organizations.

Copies can be ordered from Steven Nowakowski at <a href="http://www.stevennowakowski.com/book.php?cat=index">http://www.stevennowakowski.com/book.php?cat=index</a>

Other articles arising from Rosemary's PhD research with the same people include (a complete bibliography is included at the back of the book):

**Hill R. & Baird A.** (2003). Kuku-Yalanji Rainforest Aboriginal People and Carbohydrate Resource Management in the Wet Tropics of Queensland, Australia. *Human Ecology: An Interdisciplinary Journal* **31**: 27-53.

#### **SEMINARS AT CDU**

Keep an eye on the seminars at CDU—the EH&S Faculty and Key Centre for Tropical Wildlife Management (KCTWM) are sharing a slot on Wednesdays from 12 noon to 1pm in the Business Lecture Theatre (22.01). The CDU website and Key Centre websites have details:

http://www.cdu.edu.au/research/seminars.html

http://www.cdu.edu.au/rses/Seminars.html http://www.wildlife.ntu.edu.au/

#### **CSIRO FORUM SERIES**

These are held at CSIRO Seminar Room, Vanderlin Drive, Berrimah at 3.00 pm on Fridays Visit the website: www.terc.csiro.au/seminars

#### jobhunters

Hallmark Editions have two very useful sites, one for environmental jobs:

http://www.envirojobs.com.au the other is for jobs in research:

http://www.researchjobs.net.au

"NRMjobs" is another excellent site advertising jobs that TEM students are likely to be interested in: http://www.nrmjobs.com.au

### SEMINARS, CONFERENCES AND A FESTIVAL

The **Ecological Society of Australia** maintains a comprehensive listing of relevant conferences at: <a href="www.ecolsoc.org.au/">www.ecolsoc.org.au/</a>
ConferenceListing.html

Why not check out their student memberships when you visit their site?

### 11th International Symposium on Society and Resource Management (ISSRM) 16-19 June 2005, Östersund, Sweden

ISSRM 2005 will focus on the social and cultural dimensions of natural resource issues and their importance to natural resource decision makers and managers. Specific topics of the symposium include: nature-based tourism; rural impact from tourism; human dimensions of wildlife; strategic environmental assessment; natural resources in regional and local planning; resource economics and valuation; eco-tourism; regional development; indigenous peoples and natural resources; environmental attitudes and values; policy, planning and conservation; outdoor environmental education; environmental change and society; sustainability criteria and indicators; tourism and the environment; and fire management. Web: <a href="http://www.issrm2005.com">http://www.issrm2005.com</a>

### The 8th International Conference on Ecology and Management of Alien Plant Invasions 5-10 September 2005, Poland

Contact: Dr Barbara Tokarska-Guzik,

Department of Plant Sytematics, Faculty of Biology and Environmental Protection, University of Silesia, Jagiellonska 28 40-032

Katowice, POLAND Web: http://www.emapi.us.edu.pl/

#### Devil's Claw Festival Gregory National Park, NT

The Festival runs 4-15 April 2005 and volunteers should be physically fit and enjoy spending time in the bush. Northern Territory Parks and Wildlife Service will provide food and transport around the Park.

If you're interested, please call Aaron Ledgard on 8975 0833 or 8975 0888. But be quick, as places are limited!

#### **Groundwater Surface Water Interaction in the Tropics**

26 and 27th May, 2005

Darwin Wharf Precinct Function Centre - Stokes Hill Wharf

**Contact:** Jon Sumner jon.sumner@nt.gov.au Web: <a href="http://www.iah.asn.au/conference.html">http://www.iah.asn.au/conference.html</a>

Hosted by the Northern Territory Branch of the International Association of Hydrogeologists (IAH)

*Peter Cook* is a Principal Research Scientist with CSIRO, and an expert in the use of environmental isotopes and tracers for estimating aquifer parameters. He compiled and edited a major reference work: Environmental Tracers in Subsurface Hydrology. *Lindsay Hutley* has been working for the Tropical Savanna CRC and Charles Darwin University since 1996, initially looking at use of groundwater by savanna vegetation. This work has developed further to examining savanna carbon balance.

Richard Evans is Principal Hydrogeologist with Sinclair Knight Merz. In recent years he has focussed on groundwater management issues, particularly over allocated groundwater systems, groundwater dependent ecosystems and pollution prevention.

*Vele Ila'ava* is the Principal Scientist with i4 Nature Consultant Ltd in Papua New Guinea. Before that he was Senior Environmental Scientist in charge of rehabilitation at Ok Tedi.

Soetrisno Soekiban is a freelance groundwater adviser. He was formerly Head of the Hydrogeology Division of the Indonesian Environmental Geology Directorate.

Xu Zhenci is a Director of the Hebei Provincial Academy of Water Resources and Vice President, Association of Water Engineering of Hebei Province.

The registration fee for the seminar is \$200 for all attendees other than students. This fee includes attendance at the two workshops.

#### Conservation and Business: Natural Resource-based Enterprise Development & Local Livelihoods

Charles Darwin University and the Centre for International Forestry Research (CIFOR) are offering a short course on natural resource-based enterprise development.

Full Course 9 to 20 May \$700

Seminar day Tuesday 17 May Free

Enterprise development consultation - discussion and advise on local issues Wednesday 18 May Free

Closing date was 31 March but contact Patricia for further details

Register with: Patricia.Butler@cdu.edu.au, (08) 8946-6574

Contact: Julian.Gorman@cdu.edu.au, (08) 8946-6732

### **TEMS Links**

## Tropical Environmental Management Students' Newsletter

Vol 6 No 1 March 2005

If undelivered, return to P Wurm, Tropical Savannas CRC, CDU, Darwin 0909

The Northern Territory Field Naturalists Club meets on the second Wednesday of the month, at 7.45 pm in the SAIKS seminar room (Bldg 30) here at CDU Casuarina. Guest speakers present informative talks on the flora and fauna of the region. There are also regular excursions.

Contact: Don Franklin: don.franklin@cdu.edu.au phone 08 8946 6976(w) or 08 8948 1293 (h)

The Top End Native Plant Society meets on the third Thursday of each month at Marrara Christian School (corner of Amy Johnstone and Macmillans Rd). The meetings start at 7.30 and invited guest speakers provide insight into various aspects of Top End flora. Visit their website for more info:

http://tenpsnt.tripod.com/

#### NTECOL discussion list

TO SUBSCRIBE, PLEASE GO TO THIS PAGE:

http://lists.cdu.edu.au/mailman/listinfo/ntecol

"NTECOL is a discussion list for people with an interest in the ecology and biology of the organisms and communities of Northern Australia.

The primary purpose of the list is facilitate communication among interested people and organisations so as to increase the flow of information and facilitate interaction. This could include - but need not be restricted to - announcements of seminars, workshops and conferences, discussion of topical issues, and requests for information or collaboration."

If you want to be removed from our mailing list (electronic or hardcopy), please let me know by emailing cheryl.arnott@cdu.edu.au
Thanks