



**Centre for Disaster Studies  
James Cook University**

**Annual Report to  
Department of Emergency Services**

**Financial Year 2005/2006**

# Annual Report of the Centre for Disaster Studies of James Cook University to Queensland Department of Emergency Services for Financial Year 2005/2006

## Executive Summary

### Projects

Most of the centre's research has fallen into five broad areas of projects.

1. **Tourism and tourist impact** – including risk, crisis management, future trends, backpackers, grey nomads, terrorism and the tsunami. Projects are supported by the Sustainable Tourism Cooperative Research Centre.
2. **Bushfires** – the understanding communities project, supported by the Bushfire Cooperative Research Centre.
3. **Hazard warnings** – targeting remote, indigenous and non-English-speaking communities. Projects have been funded by the Australian Research Council and the Bureau of Meteorology.
4. **Emergency Management, mitigation and planning** – bringing together research findings and trends from earlier research, and contributing to partner institutions.
5. **Hazards Research** - Cyclones Larry and Monica, and issues related to major disasters such as Larry and the Indian Ocean Tsunami.

## **Partner Institutions and Acronyms**

AEMI – Australian Emergency Management Institute, Mt Macedon  
APAI – Australian Postgraduate Award with Industry  
ARC – Australian Research Council  
BoM – Bureau of Meteorology  
CCC – Cairns City Council  
CDS - Centre for Disaster Studies (indirectly funded from QDES)  
CRC – Cooperative Research Centre (Sustainable Tourism and Bushfire CRC)  
EMA – Emergency Management Australia  
GA - Geoscience Australia (Formerly AGSO)  
JCU – James Cook University  
NESH – Non English Speaking Households  
QDES – Queensland Department of Emergency Services  
QH - Queensland Health  
TCCIP – Tropical Cyclone Coastal Impact Program

## **Tourism and tourist impact**

**Yetta Gurtner – PhD Candidate and Researcher**

### **PhD Thesis**

#### **It is more than Tourism: Crisis management in tourist reliant destinations**

Based on the impacts and consequences of significant destination crisis in both Bali and Southern Thailand, this thesis is an attempt to synthesise current theory on tourism crisis management with real life community-based practices. Initially proposed for April 2006 the scope and final write up for this project has been extended to encompass the implications of a second series of terrorist attacks in Bali on October 1, 2005. The revised completion date is set for late 2006.

### **STCRC Project**

#### **Tourism Risk Management for Small Business**

Initiated by Scott Cunliffe and David King, and developed and written by Yetta Gurtner, this Sustainable Tourism CRC project has developed the resources for a practical training workshop on Tourism Risk Management for Small Business in Australia. Having outlined content and a one day workshop programme, the final project deliverables will include a training manual, resource book and web-based resource site. Through continued project management and research development by the CDS (in collaboration with Damian Morgan from Monash University) a pilot workshop with a representative industry group is projected for November 2006. Based on the feedback provided, the completed product is anticipated for early 2007.

### **Revised APEC book edition**

Wilkes J. and Moore S. (2003) *Tourism Risk Management for the Asia Pacific Region: an authoritative guide for managing crises and disasters*.

Released in 2003 this prominent book has been widely referenced as an important progression in the understanding and development of industry based tourism risk and crisis management. Since its initial publication the tourism industry has experienced a further series of significant shocks including continued terrorist attacks and the Indian Ocean tsunami. Given the rapid growth of interest in the area of tourism risk and crisis management, a revision has been proposed to incorporate recent lessons, experiences and reflect a more holistic integrated risk management approach. Supported by APEC, Pacific Asia Travel Association (PATA) and the World Tourism Organisation, research collaboration will include content consultation the development of practical and contemporary case studies. CDS, specifically Yetta Gurtner, has contributed significantly to the revision and improvement of this publication.





Khao Lak, Thailand, January 2005

## **Bushfire CRC: Understanding Communities Project**

Alison Cottrell

Participant at AFAC/Bushfire CRC Conference 5-8 October 2005

- Program C session presentation - "Difficulties defining communities"
- Poster: Understanding Communities - Locality remains significant
- Bulletin: Understanding Communities – project overview and methodology framework. August 2005

Provided social research methods course in Graduate Certificate in Emergency Management at EMA, Melbourne (2005)

Provide assistance with supervision of students (2006) and lecture on role of research in emergency management (June 2006)

Participated in the Regional Indigenous Australian Reference Group (RIARG) forum for the Northern Region held at Palm Island (April 2006). Our region is the Northern Region which covers the Shires from Hinchinbrook to Bowen along the coast and then all the shires out to the NT Border. RIARG has been established to give people located within the regions a platform to discuss the Strategic Plan for Indigenous Australians and feed information to the Regional Senior Staff and where issues are of a state nature they are tabled at State Indigenous Australian Reference Group (SIARG).

## **Multi Hazard Risk Assessment For Housing**

Alison Cottrell and David Lowe

Developed multi hazard risk assessment for housing in conjunction with David King (CDS) and David Henderson (Cyclone Testing Station, JCU). In line with Strategic Plan for Indigenous Australians 2005-2008, Department of Emergency Services, Qld Government. This project was initiated in relation to Palm Island but was extended to the wider community.



Left to right in photo:

Fiona McKersie, Director-General Queensland Department of Emergency Services, Tony Pearce, Director-General Emergency Management Australia, Katie Glasgow, author "The Sudanese Refugees and Fire Hazard Study", Dr Alison Cottrell, Project Leader, Bushfire CRC Understanding Communities, Judy Newton, Manager Research QFRS, The Hon. Pat Purcell, Minister for Emergency Services.





# 2006 Queensland Safer Communities Awards

The Queensland Safer Communities Awards are supported by Emergency Management Australia and recognise best practice and innovation by organisations that help to build safer communities

## WINNER

**The Sudanese Refugees and Fire Hazard Study**

Community or Personal Safety Focus Category

Awarded to

**Queensland Fire and Rescue Service,  
James Cook University,  
Bushfire Cooperative Research Centre**

Hon Pat Purcell MP  
Minister for Emergency Services

October 2006



Australian Government  
Attorney-General's Department  
Emergency Management Australia



'safer sustainable communities'



Queensland Government  
Department of  
Emergency Services



## Hazard Warnings

Douglas Goudie, Post Doctoral Fellowship Research Associate

### Indigenous Weather Knowledge and Warnings

Douglas has completed his 3 year Post Doctoral collaborative research with the Australian Bureau of Meteorology on Safety weather warnings to remote Indigenous communities and Non English Speaking Households. Since June 2004, Douglas has worked with representatives of remote Indigenous communities to help develop effective, safety-oriented weather warnings. That work continued to the end of 2005, with regular 20 minute radio broadcasts on BRACS (An Indigenous radio station broadcasting across north Queensland) to create awareness of the Bureau of Meteorology's forecasts available on the internet to Indigenous Communities. Douglas initiated the award by the Bureau of Meteorology to Indigenous radio network BRACS, for their controlled, frequent and informative coverage of Cyclone Ingrid as it threatened the North Australia coast in March 2005.

Work has continued in 2006 with a pilot project between the Bureau of Meteorology and Palm Island State School. Work is progressing on the development of a threats and safety board game directed to Indigenous students.

**Figure 4.2 Showing the BoM site to Remote users – Halls Creek**



## **Warnings to People from Non English Speaking Background**

Douglas has also led development of the Non English Speaking Households Post Doctoral consultancy with and for the Bureau of Meteorology, considering effective, safety oriented weather warnings, with background material describing fire, destructive wind and flood warnings and safety issues with focus groups of non English speaking back ground, recent immigrants and refugees.

Focus group meetings were held during the project that helped define communication issues. The main issues identified were lack of reliance on the media due to language barriers, while almost all NESH have access to telephones and the internet. So a strategy of web-based information sheets on weather threats and safety responses was developed for translation onto the internet in 10 dominant languages of recent immigrants. Once finalised and translated, the existence of these information sheets will be made widely known to the Multicultural organisations that service NESH.

A clear outcome of the NESH study is the need to have one exhaustively promoted *Dangerous weather* portal which is map based, with drop-down hazard, and language, with full and real-time links to all related sites.

## Hazards Research

### Post Disaster Surveys

#### Cyclone Larry

Following the impact of cyclone Larry on Johnstone Shire and surrounding communities on 20<sup>th</sup> March, a team of five researchers from the Centre for Disaster Studies carried out a post disaster household survey. The team was led by Dr Douglas Goudie, who has participated in previous post disaster studies. We were also fortunate to have the participation of Dr Dale Dominey-Howes from Macquarie University, and organization as well as participation by Sonia Leonard, the coordinator of the centre, and two postgraduates from JCU Cairns campus. The survey was carried out on a face to face interview basis, beginning on Saturday 25<sup>th</sup> and concluding on Tuesday March 28<sup>th</sup>. Eight separate areas/communities were covered – Innisfail Estate, East Innisfail, Flying Fish Point, Coconuts, Kurrimine Beach (one individual was interviewed in Innisfail), South Johnstone, Mourilyan and Babinda. The survey interviewed a representative from 147 participating households that held a total of 471 people at the time the cyclone impacted. The survey indicates a strong pattern of good preparation and protective behaviour, but significantly 82% of respondents had previously experienced a cyclone, principally Winifred that hit Innisfail 20 years ago.





All the people; over 200 who spoke to us directly, also represented their families, and reflected the experiences of their neighbours and friends in the impact zone. Many knew they were going through a life-threatening experience. Some only realised this at 3 am, briefly before impact, but even these households had prepared. The researchers appreciate their time in sharing information on their experiences, in the hope that warnings, public awareness and preparedness ahead of major impact events will be enhanced as a result of these responses.



Following Douglas Goudie's involvement with the post disaster survey of Cyclone Larry in the Johnstone Shire, he also contributed to briefing meetings with Bureau of Meteorology staff, James Cook University and other stakeholders following the clean up operation.

Douglas also conducted a review, through SKM, for Ergon Energy's Disaster Management Plans; state-wide, but focused on North Queensland with particular emphasis on the response following cyclone Larry. Also, he was an invited member of an expert panel at Port Douglas in April 2006, on Climate Change, Extreme Events and Natural Disaster Management for Local Governments, organised by the Australian Greenhouse Office.

### **Post Cyclone Monica Survey**

The Centre for Disaster Studies was approached by the Bureau of Meteorology to conduct a brief survey to gauge the reactions of residents to preparation for a severe event that fortunately did not transpire. This was carried out as a brief telephone survey of Darwin residents between 6<sup>th</sup> and 10<sup>th</sup> May. The Bureau had preferred a separate survey of residents in Arnhem Land communities who were



more directly impacted by the cyclone. Unfortunately there are many logistical problems with carrying out telephone surveys in remote locations, and insufficient funds for face to face surveys of the type we had just completed in the Cyclone Larry impact communities. Thus telephone numbers were randomly generated for suburbs of Darwin. These were contacted until surveys of 200 households had been completed (201). A random coverage of Darwin was achieved, but as in all such surveys based on landlines there is a bias against households that are privately listed and those (often lower socio-economic groups) that do not have a telephone. Mobile numbers were not contacted. Nearly all households in the urban area have a phone and as the questionnaire was aimed at household preparation activities the coverage was sufficient to indicate general patterns of behaviour, but did not lend itself to sophisticated statistical tests. Telephone surveyors all had knowledge of Darwin suburbs and previous research experience. Responses were overall positive and helpful.



Responses were partly pre-coded to aid consistency of responses and were mostly entered into the database as coded answers in order to generate simple tables. Telephone surveys are most successful when kept brief and simple, although inevitably the depth of data is reduced. A questionnaire survey was developed in 2005 and used in Port Douglas after category 5 Cyclone Ingrid had threatened the Queensland coast before landfalling in sparsely populated regions of Cape York. This survey instrument was used as a basis for the Cyclone Monica survey.

## **Storm Surge Atlas of Cairns**

Allison Hoskin-Kain - Honours Student

This honours project is examining the variation of storm surge inundation generated by tropical cyclones along the Cairns coast using a storm surge inundation model. This project is defining a variety of tropical cyclone scenarios based upon meteorological characteristics (i.e. direction, speed, radius of maximum winds and central pressure), as scenarios based upon probabilities are likely to change, therefore becoming less significant to the general community. By use of GIS applications and cartography, the inundation levels are examined and explained and the interaction of storm surge with the built environment is identified. A storm surge atlas will be created to present the results that will be delivered via a webpage to be made available to the greater community. The atlas will identify suburb of high risk and suburbs that can be considered safety zones that will empower the community with a greater understanding of storm surge which will inevitably reduce vulnerability.

## **Population and Development Consolidation as a Strategy to Reduce Vulnerability to Natural Disasters and Global Climate Change in Archipelagic Small Island States: The Case of Maldives.**

Ahmed Shaig

Vulnerability to sea induced natural disasters and more recently to the projected impacts of global climate change, is a major concern of low lying archipelagic small island states. It has prompted the need for medium and long term adaptive strategies in such countries, to minimize adverse impacts of temporary and potentially permanent sea level rise. The dispersed nature of sparsely populated islands and the resulting high per capita costs in providing necessary infrastructure is a major barrier, in these predominantly poor countries, to develop adequate adaptive measures to protect its environment, population and investments. This study will look into the possibility of identifying comparatively less vulnerable or 'safe' islands and effectiveness of consolidating population and development into these safe islands, in reducing the cost of adaptive measures and hence, the vulnerability of archipelagic small island states to natural disasters and global climate change. This study will be based on Maldives.

**Aim:** To identify whether a population and development consolidation strategy can help reduce vulnerability to ocean induced natural disasters and global climate change in Maldives.

**Objectives:**

- To identify key population and development consolidation related theories, strategies, practices and experiences of other countries, especially amongst archipelagic Small Island States.

- To identify, key geographic features of an island which makes it comparatively 'safe' or less vulnerable to natural disasters and global climate change.
- To evaluate whether consolidating population and development into 'safe' islands can reduce vulnerability of human life and investments to ocean induced natural disasters and impacts of global climate change in Maldives.

**Review of the Practices and Outcomes of the Natural Disaster Risk Management Study Programme for Queensland Department of Emergency Services.**

David King commenced a review of the Natural Disaster Risk Management Study Programme for Emergency Management Queensland in June 2006.

## People

A large number of casual employees have worked on research projects and additionally undergraduate students have carried out a number of minor projects on hazard topics and issues.

Dr David King, Director, is an Associate Professor of Human Geography in the School of Tropical Environment Studies and Geography, and is also Director of the Centre for Tropical Urban and Regional Planning. This latter centre encompasses the teaching program in planning and provides very strong links with the planning profession. As well as strong involvement in planning education, he also has extensive knowledge of the South West Pacific, especially Papua New Guinea. Dr King is a Corporate Member of the Planning Institute of Australia.

Dr Alison Cottrell, is a Sociologist and lecturer in Human Geography in the School of Tropical Environment Studies and Geography. She has extensive knowledge of South East Asia and carried out doctoral research in Indonesia. A particular interest is in the use and development of qualitative research methods to approach complex environmental and disaster management and planning issues. During 2003/2004 Dr Cottrell has led the Communities sub program of the Bushfire Cooperative Research Centre. She is a Corporate Member of the Planning Institute of Australia.

Margaret Spillman is employed as a research officer with Alison Cottrell in the communities sub program of the Bushfire CRC.

David Lowe is employed as a research officer with Alison Cottrell in the communities sub program of the Bushfire CRC.

Sally Bushnell is employed as a research officer with Alison Cottrell in the communities sub program of the Bushfire CRC.

Dr Douglas Goudie is an adjunct lecturer in the School of Tropical Environment Studies and Geography, with the second 3 year appointment to 2008. In June 2003 he was appointed as a Research Associate in the Centre for Disaster Studies. With the finalisation of the postdoctoral fellowship funds Dr Goudie has been working on Cyclone Larry Post Disaster Surveys. Dr Goudie is a Corporate Member of the Planning Institute of Australia, and now a senior research fellow with the Bushfire CRC, focused on effective risk communication.

Sonia Leonard is Coordinator in the Centre for Disaster Studies, and is completing a PhD on 'Holocene Sediment loads in Wet Tropics Rivers' in the School of Tropical Environment Studies and Geography, for which she received a Queensland Smart State Grant for \$10000 over 2006-07. She has taken over



Jordahna Haig's former role as the primary contact person for the Centre. Sonia has resumed the Centre's position as an advisor to the Cairns Local Disaster Management Group. Sonia has also been involved in the Cyclone Larry post Disaster surveys of the Johnstone Shire.

Dr Sue McGinty, is the Director of Research in the School of Indigenous Australian Studies. She collaborates with the Centre as a joint supervisor of Eddie McLachlan and has contributed to hazard projects concerned with Indigenous Communities.

Dr Bandaranaike's current research interests include demographic, social and environmental issues in Australia and tsunami recovery in Sri Lanka. She specialises in demographic analysis and profiling with a focus on youth populations and regional communities. Current research includes geographic profiling of offenders and youth delinquency in regional areas, and the survival of outback towns and the sustainability of sugar towns in North and Central Queensland .

Dr Scott Cunliffe, has completed his PhD with the Centre and is now working for the United Nations Development Program (UNDP) in Bangkok. His ongoing work on STCRC Project, Tourism Risk Management for Small Business has been handed over to Yetta Gurtner. We wish Scott all the best and look forward to working closely with him through the UNDP.

Yetta Gurtner has continued work on a PhD with the Centre on impacts of human generated hazards, specifically tourism and terrorism, the Bali Bombing and the process of recovery. She has studied extensively in Indonesia. Yetta has recently taken over the Sustainable Tourism CRC – Tourism Risk Management Project from Scott since his appointment with the UNDP in Bangkok.

Eddie McLachlan, is a research student jointly in the Centre for Disaster Studies and School of Indigenous Australian Studies funded by the ARC and Queensland Health to examine Indigenous knowledge of hazards and community vulnerability to disaster.

Shane Cridland is a PhD student jointly in the Centre for Disaster Studies and the School of Tropical Environment Studies and Geography. He is researching the winter movement patterns of Gray Nomads across northern Australia and their impact on sustainable tourism. Shane was awarded a Queensland Smart State Grant for \$4000 in 2006.

Ahmed Shaig is a PhD student and planner from the Maldives. His initial research work on a methodology for consolidating government services and population in the Maldives has expanded to include the identification of safe islands as part of the regional planning for hazard mitigation following the Indian Ocean Tsunami.

Jordahna Haig, the coordinator of the Centre from 2003 to 2005, suspended her PhD candidature to take up a one year position during 2006 with the Swiss Federal Institute for Snow and Avalanche Research, organising the International Disaster Reduction Conference. She will probably continue her PhD research in Europe in 2007.

## **Committees, Community and the Media**

Members of the centre provide representation on various local committees in Townsville and Cairns, such as the Cairns Counter Disaster Group and Townsville Thuringowa Disaster Recovery Committee, as well as the state level Queensland Tropical Cyclone Coordinating Committee.

Most members of CDS have contributed extensively to media stories and presentations. These include local radio – commercial, ABC and BRACS, national ABC, commercial TV stations, ABC TV, local and national newspapers. The university keeps a record of all media exposure. Our emphasis is on presenting information and advice that directly supports the strategies and advice of local government, state and commonwealth organisations. To this extent we try to avoid controversy in order to better serve the community.

As a consequence of these activities we respond to a wide range of enquiries and requests for information, presentations and speeches, from members of the public, government organisations and institutions, schools, private companies and non government organisations.

## **Contacts and Members**

Note that the former School of Tropical Environment Studies & Geography has merged with the School of Earth Sciences and has been renamed the School of Earth and Environmental Sciences

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	Margaret Spillman	0747814877	0747814020	EES 115 (TSV)
	David Lowe	0747814877	0747814020	EES 115 (TSV)
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<b>Tourism and Disasters</b>	Dr. Scott Cunliffe			Bangkok
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<b>Tsunami Recovery</b>	Dr Suniti Bandaranaike	0747814561	0747814020	EES 113 (TSV)
<b>Coordinator 2005</b>	Jordahna Haig			IDRC



## Publications in 2005 – 2006

As it is not possible to identify many publications within the exact financial year, all 2005 and 2006 publications and reports have been listed. These are simply placed in alphabetical order to give a picture of the range of our activities and outputs.

- Amman W., Haig J., Huovinen C. & Stocker M. 2006. Editors **IDRC Davos 2006: Extended Abstracts**. Proceedings of the International Disaster Reduction Conference, Swiss Federal Research Institute
- Anderson-Berry, L & King, D 2005 **Mitigation of the impact of Tropical Cyclones in Northern Australia through community capacity enhancement**. Mitigation and adaptation strategies for global change Vol. 10: pp 367 - 392
- Balcombe, L (In press) **Bushfire Preparation, Response and Recovery in the Interface Zone** in King, D & Cottrell, A (eds) *Communities Living with Hazards*, Centre for Disaster Studies, James Cook University
- Bandaranaike, SD & Coventry G. 2006. Demography and Prisoner Profiles on risk needs and risk assessment at the Stuart Prison, 2002-2006. **Crime in Rural Communities**, University of New England, Armidale
- Bushfire CRC, 2006 **The Sudanese Refugees and Fire Hazard Study**. Bushfire CRC with Queensland Fire and Rescue Service
- Bushnell, S 2006 **Communities living with bushfire: desktop review**, Bulletin no 6, Bushfire CRC Understanding Communities, James Cook University
- Bushnell, S 2006 **Thuringowa peri-urban residents and bushfire: Do people living on different block sizes have different values, knowledge, perceptions and expectations?** Bulletin no 7, Bushfire CRC Understanding Communities, James Cook University
- Bushnell, S 2006 **Thuringowa peri-urban residents and bushfire: Do people who own or rent their homes have different values, knowledge, perceptions and expectations?** Bulletin no 8, Bushfire CRC Understanding Communities, James Cook University
- Bushnell, S 2006 **Thuringowa peri-urban residents and bushfire: How knowledgeable are people? What are their perceptions of service providers and others in their locality?** Bulletin no 9, Bushfire CRC Understanding Communities, James Cook University
- Bushnell, S 2006 **Thuringowa peri-urban residents and bushfire: Who prepares for bushfire?** Bulletin no 10, Bushfire CRC Understanding Communities, James Cook University
- Bushnell, S, Cottrell, A, Spillman, M & Lowe D 2006 **Understanding Communities Living with Bushfire: The Thuringowa Bushfire Case Study**, Bushfire CRC Understanding Communities technical report, James Cook University
- Centre for Disaster Studies, 2006 **Review of the Practices and Outcomes of the Natural Disaster Risk Management Study Programme**. Queensland Department of Emergency Services.

- Cottrell, A 2005 **Sometimes it's a big ask, but sometimes it's a big outcome: Community participation in flood mitigation.** Australian Journal of Emergency Management Vol. 30: pp 27 – 32
- Cottrell, A 2005. **Communities and Bushfire Hazard in Australia: More questions than answers.** Environmental Hazards, 6, 109 – 114
- Cottrell, A (In press) **What is this thing called “Community”:** an example in **Far North Queensland** in King, D & Cottrell, A (eds) Communities Living with Hazards, Centre for Disaster Studies, James Cook University
- Cottrell, A & Bushnell, S (In press) **Living with Bushfire: What do people expect?** in King, D & Cottrell, A (eds) Communities Living with Hazards, Centre for Disaster Studies, James Cook University
- Cottrell, A & Spillman, M 2005 **Understanding Communities Project, an overview,** Bulletin, Bushfire CRC Understanding Communities, James Cook University
- Cottrell, A 2005 **Defining Communities,** Bulletin no 4, Bushfire CRC Understanding Communities, James Cook University
- Cottrell, A 2005 **What’s in a name – peri-urban communities?** Bulletin no 5, Bushfire CRC Understanding Communities, James Cook University
- Cottrell, A 2005 **Understanding Communities,** Session presentation, 12<sup>th</sup> Annual AFAC Conference & Bushfire CRC Conference, Auckland, NZ
- Cottrell, A 2005 **Understanding Communities: Locality remains significant,** Poster, 12<sup>th</sup> Annual AFAC and Bushfire CRC Conference, Auckland, NZ
- Cottrell, A, Bushnell, S & Spillman M 2006 **Understanding Communities Living with Bushfire: The Thuringowa Bushfire Case Study,** Poster, 13<sup>th</sup> Annual AFAC and Bushfire CRC Conference, Melbourne
- Cunliffe, S (In press). **Tourism Risk Management for Small and Medium Enterprises.** Tourism Review International
- Cunliffe, S. (In press) **Tourism, Disasters and Vulnerability** in King, D & Cottrell, A (eds) Communities Living with Hazards, Centre for Disaster Studies, James Cook University
- Cunliffe, S 2006 **Best Education Network Think Tank V Keynote Address: Risk Management for Tourism: Origins and Needs.** Tourism Review International, 10, 2-12
- Cunliffe, S 2005 **Some risks are worth taking: tourism risk management in tropical coastal areas.** PhD Thesis James Cook University
- Cyclone Larry March 2006 - Johnstone Shire Post Disaster Residents Survey
- DiGian, S. 2005 **Socio-economic Variables as Indicators of Preparedness Level in Cyclone Events.** Centre for Disaster Studies, James Cook University
- Goudie DD. 2005. **Nine internal reports to the Australian Weather Bureau on risk communication and non English speaking households.** Progress reports on the collaborative Post-doctoral research into improving weather warnings.
- Goudie DD. 2005. Cyclone surge and mass evacuation issues in Cairns, Australia. In (Ed Free and Jones) TIEMS 12<sup>th</sup> annual International conference proceedings, 2005. 2 – 10. 319.**

- Goudie DD. 2005. Sustainability planning: pushing against institutional barriers. In **Ecosystems and Sustainable Development** V. WIT Press. WIT Transactions on Ecology and the Environment, 81:5; 215- 224, www.witpress.com.
- Goudie DD. 2006. **Risk communication. Snapshot of Current Understanding.** Presentation to LGA at Port Douglas. 30 March 2006. Part of 2 day workshop on climate change and coastal communities. GHO, Austrn. Govt. to publish.
- Goudie DD. 2006. **Isis Shire coastal settlement disaster management evacuation planning.** Initial report.
- Goudie DD. 2006. **Ergon Energy Disaster management plans. Internal cohesion and alignment with legislation and broader protocols.** A commissioned review to clarify and strengthen how Ergon Energy achieves its Emergency Management Planning goals in North Queensland, including mitigation and preparation. P37. Consultancy.
- Goudie DD. 2006. **Cyclone Larry. Resident survey of safety-oriented weather warnings and risk communication.** ATCCIP workshop proceedings Cairns 17 October. BoM. p4.
- Goudie, D (In press) **Transport and Evacuation Planning** in King, D & Cottrell, A (eds) *Communities Living with Hazards*, Centre for Disaster Studies, James Cook University with Queensland Department of Emergency Services.
- Goudie, D (In press) **Indigenous Hazard Knowledge: old and new** in King, D & Cottrell, A (eds) *Communities Living with Hazards*, Centre for Disaster Studies, James Cook University with Queensland Department of Emergency Services.
- Gurtner, Y 2005 **Understanding Tourism Crisis: Case study of Bali and Phuket.** Managing risk and crisis for sustainable tourism: research and innovation
- Gurtner, Y 2005 **Adversity and Resilience: A Case Study of Crisis Management in a Tourist-reliant Destination.** CAUTHE 2005: Sharing Tourism Knowledge
- Gurtner, Y (In press) **Tourism Crisis: Management and Recovery in Tourist-reliant Destinations** in King, D & Cottrell, A (eds) *Communities Living with Hazards*, Centre for Disaster Studies, James Cook University
- Gurtner, Y & King, D 2005 **After the Wave: a wake up for Australian coastal locations.** *The Australian Journal of Emergency Management*, 20, 1.
- Kench, Paul S, McLean, Roger F, Brander, Robert W., Nichol, Scott L, Smithers, Scott G., Ford, Murray R, Parnell, Kevin E. & Aslam Mohamed. 2006. **Geological effects of tsunami on mid-ocean atoll islands: The Maldives before and after the Sumatran tsunami** *Geology*; March 2006; v. 34; no. 3; p. 177–180;
- Kench, P., Nichole, S., Mclean, R., Smithers, S. and Brander, R. (In Press) **Impact of the Sumatran Tsunami on the Geomorphology and Sediments of Reef Islands: South Maalhosmadulu Atoll, Maldives. Atoll Research Bulletin**

- King, D & Cottrell, A (eds) 2006 (In press). **Communities Living with Hazards**, Centre for Disaster Studies, James Cook University
- King, D, Cottrell A, Goudie D & Cunliffe S. 2005. **Community hazard awareness and resilience in northern Australia**. Know Risk, United Nations ISDR (Eds.) pp 324 – 325
- King, C 2005 **Parallel routes to recovery: community priorities and NGO policy in the post civil war reconstruction of Sierra Leone**. International Journal of Emergency Management Vol. 2 No. 4
- King, D & Gurtner Y 2005 **After the wave: a wake up warning for Australian coastal locations**. Australian Journal of Emergency Management Vol. 20: pp 4 - 9
- King, D., Goudie D. & Dominey-Howes D. 2006. **Cyclone knowledge and household preparation – some insights from Cyclone Larry**. Australian Journal of Emergency Management, Vol 21, No 3. pps 52-59
- King, D 2006 Post Cyclone Monica Survey. **Centre for Disaster Studies & Bureau of Meteorology**
- King, D (In press) **Learning from our Disasters** in King, D & Cottrell, A (eds) Communities Living with Hazards, Centre for Disaster Studies, James Cook University
- King, D 2006 **Hazard Mitigation in Remote and Indigenous Communities** Invited Paper In Ammann W, Haig J, Huovinen C & Stocker M. Editors Proceedings of the International Disaster Reduction Conference, Davos, Switzerland August 27- September 1 2006, Swiss Federal Research Institute WSL
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