

RESEARCH NEWS

Surf Life Saving Australia | Issue 5 | December 2012



RipSAFE field research at Cronulla Beach, NSW

News

Rip Current Awareness Day

A record number of clubs are taking part in RCAD this year – over 100 beaches across the country will be releasing dye into the water as part of the safety campaign, giving swimmers and onlookers an opportunity to develop a greater awareness of rip currents. SLSA provided each registered SLS club with a pack of coloured dye to illuminate the rip currents on their beaches. The spectacular dye release shows where the rip current is and how it flows through the surf zone. This technique has been used very effectively to capture attention and provides a rare opportunity for lifesavers to engage with the public. SLSA also provided a set of highly visual presentations which can be used by lifesavers to further educate people in the clubhouse. RCAD was on Sunday 4 November to coincide with the 2nd International Rip Current Symposium. Victorian and South Australian Clubs will be holding Rip Current Awareness Day between the 1-9 December 2012.

- Have you ever been caught in a rip current? We would love to hear about your experience and learn from your story of survival. Please visit research.net/s/ripcurrentsurvivorexperiencesurvey to complete a brief anonymous survey.

2nd International Rip Current Symposium



Prof. Andy Short delivering the keynote address at the 2nd International Rip Symposium in Collaroy, NSW

Surf Life Saving Australia (SLSA) hosted the 2nd International Rip Current Symposium in Collaroy, 31 October – 1 November. The symposium brought together leading international researchers and experts to share knowledge of rip currents to enhance

worldwide understanding of this natural hazard and to further the development of related science and public education strategies to reduce the incidence of drowning. The symposium was a great success; there were 70 delegates, from 13 countries, representing 36 different organisations. Feedback from participants was overwhelmingly positive and encouraging.

To find out more about rip currents please visit ripcurrents.com.au and scienceofthesurf.com.

Eureka Prize

The Australian Museum Eureka Prizes are a unique partnership between government organisations, institutions, companies and individuals committed to celebrating the vitality, originality and excellence of Australian science. The prizes are presented annually by the Australian Museum; the prizes reward excellence in the fields of: research & innovation, leadership & commercialisation, school science, science communication & journalism. The prize is part of the most comprehensive and prestigious national science awards.

SLSA congratulates the 2012 winner of the Eureka Prize; Dr. Rob Brander, for pioneering our scientific understanding of rip current flow behaviour through innovative and collaborative research.



Dr. Rob Brander receiving the Eureka 2012 Prize from The Honourable Chris Evans



National Coastal Safety Report 2012

The NCSR was released on 14 Dec. This annual report highlights the epidemiology of coastal drowning deaths in Australia each year. Among the key findings from the Report:

Overall

- 119 coastal drowning deaths
- Above the eight year average of 92

Demographics

- 106 (89%) were males
- 35 (29%) were aged between 15-29 years; individuals 70-74 had the highest rate of 1.2 per 100,000 population
- 29 (24%) were known to be of a foreign ethnicity; of which, 13 (11%) were international visitors

Time

- 38 (32%) occurred between 12pm – 4pm
- 40 (34%) occurred during summer months

Activity

- 32 (27%) were attributed to swimming/wading
- 20 (17%) were attributed to boating
- 22 (19%) were attributed to rip currents
- 16 (13%) were attributed to rock fishing
- 12 (10%) were attributed to a medical condition or injury
- 8 (7%) were attributed to alcohol and/or drug toxicity

Location

- 53 (45%) occurred at a beach
- 50 (42%) of individuals lived more than 50km from the drowning location
- 52 (44%) of individuals drowned over 5km from the nearest lifesaving service

Project Updates

Rip Current Research

The RipSAFE study in partnership with the University of New South Wales (Dr. Rob Brander) is currently underway. Preliminary project results were presented at the 2nd International Rip Current Symposium in three different presentations by Dr. Rob Brander, Dr. Dale Dominey-Howes, and Jak McCarroll. Data from field studies continues to be collected in an effort to determine the best way to survive when caught in a rip current. The latest round of field tests took place in Cronulla in November and further tests will take place in February 2013.

For more information about the rip experiments, please contact Dr. Rob Brander at rbrander@unsw.edu.au

Rocky Platform Risk Classification System

Dr. David Kennedy has utilized a grant from Melbourne University to pilot the methods for the development of a risk classification study on rocky coasts. The results from this pilot are being used for an Australian Research Council grant application this month. Prof. Colin Woodroffe (University of Wollongong) has recently presented the methodology for this project at the NSW Coastal Conference in Kiama.

Adapt Between the Flags

Funding from SLSC and the Department of Climate Change and Energy Efficiency has enabled SLSC to partner with the Griffith University Centre for Coastal Management (Dr. Marcello Sano) to continue the Adapt Between the Flags study. The main objectives of the study are to explore adaptation pathways and enhance the capacity of Surf Life Saving Australian to adapt to climatic events and climate change.

The second round of workshops is currently being conducted at Ulverstone SLSC (TAS), Cudgen Headland SLSC (NSW) and Currumbin SLSC (QLD) and in our national office. A facebook page has been created to connect interested stakeholders, community members and researchers

facebook.com/pages/Adapt-Between-the-Flags/135531283244184

RESEARCH NEWS

Determining the Social Capital of SLSA

Through a grant from the Trust Company Philanthropy Fund, SLSA is continuing our work with researchers at the University of Technology, Sydney to understand how SLSA contribute to the broader community. We know that our impact goes beyond saving lives. We are committed to being an inclusive organisation dedicated to all members of the Australian community and providing a safe environment for all who choose to participate in our activities and who visit the beach.

Anecdotally we have seen many individual examples of the benefits that these socially inclusive programs offer to the community, Surf Life Saving and the individuals who engage in them. This ground breaking study aims to capture these examples of community engagement to provide examples of best practice of our socially inclusive practice.

An Australian Research Council Linkage Grant application titled 'Developing a systemic social impact measure for community based organisations' has also recently been submitted, further strengthening the collaborative bonds between SLSA and UTS.

Project Blue Print

SLSA and Australian CoastSafe are undertaking an ambitious project after funding approval was granted under the NSW Water Safety Black Spot Fund to conduct 'Project Blue Print', a Coastal Public Safety Risk Assessment for every beach and rock platform in NSW. This project will be fundamental in addressing the coastal drowning issue in NSW both in the short, mid and long term.

The project will do this by providing a long-term, sustainable and effective drowning prevention strategy with clear evidence/data, engagement of all relevant stakeholders and the application of effective risk mitigation and drowning prevention initiatives where and when they are required. This research is led by SLSA Coastal Risk Manager, Adam Weir.

Resource Library Project

We are very fortunate to have a volunteer, Julie Edstein, donating her time and library expertise to this SLSA project. Julie and Barb Brighton (SLSA Research Assistant) are currently in the process of organising the library resources at our Rosebery office. We are using the open source library software, KOHA, for cataloguing and eventually borrowing purposes. If you have any expertise in this area and can volunteer some time assisting us in this process please contact Barb at BBrighton@slsa.asn.au.

Grants

Two ARC linkage grants have recently been submitted for funding to commence in 2013. **In addition, five grants were received or continued in 2012, representing a total value of over \$390,000.**

Grants Submitted:

- Dr David Kennedy, Prof Colin Woodroffe, Dr Shauna Sherker. Rocky Coasts: A Framework for risk assessment in order to reduce drowning. ARC Linkage Grant in partnership with Melbourne University (LP130100204)
- Prof Jenny Onyx, Dr Melissa Edwards, A/Prof Simon Darcy, Dr Shauna Sherker. Developing a systemic social impact measure for community based organisations. ARC Linkage Grant in partnership with University of Technology Sydney (LP130100381)

Grants Received for 2012:

- Bradstreet, A., Sherker, S., M. Sano. Adapt Between the Flags - Enhancing the capacity of Surf Life Saving Australia to cope with climate change and to leverage adaptation within coastal communities. Australian Department of Climate Change and Energy - National Climate Change Adaptation Research Facility 2012
- Tomlinson, R., M. Sano, S. Sherker. Adapting Between the Flags - A partnership with Surf Life Saving Australia. Griffith University Industry Collaboration Scheme 2012
- Sherker, S., R. Mitchell, M. Bambach. Research Review of Rock Fishing in NSW. NSW Department of Primary Industry 2012
- Sherker, S., M. Edwards, V. Brown. Engaging Diverse Communities and Developing Social Inclusiveness Through Surf Life Saving Activities. The Trust Company Foundation 2012
- Brander, R., I. Turner, D. Dominey-Howes, J. Goff, W. Shaw, D. Drozdowski, S. Sherker. Rip Currents: An evidence based approach to safely navigating the beach's greatest drowning hazard. Australian Research Council Linkage Project 2011-2013

Publications

SLSA have co-authored 5 peer-reviewed journal articles so far in 2012, and submitted two for publication, as listed below. The publications are in partnership with our academic colleagues at the University of Melbourne (1); University of Wollongong (2); University of NSW (3); SLSA (4) and Coastal Zone Management (Australia) Pty Ltd (5). Copies of papers are available on request to Barbara Brighton BBrighton@slsa.asn.au

Brighton^{B.4}, S. Sherker⁴, R. Brander³, M. Thompson⁴, A. Bradstreet⁴. Rip current related drowning deaths and rescues in Australia 2004-2011. [submitted Dec 2012].

Kennedy, D.1, S. Sherker⁴, C.D. Woodroffe², A. Weir⁴, B. Brighton⁴. Rocky coast hazards and public safety: moving beyond the beach in coastal risk management. *Ocean and Coastal Management* [submitted Sept 2012].

Elrick-Barr⁵, C., Kay, R.⁵, Farmer, N.⁴ Developing a road map for climate change adaptation: The experience of Surf Life Saving Australia. *Ocean and Coastal Management* [In press Nov 2012].

Mitchell R.³, B. Brighton⁴, S. Sherker⁴. The epidemiology of competition and training-based surf sport-related injury in Australia, 2003 to 2011. *Journal of Science and Medicine in Sport* 16:261-266, 2012.

RESEARCH NEWS

Williamson A.³, J. Hatfield³, S. Sherker⁴, R. Brander³, A. Hayden³. A comparison of attitudes and knowledge of beach safety in Australia for beachgoers, rural residents and international tourists. *Australian New Zealand Journal of Public Health* 36(4):385–391, 2012.

Drozdowski, D.³, W. Shaw³, D. Dominey-Howes³, R. Brander³, T. Walton³, A. Gero³, S. Sherker⁴, J. Goff³, B. Edwick³. Insights on the perceptions, knowledge and experience of beachgoers caught in rip currents. *Natural Hazards and Earth System Science* 12:2001–11, 2012.

Williamson A.³, J. Hatfield³, S. Sherker⁴, R. Brander³, A. Hayden³. Development and evaluation of an intervention to reduce rip current related beach drowning. *Accident Analysis and Prevention* 46:45–51, 2012.

Conferences

SLSA staff and the Research team have been busy submitting and presenting 16 conference papers at state, national and international conferences.

Coast to Coast 2012, 17-21 September 2012 (Brisbane, QLD)

- Ware, D., M. Sano, S. Sherker. Social Network Analysis for adaptation planning of Surf Life Saving Clubs.

11th World Conference on Injury Prevention and Safety Promotion (Safety 2012), 1-4 October 2012 (Wellington, NZ)

- Brighton, B., S. Sherker, A. Bradstreet and M. Thompson. *Rip current related drowning deaths and rescues in Australia 2004-2011*. [published in Injury Prevention 2012; 18(Suppl_1): p. A77-b]
- Weir, A. *Using cost effective technology to save lives*. [published in Injury Prevention 2012; 18(Suppl_1): p. A76-a]
- Hatfield J., A. Williamson, R. Brander, S. Sherker, A. Hayden, N. Dunn. *Development and evaluation of campaigns to reduce rip current-related beach drowning in Australia*. [published in Injury Prevention 2012; 18(Suppl_1): p. A135-a]

2nd International Rip Current Symposium, 30 October – 1 November 2012 (Sydney, Australia)

- Bradstreet, A., R. Brander, S. Sherker and J. MacMahon. *Responses of Swimmers Caught in Rip Currents: Perspectives on Mitigating the Global Rip Current Hazard*.
- Bradstreet, A. *The Australian Experience of Rip Current Campaigns: Managing change through a paradigm shift*.

- Brander, R., A. Williamson, J. Hatfield and S. Sherker. *Community presentations on rip currents - content, challenges and the Science of the Surf case study*.
- Brighton, B., S. Sherker, M. Thompson and A. Bradstreet. *Rip current related drowning deaths and rescues in Australia 2004-2011*.
- McCarroll, J., R. Brander, J. MacMahon, I. Turner, A. Reniers, J. Brown. *RIPSAFE-Rip current swimmer and floater experiments*.
- Drozdowski D., R. Brander, D. Dominey-Howes, W. Shaw, J. Goff, M. Moraza, S. Sherker. *Surveying rip current survivors: preliminary insights into the experiences of being caught in rip currents*.
- Hatfield, J., A. Williamson, R. Brander, S. Sherker and A. Hayden. *Development and evaluation of campaigns to reduce rip current-related beach drowning*.
- Williamson, A., J. Hatfield, S. Sherker, R. Brander, A. Hayden and N. Dunn. *Understanding how to address rip current safety for international tourists*.

NSW Coastal Conference, 6-9 November 2012 (Kiama, NSW)

- Bradstreet A., Sherker, S., Brighton, B., Thompson, M., Weir A. *Rock Fishing in NSW: An evidence based approach to reduce severe injury and drowning risk*.
- Kennedy, D., Brighton, B., Weir, A., Sherker, S. and Woodroffe, C. *Towards a typology of rocky coasts in the context of risk assessment*.
- Weir, A., Stigter, L., Massey, S. *Project Blue Print-State wide coastal public safety risk assessment program*.

Australia and New Zealand Third Sector Research Biennial Conference, 21-23 November 2012 (Hobart, TAS)

- Edwards M., J. Onyx, H. Maxwell, S. Darcy, P. Bullen, S. Sherker. *Joining the dots: Social Impact and Cultural Diversity*.

Awards

‘Research Project of the Year’ NSW Government/AustSwim Water Safety Awards 2012 (Research Review of Rockfishing in NSW)

‘Best Conference Presentation’ Australian Water Safety Conference 2012 (The Ripsafe Project - A holistic approach to understanding the rip current hazard. Dr Robert Brander, Dr Danielle Drozdowski, Dr Dale Dominey-Howes, Dr Ian Turner, Dr Wendy Shaw, Robert McCarroll, Mischa Moraza, Dr James Goff and Dr Shauna Sherker)

‘People’s Choice Award’ Australian Water Safety Conference 2012 (Meeting the challenge of preventing drowning deaths on the rocky coast. Dr David Kennedy, Barbara Brighton, Prof Colin Woodroffe, Adam Weir and Dr Shauna Sherker)

The SLSA Research Team wishes all of our Research News readers a safe and happy holiday season. We look forward to continued research success in 2013.