

Cyclone awareness amongst Backpackers in Northern Australia

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Vulnerability to natural hazards is a central concern of emergency management. Most articles published in this journal in recent years have been concerned with aspects of vulnerability and communities. As Handmer (2003) has expressed it "we are all vulnerable", but we are not homogenous (Marsh & Buckle 2001). Mitigation of hazard impact and vulnerability through education and awareness raising has had to treat communities and population groups as separate targets for information (Anderson-Berry 2003). Backpackers are one such identifiable group within the tourists and visitors to the cyclone prone north of Australia. Some recent disasters, such as the Childers hostel fire and highly publicised accidents involving backpackers have underscored their vulnerability. They are part of a wider group of independent travellers, including four wheel drivers, caravanners and the "grey nomads", the elderly long distance caravan and campervan travellers.

Independent travellers and tourists are superficially more vulnerable to natural hazards because they travel outside formally organised tours or groups, they stay in cheaper or more remote accommodation and are usually travelling into new places of which they know relatively little. Backpackers as a group are generally perceived as young people who travel light, prefer budget accommodation and avoid structured travel and activities (Pearce 1990). They seek adventure and new experiences and are inevitably risk takers. As many travel to northern Australia throughout the year, including the wet season, it is important to understand more about them to be able to target their vulnerability and reduce their risk from natural hazards.

Young researchers with the Centre for Disaster Studies in Cairns carried out two studies of backpackers in 2000 and 2003. The need for such research had emerged during the 1990s as longitudinal studies of cyclone awareness and preparedness in the Northern Beaches suburbs of Cairns, carried out by Anderson-

Berry (2003) and the centre, showed disturbing gaps in peoples' knowledge about cyclones. Findings from these studies concluded the importance of targeting different demographic, social and cultural groups within the communities. Tourists are an important part of the non-residential population of Cairns. The backpacker studies were initiated by the fortuitous arrival of young overseas students looking for minor research projects, Elke Kuehlbrandt from Germany and the two joint authors of this article, from The Netherlands. As the first study in 2000 was carried out during the dry season, the second survey replicated the original during the cyclone season of 2003. Together the two surveys gave a picture of the characteristics of backpackers as well as their general knowledge and experience about tropical cyclones, and their perceptions of risk. The second survey also enabled an analysis of differences in perception of cyclones by those who were visiting in the dry season, as opposed to those who were in Cairns and the Daintree at a time of year when cyclones were a real risk. Both surveys also contacted backpacker providers and administered simple questionnaires on their role in cyclone education. The 2000 survey interviewed 158 backpackers in Cairns, while in 2003 220 were surveyed in Cairns and at Cape Tribulation in the Daintree region about 120 kilometres north of Cairns.

Backpacker characteristics

The backpackers tend to be young well-educated people with 85% of the respondents coming from the United Kingdom and the rest of Europe. Almost three-quarters of the backpackers considered their competency level of English fluent, because many had English as their first language. However, over 90% of the backpackers who didn't have English as their first language considered their competency level as adequate to fluent. At such competency levels they should be able to understand cyclone safety information and warnings.

For the majority of the respondents the main purpose for visiting Australia was holiday, followed by a combination of working and holiday. As people on holiday are in a pleasure-seeking mood, they tend to ignore the risk, and show a low level of natural disaster awareness (Murphy & Bayley 1989). However, one of

the backpackers stated that when Exmouth was severely impacted by cyclone Vance on March 22nd 1999 not only the local residents but also the backpackers present at that time helped in the post disaster clean up.

Almost all of the backpackers were travelling alone, or in a small informal group. Only one respondent was travelling in an organized group, where tour guides mainly provide information for the trip. Backpackers have to search for information about their trip themselves. On the other hand, backpackers that are travelling alone are rather more vulnerable to the hazards of cyclones than small informal groups. This is caused by the sense of responsibility and protective behaviour towards the other members of the group. Most of these small informal groups of backpackers formed during the journey in Australia, but respondents suggested these groups formed and reformed as people went off in different directions, so that a whole trip was not necessarily completed with just one group. Both studies showed that backpackers use a variety of forms of transport, but the majority in 2003 travelled mainly by bus which is a relatively open and insecure form of transport. The group provides mutual security and companionship, but as far as cyclone vulnerability is concerned it must increase safety through the sharing of knowledge and a multiplication of information absorption.

For most backpackers the length of stay in Australia varied between 2 weeks and 4 months. Only 15% of the respondents stayed between 10 and 12 months. Both studies found that the length of stay in Cairns was between 1 and 14 days, but although most leave Cairns within 14 days, they tend to continue their trip through the cyclone prone areas of the north.



Aerial shot of a cyclone off the eastern coast of Australia

Sources of information

The majority of the backpackers sought information about Australia before they started their trip. The kind of information they searched for was varied, but the three main subjects were places of interest, accommodation and trips. The respondents used different information sources to gather this information; but the preferred sources were guidebooks and the Internet. The guidebooks were the most popular source of information of backpackers before and during their trip, with The Lonely Planet being used by more than half of the backpackers. The Internet was used as information source mainly before rather than during the trip. Word of mouth and tour agents were also important sources of information during the trip.

General knowledge and awareness of cyclones

Most of the backpackers had never lived in an area where a cyclone could occur, and only a third of them had ever travelled to a cyclone prone area. Therefore the general knowledge of cyclones amongst backpackers was expected to be low. However, almost three-quarters of them were aware that some parts of Australia are affected by tropical cyclones, and more than half of the respondents also knew or had a general idea which areas of Australia are affected by tropical cyclones.

Even though most of the backpackers were aware that Australia is affected by tropical cyclones, only 30% of the backpackers got information about cyclones during their trip through Australia. An even smaller proportion of the respondents found information about cyclones before their trip started. As a consequence, it is likely that most of the backpackers had only a very general knowledge about cyclones. The two main sources of cyclone information during the trip of the respondents were word of mouth and the television. The information found about cyclones in Australia was moderate to very useful and in general considered to be enough, so consequently most of the respondents didn't search for any more cyclone information.

Despite backpackers' perception of the adequacy of their cyclone knowledge it was generally very low. The more specific the knowledge that was required to answer questions about cyclones, the fewer respondents gave a correct answer. Almost half of the respondents were at least partially correct about when the cyclone season occurs in Cairns. Both studies asked which is the most destructive category 1 or 5, and recorded half of the respondent's answers as correct and the other half almost evenly divided between an incorrect answer and do not know. Even fewer participants were able to provide at least a partially correct description of a storm surge, with the majority of the backpackers not knowing what a storm surge is. Most of the respondents knew that a cyclone could cause severe damage or severe

building damage, but many thought that that cyclones are a rare occurrence in Cairns.

The first backpacker study in 2000 suggested that many people were likely to go to local residents to get the most up to date information about cyclones, while the second study in 2003 recorded that the majority of the participants would consult the Internet for this information. As the Cairns community has also demonstrated a low perception of risk towards cyclone hazards (Anderson-Berry 2003), the fact that more backpackers would consult the Internet instead of local residents to gather the most up to date information about cyclones is probably a good development. Almost all of the respondents either didn't know if there was cyclone safety information available at their accommodation or said this information wasn't available at all. A basic conclusion from both backpacker studies is that the general knowledge and awareness about cyclones is not significantly different either during or outside the cyclone season. Visiting the north during the cyclone season had not prompted any special preparation or anticipation of the risk.

Attitude and concern about cyclones

The attitude of backpackers towards the preparedness of hostels concerning cyclones is low, as most of them are not influenced by this factor in their choice of accommodation. There is no significant difference between the first study outside the cyclone season and the 2003 study, within the cyclone season. This is an interesting result as approximately 20% of the respondents of the previous study stated that the preparedness of accommodation for cyclones would only influence their choice of accommodation in the cyclone season. As half of the respondents in the 2003 study were aware that they were in the cyclone season at the time of being interviewed, one would have expected them to be more interested in the preparedness of the accommodation providers. Only one respondent planned his/her trip to Cairns with the cyclone season in mind. Generally backpackers are not planning their trips with any consideration of the cyclone season.

If a cyclone were heading for the coast of Cairns, most of the backpackers had some idea of what to do, and would ask for information. Two other options that backpackers indicated as actions in case of a cyclone were either to evacuate or to shelter. They did not have one particular idea of what to do in the event of a cyclone, but nevertheless all three of these options are plausible.



The internet can be an effective delivery vehicle for information dissemination to backpackers

Use of the Internet

One of the main aims of the project was to determine how and where backpackers acquire information about the tropical cyclone risk. More than 95% of the backpackers used the Internet during their trip. The majority spent less than three hours a week on the Internet, and the two most popular places to use the Internet were at their accommodation and in Internet cafés. The respondents used the Internet mainly for emailing, whereas other purposes were planning the trip and checking for news. Thus the Internet was used for communication rather than as a source of information.

It is remarkable that visitors at all of the accommodation providers seldom asked for information about cyclones. This endorses the view that backpackers are not searching in an active way for cyclone information. The majority of the accommodation providers used conventional information modes to inform their guests about cyclones, like pamphlets and brochures. In the two surveys accommodation providers stated a willingness to put out cyclone information, but actual evidence of this information was patchy. Most of the providers thought that an Internet site is the best mode to provide information about cyclones to backpackers, although in a sense that is absolving themselves of responsibility to their clients. During the cyclone season some accommodation providers used the Internet to get information about cyclones as well as television and the weather fax of the Bureau of Meteorology. Most of the providers had an emergency safety plan, with at least an emergency manager, as well as plans for securing business records and emergency supplies of water and food.

Recommendations from Backpackers Surveys

Because backpackers were not interested in complex detailed cyclone information, the cyclone information should be provided in a visual attractive and easy-reference mode specially directed to backpackers. A pamphlet could cover the most important topics about cyclones in a distinct manner. The interests and behaviour of the backpackers have to be taken into consideration at the stage of designing specific cyclone information.

Both the accommodation providers and backpackers considered the Internet was the best way to provide information about cyclones. However, the backpackers need to be made aware of the Internet sites about cyclone information. These could be referred to by pamphlets and brochures.

Because the respondents often used guidebooks, a chapter with cyclone information could be implemented in the guidebooks to improve the knowledge of cyclones. There is also an opportunity for implementation in backpacker-designed magazines, like the TNT Magazine. Since the main reports (Hoogenraad & van Eden 2003, Kuehlbrandt 2000) have been presented to Cairns City Council and made available through the website, Lonely Planet Guides have approached the Council, and the Centre for Disaster Studies to prepare cyclone specific information for their guides.

There are many brochures with cyclone information produced by government departments, but the information transfer to backpackers has to be improved, because they have a low initiative for gathering cyclone related information. The accommodation providers are the most visited locations for backpackers; therefore it is important that the providers supply information brochures and pamphlets to visitors. Because not all the accommodation providers were willing to provide information, the possibility of the council enforcing information provision could be investigated. Other recommended locations to provide information to tourists are the airport, shopping malls and buses. Not all the staff of the backpacker accommodation had knowledge of their own emergency safety plans; nevertheless it is important that all the employees understand these plans, and safety procedures.

Conclusion

Awareness of tropical cyclones was high amongst the backpackers, in the sense that most of them knew Australia could be affected by cyclones and that they could cause severe damage. However, the general factual knowledge about cyclones was low. In spite of their general awareness, the behaviour of the backpackers was not influenced by the dangers of cyclones. For example,



Cyclone information could be disseminated in guide books

the cyclone safety preparedness of an accommodation provider only influenced a small proportion of the respondents. Although the opinions about how to act in case of a cyclone were varied, all of them were plausible. Almost every backpacker had an approximate idea of what to do in case of an emergency. In this area of preparedness there was no significant difference between the surveys during and outside the cyclone season.

One of the most interesting findings is that the majority of the backpackers travel in small informal groups, mainly by bus. Because backpackers are not travelling in an organized group they have to gather the information about the trip themselves. The advantage of travelling in a group is that groups are less vulnerable to natural disasters than single travellers. The most popular information sources before and during the trip were guidebooks. Before the backpackers come to Australia, they also used the Internet often as information source. However, many respondents admitted they did not find much information about cyclones before and during their staying in Australia.

Most of the backpackers used the Internet during their stay in Australia email and news. While they had not used it for information about cyclones, nearly every respondent would search for the most up-to-date cyclone information on the Internet. Accommodation providers also thought that the Internet was the most useful mode of providing information about cyclones to backpackers. At half of the accommodation providers there was no cyclone information available for visitors



Even in outback wilderness areas backpackers may find themselves threatened or isolated by the passage of a cyclone.

and only half of the them were willing to provide cyclone information to visitors. Most of the providers had an emergency plan with regards to cyclone safety, but amazingly some did not know the content of those plans.

The Lonely Planet contained information about cyclones, but this information was only about facts of some cyclones that hit Australia in the past. Some government departments and Cairns City Council provide cyclone brochures with clear safety information, but the distribution of those brochures is inadequate. As backpackers have a low interest in gathering cyclone related information, responsibility falls on the government and accommodation providers for the information transfer.

As backpackers are not likely to search in an active way for cyclone information the cyclone information provided should be in a mode directed towards them. If an Internet site is designed to inform backpackers about cyclones this should be referred to it in pamphlets and brochures, because backpackers mainly use the Internet for email. Targeted awareness that is related to the behaviour of this particular well educated group of visitors will improve their safety without reducing the adventure and excitement that seek during their time in Australia.

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Note: The full reports of the backpacker studies are located on the Centre for Disaster Studies website at <http://www.tesag.jcu.edu.au/CDS/index.shtml>