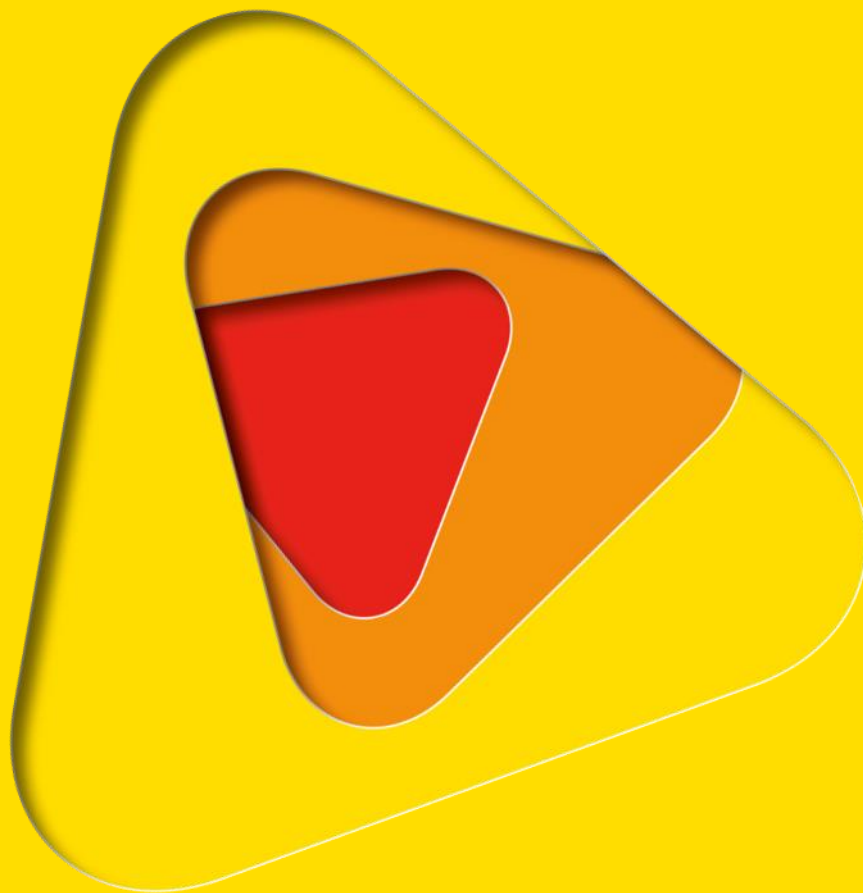bushfire&natural
HAZARDSCRC

MANAGING ANIMALS IN DISASTERS: IMPROVING PREPAREDNESS, RESPONSE AND RESILIENCE

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Annual Report 2014

Managing Animals in Disasters (MAiD)
Improving preparedness, response and resilience through individual and organisational collaboration

Annual Report - 2013/14

Photograph of Jeff Kryger (FRNSW) with Baxter the dog at Winmallee during the Blue Mountains Bushfires, October 2013. Image went viral after being tweeted by FRNSW and NSW RFS (Photo taken by Matthew Hickie, FRNSW)

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Managing Animals in Disasters (MAiD): Improving preparedness, response and resilience through individual and organisational collaboration

'In the event where owners have been told to evacuate pets/animals are often forgotten, when told they cannot return this causes many problems for emergency crews. Endangering life for animals is a big decision and can stretch already busy emergency crews to the limits. Again owners need to take responsibility for their pets/animals where safe to do so. If they chose to leave them behind they cannot get angry when told for their own safety they cannot return.' (Emergency Responder, FRNSW)

The problem: Consideration of animals (pets, livestock and other animals, including wildlife) can impact on people's decision making and behaviour during natural disasters. In addition the management of animals in disasters is complex; involving many stakeholders and requiring clear roles and responsibilities for all concerned and a high degree of co-ordination.

Significance: A lack of preparedness by some animal owners combined with the severity of the emergency situation and strong attachment to animals can lead to issues of public and responder safety. Animal owners may risk their lives to save animals, may fail/refuse to evacuate, may abandon or release animals, may have unrealistic expectations if they evacuate with their animals, and may try to return before it is safe to rescue or tend to their animals. Emergency responders can be faced with difficult dilemmas and highly emotionally-charged situations. In addition, if there is a lack of co-ordination in response there can be confusion for animal owners and responders and further potential for risky or impulsive decision-making and poor animal welfare outcomes.

How we plan to address the problem: Given the breadth of the problem we are following a phased approach. Initially we are scoping the area; identifying the challenges and needs of responders and stakeholders, reviewing the plans and policies, and identifying priority areas with our project end-users and other stakeholders. This will lead to a set of Fieldwork studies in those priority areas to gather evidence and information that will inform the development of support tools. These outputs will assist operational response, community engagement and professional development and could include training resources, guidelines, or engagement materials.

Word cloud based on the 100 most frequently mentioned words used by emergency services personnel when describing their experiences with animal owners in disasters

(Data from the MAiD Responder Survey)

Introduction

Australia is characterised annually by 'droughts and flooding rains' that are expected to intensify with climate change [1]. It also has some of the highest pet ownership levels in the developed world [2]. If 63% of 8.6million Australian households own pets, the combination of natural disaster and pet ownership is of concern for over 5 million households. In times of fire and flood, the majority of animal owners will put their own lives at risk to save animals. Animal owners are less likely to evacuate during natural disasters than non-owners [3] and if they do evacuate, are likely to return to try to rescue their animals [4]. In Australia, Howlett and Turnbull found that more than 80% of animal owners would risk their lives to save their animal [5]. Indeed, more than 8% of fatalities from floods alone resulted from people's attempts to save 'stock, property or pets' even when the animal or pet was not their own [6: 406].

Frequently, these efforts can put other people's lives on the line too [7]. As we lack a comprehensive understanding of the impact of animals on human disaster behaviours, we do not have sufficient knowledge to develop effective best practice support tools to aid the survival of community members and assist the personnel working to protect them.

Current research in Australia [8] focuses on prevention and preparedness. However, there is no current research addressing the impact of animals on response, or the impacts of having/losing animals on disaster recovery. Neither do we understand the additional benefits to individual/family resilience that can be achieved through animal contact and supportive use of animals with disaster survivors (note the use of comfort dogs after the recent Boston Marathon bombings). Preliminary data gathered recently by Taylor, Burns, Lynch and Eustace (in press) suggest that pets play an important role in disaster recovery; providing both comfort and 'welcome distraction' as well as a focus for normal routines and a route to maintaining and building social capital.

Animals (pets, livestock and wildlife) also impact on the roles of multiple responder groups in disasters. In addition to documented cases of failure to evacuate and threats to public (and responder) safety, responders have to increasingly deal with animal owners who have expectations and demands regarding the needs of their animals in disasters (witnessed in Australian Capital Territory Bushfires 2003, Tropical Cyclone Larry 2006, Tropical Cyclone Yasi 2011, Queensland Floods 2010/11 and 2013, Victorian Bushfires 2009, NSW Flood 2012 and Tasmania Bushfires 2013). Responders also need to manage large-scale animal disaster management situations in the context of livestock. These situations present logistical and practical considerations during response, issues of animal welfare and mass euthanasia considerations. Responders such as Rangers, government and private veterinarians, emergency response workers and volunteers can be exposed to the distress and suffering of animals and their owners. There is only limited research on the psychosocial impacts of responding to animal emergencies (e.g. Newcastle disease response and Ovine Johne's disease response in Australia and Foot and Mouth disease in Europe) extremely limited research in relation to natural disasters, one notable exception being recovery from the ACT bushfires where the death or injury of pets was reported as well as a memorial service for animals who died in the disaster.[9]

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The MAiD Project

Research in this area is urgently required as there is a paucity of evidence to guide policy development and training needs. This project will leverage off current initiatives and programs, nationally, and existing research on prevention and preparedness by providing complementary research on the impact of animals on response and recovery for the community as well as responders.

In this project 'animals' include domestic pets, commercial animals, livestock, and wildlife. Animal owners may include pet owners, small-scale animal related business owners, livestock producers, and those concerned with and interested in wildlife (e.g. wildlife carers, rural dwellers). Similarly, responders may be drawn from a broad range of groups, such as emergency services, Local Government, RSPCA officers, Parks and Wildlife rangers, NGOs (Red Cross, Salvos), GPs, veterinarians, established volunteer organisations, and spontaneous (emergent) responders. Within these groups there is a variation in preparedness and potential vulnerabilities. The project has been designed to provide the empirical evidence required to determine what constitutes best practice.

The MAiD project commenced in January 2014 and will run for three and a half years and is structured in four sequential stages.

- Scoping and exploration: to review, explore, and scope issues. Identify priorities and needs suitable for development of support tools/materials.
- Fieldwork: to gain an in-depth understand of priority areas and inform support tools/materials development.
- Development: Development of prototype tools/materials with project end users.
- Assessment and evaluation: of the support tools/materials.

Project Aim and Goal

> The MAiD project is seeking to identify and build best practice approaches to animal welfare emergency management to enable engagement with animal owners, and other stakeholders in disasters/emergencies.
>
> The goal is to improve outcomes for public safety and the resilience of responders, animal owners, those with animal-related businesses, and their communities.

Scoping and exploration

The project is deliberately designed to be broad in its initial scope. This is to enable a broad audit of current research, initiatives, and programs across Australia (and internationally) in relation to animals across the whole disaster system. The project will identify what is currently known, what is already underway, and what gaps still remain. This information will be supplemented with data from three exploratory studies of pet owners (already undertaken), animal-related business and livestock owners, and responder experiences. An open workshop will be held to review these findings and to collect information on end-user (and other stakeholder) perceived needs and priorities, and information will be supplemented by a survey of stakeholder needs and priorities. Fieldwork studies

will be determined based on end-user priorities, the outcomes of the workshop and surveys, and areas/targets thought amenable to successful study, tool development and later evaluation.

Fieldwork studies

A small set of complementary field work studies are planned; each focussed on a different animal-related issue. The fieldwork is expected to involve mixed methods approaches, e.g. surveys, interviews and other methods in which the team is experienced. Fieldwork will include (but will not be limited to) assessment of lived experiences and/or expectations, problems encountered, lessons learned, identification of preferred approaches to assisting/solving problems and/or helping others, discussion of potential engagement activity/communication sources.

Development of tools, training, support materials

The field work studies will be discussed with the end-users and the extended team to reach agreement on the best tools or supports to address the issues identified. This will be followed by a highly-interactive period with end-users to develop outputs that are acceptable to emergency services (especially if they are expected to be involved in their eventual delivery and/or branding) and are regarded as fit-for-initial assessment by end-users and the research team.

Preliminary assessment and evaluation of tools, training, support materials

The project will include assessment or evaluation of the project outputs. Four discrete evaluation studies have been planned and budgeted for, and the initial expectation is that these studies will be undertaken in either the same locations as the field studies, or in locations/circumstances that match their key disaster-related characteristics (e.g. the animal type, the disaster type, the target owner). Focus groups have been planned as the key research method for evaluation and for planning and budgeting purposes although we would like to be flexible and use the methods that are considered most appropriate once ascertained.

Progress to date

Planned Year One Activities (January – June 2014)

A series of small scale exploratory scoping studies is planned for Year One (Jan-Dec 2014). These studies will be used to gather information about the range of issues and challenges faced by responders and animal owners in the context of managing animals in natural disasters.

Activities include

- Critical audit: of formal policies and procedures, local initiatives, and review of current research.
- Emergency responders: stakeholder organisations' priorities, and responder experiences and needs.
- 'Non-traditional' (untrained) responders: activities, perceived roles, coordination with formal emergency response organisations.
- Animal-related business owners: preparedness, expectations, experiences, needs.
- Knowledge exchange workshop: one-day meeting with invited attendees.

The project officially commenced in March, but was preceded by a number of project start-up activities; team teleconferences, project plan development, and recruitment. The University of Western Sydney (UWS) and Central Queensland University (CQUni) both offered PhD scholarships to align to the project and UWS PhD scholarship interviews took place in March.

Project funding supports two part-time (0.4 FTE) post-doctoral positions, one at UWS and one at CQUni. Brad Smith was recruited to the CQUni position and started work in March.

Research Advisory Forum

The BNHCRC hosted a Research Advisory Forum 18-20 March in Adelaide; bringing together the project researchers and the CRC partner organisations – including most of the nominated project end users. On Day One all project lead researchers were allocated five minutes to present an overview of their projects. Day Two included sessions for more coordinated and strategic discussions between researchers and end-users about individual projects and project clusters in the CRC technical program. Four of our five project end-users attended the meeting and it was extremely helpful to be able to meet face-to-face to discuss the project direction. The photo (right) was taken at this meeting.

L-R: Mel Taylor, Brad Smith, Kirrilly Thompson attending the BNHCRC Research Advisory Forum

Year One Scoping Activities

The MAiD project is using the first year to take a broad look at the area of animals in disasters. To date we have commenced three main activities.

1. A national audit of needs, practices, policies and initiatives

Work has started on collating information to support this review. Central to this process is a **survey of stakeholder organisations' needs and priorities**. A questionnaire has been developed to gather this information and data collection is due to commence shortly. The survey will be delivered online and we have been collating a database of stakeholder contacts, in two parts. The first section comprises all emergency service organisations and formal response agencies for animals across Australia and the second section comprises a broader-ranging set of stakeholders from identified organisations (councils, government agencies and NGOs) and industry representatives.

2. Responder Survey

Another important component of the project's first year scoping activities is to explore the experiences and perceived needs of 'on-the-ground' emergency responders in managing animals and their owners in disasters/emergencies. A number of issues have been reported in the media and in conversation, and many agencies have responded with engagement activities and initiatives. The rationale for undertaking scoping activities in this area is to understand these issues better, to learn from those who have encountered these issues first-hand, to identify their needs, and to avoid duplication of effort with regard to project outputs. A short generic questionnaire was developed by the MAiD team to collect this information. Data collection began with delegates attending the NSW RFS Australian Community Engagement and Fire Awareness conference (see later) and the team is planning to attract a broader range of responders via project and cluster end-user contacts shortly.

3. Bushfire CRC Interview

In May, Brad Smith and Kirrilly Thompson worked with the Bushfire CRC and the CFS to interview residents affected by fires earlier in the year in South Australia. This deployment enabled them to collect data from bushfire-affected animal owners. The MAiD project will draw on data collected during these interviews, especially those held with livestock producers and other commercial animal owners as part of the project scoping work.

Remaining Activities in 2014

Project activity this year will be bringing together information to identify gaps and priority areas. A series of end-user and stakeholder engagement activities, starting with a knowledge exchange workshop in August, will be used to agree the focus for subsequent support tool development.

Publications and Conference Presentations

During the period January-June 2014 the MAiD team presented the project at two conferences.

Australia and New Zealand Disaster and Emergency Management conference (ANZDMC 2014) - The MAiD team used this opportunity to raise awareness of the project to a broad range of stakeholders at ANZDMC in early May at the Gold Coast. The team hosted a poster presentation (see photo) which provided an excellent focus for discussion with conference delegates. Mel Taylor and Greg Eustace also chaired sessions at this conference, and Penny Burns gave one of the keynote presentations on the role of GPs in disasters.

L-R: Greg Eustace, Penny Burns and Mel Taylor presenting the MAiD project poster at ANZDMC 2014.

Australian Community Engagement and Fire Awareness (ACEFA) - The MAiD team, and the BNHCRC Communication and Warnings cluster of projects, were actively involved in the ACEFA conference in Wollongong in May. This is a large conference hosted by NSW RFS.   Mel Taylor gave a presentation on how pets can influence decision-making in disasters, and her presentation was preceded by a presentation on the Communication and Warnings cluster of projects, presented by Professor Vivienne Tippett who is the cluster Lead Researcher. The conference session was well attended and generated plenty of discussion.

References

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Integrated project team members

The full research team, end-user organisations and representatives, senior advisory team, and project PhD students are listed below.

MAiD Research Team

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(Project Leader)

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Dr Penny Burns
General Practice, School of Medicine, University of Western Sydney

Dr Bradley Smith
Appleton Institute, Central Queensland University

Greg Eustace
State Emergency Coordinator

RSPCA Queensland

Senior Advisory Team

The MAiD research team is supported by a Senior Advisory Team.

Professor Beverley Raphael, Australian National University

Professor Kevin Ronan, Central Queensland University

Associate Professor Pauleen Bennett, LaTrobe University

MAiD PhD students

Rachel Westcott University of Western Sydney

UWS PhD Scholar BNHCRC Scholar

Steve Glassey University of Canterbury, NZ

BNHCRC Associate Student

MAiD Project End – User Organisations and Representatives

Organisations   **Named points of contact**

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Peter Cinque
Region Controller (Sydney Western Region)

Andrew Stark
Chief Officer, ACT RFS

Katrina Beard
Manager – Education, Research, Training

Sandra Barber
Manager Community Education