MANAGING ANIMALS IN DISASTERS (MAiD)

Presentation to the BNHCRC Research Advisory Forum
Wednesday 5th April 2017

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Macquarie University, NSW & Central Queensland University, SA
MANAGING ANIMALS IN DISASTERS (MAiD):

**AIM** - To identify and build best practice approaches to animal emergency management to enable engagement with animal owners, and other stakeholders in disasters and emergencies.

**GOAL** - The goal is to improve outcomes for public safety and the resilience of responders, animal owners, those with animal-related businesses, and communities.
PROJECT PHILOSOPHY

1) Animals are, and remain, the responsibility of their owners
   • Presents challenges for AEM
   • Where does ‘shared responsibility’ fit?

2) Not all animals can be saved

3) MAiD is not an animal welfare project – the focus is HUMAN behaviour
PROJECT STRATEGY

1) Phase 1 – AEM in Australia
   • What are the issues for end users and other stakeholders? Scoping (All)
   • Laying down a knowledge/research base in Australia (All)
   • Where are we with AEM? Audit report (MT, GE)

2) Phase 2 – Different perspectives on AEM
   • Those affected – Sampson Flat and Pinery bushfires (KT, LO)
   • Those who respond – Case study (SF), Spontaneous volunteers (MM, MT)
   • Seeing it from both sides – the Responder-Owner interface (RW)
   • Comparing animal owners and non-animal owners - building a better picture (LO, KT)
   • Supporting community-led AEM (MT, MM)
# Mapping End-User Challenges to the Research Program

<table>
<thead>
<tr>
<th>End-user reported challenges in AEM</th>
<th>Phase 2 – Different Perspectives</th>
<th>PhD research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spontaneous volunteers</td>
<td>SF/Pinery experiences</td>
</tr>
<tr>
<td>a. The physical management/rescue of animals in natural disasters</td>
<td>🐶</td>
<td>🐶</td>
</tr>
<tr>
<td>b. Interactions with animal owners during disaster response</td>
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<tr>
<td>c. Interactions with animal owners in disaster preparedness and planning</td>
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<tr>
<td>d. Interactions with members of the general public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Post-disaster impacts in management of animals or their owners</td>
<td></td>
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<tr>
<td>f. The logistics available to respond to animals in natural disasters</td>
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<td></td>
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<tr>
<td>g. Unclear policy or operational responsibilities</td>
<td></td>
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<tr>
<td>h. Inter-agency coordination around the management of animals or their owners in natural disasters</td>
<td></td>
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</tr>
<tr>
<td>i. Co-ordination with non-emergency service agencies</td>
<td></td>
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</tr>
<tr>
<td>j. Managing/dealing with untrained/spontaneous animal-related responders</td>
<td>🐶</td>
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SURVEY OF TASMANIA

• Online survey

• Originally focussed on selected areas in two LGAs known to have high rates of horse ownership and existing relationship with TFS

• Mail out of information flyer in mid November 2016
  • But low response rate......
SURVEY (CONT.)

- Decision to promote survey to total Tasmania
- Promotion
  - Targeted marketing via Facebook
  - Facebook groups located in Tasmania tagged and sent survey information
  - Survey link on TFS FB page and website
RESPONSES

• N=427 usable responses
• Representative of population distribution of Tasmania
Age Sex Distribution of Survey (Raw Data) vs 2011 Census

- Survey M
- Survey F
- Census M
- Census F

Percentage of total population

Age Group

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

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WEIGHTING

• Standard procedure in survey based research
• Adjusts profile of survey respondents to match the population
• 2011 Census data on age (5 year groups) and sex
• Could include other additional relevant variables (eg household type, marital status, employment status, income)
  • Results in unwieldy contingency tables, eg 30*20
• Raking also used where appropriate
## Profile of Survey Respondents (Weighted)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Pet Owners</th>
<th>Control Group (Non-Pet Owners)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>47</td>
<td>49</td>
</tr>
<tr>
<td>Aged 18-34</td>
<td>29</td>
<td>15</td>
</tr>
<tr>
<td>Aged 65+</td>
<td>10</td>
<td>52</td>
</tr>
<tr>
<td>Employed (FT, PT, SE or casual)</td>
<td>68</td>
<td>34</td>
</tr>
<tr>
<td>Retired</td>
<td>13</td>
<td>54</td>
</tr>
<tr>
<td>Hhs (single &amp; couple) without dependents</td>
<td>47</td>
<td>76</td>
</tr>
<tr>
<td>Hhs (sole parent &amp; couples) with dep children</td>
<td>32</td>
<td>11</td>
</tr>
<tr>
<td>Mixed adults</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Family members with vulnerable member(s)</td>
<td>38</td>
<td>19</td>
</tr>
<tr>
<td>N</td>
<td>318</td>
<td>109</td>
</tr>
</tbody>
</table>
2014, n=15,944, ages 14+
PET OWNERSHIP RATE

• The survey was not targeted toward pet owners
  • Aim to allow comparisons of pet owners with non-pet owners (reveal key differences)
  • But some bias toward pet owners nevertheless
### Comparison with Reported Pet Ownership Rates

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All species</td>
<td>62</td>
<td>66</td>
<td>~</td>
<td>~</td>
<td>75</td>
</tr>
<tr>
<td>Dogs</td>
<td>39</td>
<td>43</td>
<td>38</td>
<td>44</td>
<td>46</td>
</tr>
<tr>
<td>Cats</td>
<td>29</td>
<td>30</td>
<td>23</td>
<td>34</td>
<td>31</td>
</tr>
<tr>
<td>Fish</td>
<td>12</td>
<td>14</td>
<td>~</td>
<td>~</td>
<td>10</td>
</tr>
<tr>
<td>Birds (incl. chickens)</td>
<td>12</td>
<td>7</td>
<td>~</td>
<td>~</td>
<td>23</td>
</tr>
<tr>
<td>Small mammals</td>
<td>3</td>
<td>5</td>
<td>~</td>
<td>~</td>
<td>6</td>
</tr>
<tr>
<td>Reptiles</td>
<td>3</td>
<td>0</td>
<td>~</td>
<td>~</td>
<td>1</td>
</tr>
<tr>
<td>Other pets (incl horses)</td>
<td>3</td>
<td>5</td>
<td>~</td>
<td>~</td>
<td>18</td>
</tr>
<tr>
<td>Other pets</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>6</td>
</tr>
<tr>
<td>Horses</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>~</td>
<td>12</td>
</tr>
</tbody>
</table>
PET OWNERS VS NON-PET OWNERS IN BUSHFIRES

56% of pet owners have been affected by a bushfire in the past,

compared with

31% of non-pet owners
<table>
<thead>
<tr>
<th>Plan?</th>
<th>% Pet owners</th>
<th>% Non-pet owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes - written plan</td>
<td>10</td>
<td>39</td>
</tr>
<tr>
<td>Yes - but not written down</td>
<td>61</td>
<td>31</td>
</tr>
<tr>
<td>No plan</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Other/NA</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>N</td>
<td>156</td>
<td>44</td>
</tr>
</tbody>
</table>
PLANNED AND ACTUAL ACTIONS OF PET OWNERS IN PREVIOUS BUSHFIRES

- Whole family/household leaves early
- Sheltered in place, (did not actively defend property)
- Wait to see how bad it is and then decide
- Some household members leave early/others stay and defend
- Stay and defend
- Other

Planned (n=114) vs Actual (n=82)
PLANNED AND ACTUAL ACTIONS OF NON-PET OWNERS IN PREVIOUS BUSHFIRES

- Whole family/household leaves early
- Sheltered in place, (did not actively defend property)
- Wait to see how bad it is and then decide
- Some household members leave early/others stay and defend
- Stay and defend
- Other

<table>
<thead>
<tr>
<th>Action</th>
<th>Planned (n=26)</th>
<th>Actual (n=35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole family/household leaves early</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheltered in place, (did not actively defend property)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wait to see how bad it is and then decide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some household members leave early/others stay and defend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stay and defend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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ACTUAL RESPONSES OF PET OWNERS AND NON-PET OWNERS

- Whole family/household leaves early
- Sheltered in place, (did not actively defend property)
- Wait to see how bad it is and then decide
- Some household members leave early/others stay and defend
- Stay and defend
- Other

Pet Owners  Non-Pet Owners
PLANNED FUTURE RESPONSES OF PET OWNERS AND NON-PET OWNERS

- Stay and defend
- Some household members leave early/others stay and defend
- Whole family/household leaves early
- Shelter in place (passively)
- Wait to see how bad it is and then decide

Pets (n=177) vs. No pets (n=61)
PRACTISED THE PLAN? PET OWNERS VS NON-PET OWNERS

- Yes
- No
- Other

Pet owners vs Non-pet owners
ANALYSIS IN PROGRESS

• Different actions by different groups of pet owners
  • dog owners vs cat owners vs horse owners vs small animal owners vs bird owners etc
  • Particular attention to horse owners given transport needs
  • Role of emotional attachment to pets in planning decisions
BLUE ARC
BLUE MOUNTAINS - ANIMAL READY COMMUNITY

Your voice, their lives.

Animals in Emergencies Survey
Blue Mountains & surrounding areas
DUAL AIMS

Blue ARC
To support community resilience in emergency events through better awareness, preparedness, planning and response for companion animals, livestock, and native wildlife.

MAiD
• To support and observe formation and progression of a community-led AEM group
• Distil generic advice, guidance, applicable to other groups
• Identify and start developing outputs and resources that could be taken and modified for use elsewhere
**ACTIVITIES (DATA IN)**

- Group meetings
  - Establishing the group, what it is and isn’t, motivations and expectations of members
  - Brainstorming activities
  - Formal aims, description
- Local networking
- Interviews
- Community survey
- Audit of veterinary practices
- Audit of animal boarding establishments
- Workshops – expert consensus community training
ANIMALS IN EMERGENCIES SURVEY

AIMS

1) To assess local community emergency preparedness for their animals,

2) To learn about experiences and identify issues that have occurred in previous emergencies regarding animals, and

3) To identify local needs and gaps when it comes to preparing and planning for animals in local emergencies.

(plus unstated aims...)
Call to think about animals as well

Preparing for disasters

DO YOU know how best to look after a treasured family pet during a disaster or where to go for help?

These are just some of the questions researchers will ask in a survey aimed at better preparing the community for natural disasters in the wake of the 2013 fires.

The survey is a project of Macquarie University research, in conjunction with community group Blue ARC, responsible for the book The Smoke Clear, a compilation of photos taken after the bushfires, and the revitalisation of Enira Parndoo Park in Winmalee. Dr Mal Taylor is leading the research project Managing Animals in Disasters, which is funded by the Bushfire and Natural Hazards Cooperative Research Centre.

We may not be able to predict or prepare for natural disasters, but there are things we can do to help our companion animals stay safe.

TAKING A SURVEY: Buena Vista Rd’s Richard Astill and Fran Elton with dogs Mahara and Mili, with Blue ARC’s Jenny Bigelow and Dr Mal Taylor.

ANIMALS REMEMBERED: Dr Chris Blair by the memorial in Winmalee dedicated to the animals lost in the fires of 2013.

The survey is at www.surveymonkey.com, or you can complete it in person at springwood and Winmalee Neighbourhood Centres, The Training Page and online at bhcrc.com.au.
SURVEY LATEST (04/04/17)

- 258 responses
- 123 experienced an emergency event (80% - 2013 bushfires)
- 65 evacuated with animals

- 26% don’t have a clear plan of where they’d take their animals if they evacuated
- 14% would need to make two or more trips to get all people and animal out in an emergency
- 31% don’t have a family member or friend who could evacuate animals for them if unable to get home
- 22% don’t have ID tags on animals
- In 22% of households all adults are away for most of the day (Mon-Fri)
I was one of the long distance commuters sent home early on the day of the October 2013 fires. We looked in horror at the amount of smoke outside the train windows and felt powerless as we shuffled along. There was one young woman on the phone desperately trying find someone to get her horses in Winmalee to safety. It was heart wrenching to listen to as were all the other calls. The pets of long distance commuters are particularly vulnerable in this situation and it would be good to offer some sort of support for them.
WHY THIS IS AN ISSUE FOR ESOs

If you needed information or advice about what to do with your animals in an emergency situation, where would you go? (n=254)

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency service organisation (RFS, SES, or Fire and Rescue)</td>
<td>62%</td>
</tr>
<tr>
<td>Police / Local police (e.g. Blue Mountains LAC)</td>
<td>24%</td>
</tr>
<tr>
<td>Council (e.g. Blue Mountains City Council)</td>
<td>27%</td>
</tr>
<tr>
<td>Department of Primary Industry (DPI)</td>
<td>4%</td>
</tr>
<tr>
<td>Social Media (Facebook, Twitter etc.)</td>
<td>47%</td>
</tr>
<tr>
<td>Your local veterinary clinic / your vet</td>
<td>55%</td>
</tr>
<tr>
<td>RSPCA (e.g. local Katoomba RSPCA or national RSPCA call centre)</td>
<td>41%</td>
</tr>
<tr>
<td>Neighbours (someone nearby)</td>
<td>32%</td>
</tr>
<tr>
<td>Friends/family</td>
<td>43%</td>
</tr>
<tr>
<td>Local animal association/group</td>
<td>10%</td>
</tr>
<tr>
<td>Other online sources/websites</td>
<td>21%</td>
</tr>
<tr>
<td>Other source</td>
<td>3%</td>
</tr>
</tbody>
</table>
COMMUNITY APPETITE FOR TRAINING

Would you be interested in any of the following training, if it was organised and held locally, and at minimal cost?

- Animal handling skills: 35.6%
- Large animal rescue methods: 20.9%
- Emergency pet/animal first aid: 71.2%
- Care of wildlife: 65%
- General emergency planning assistance - help with making a plan: 42.3%
- Other: 6.1%
VETERINARIANS IN EMERGENCIES

• Audit of local capacity
• Resources for community
• Experience in 2013 bushfires
• Practice emergency preparedness
• Needs – equipment, training
• Community training
• Ideas to support community
ACTIVITIES (OUTPUT PACKAGE)

1) Ideas for community activities
   • Awareness raising, fund raising, engagement

2) Provision of question bank and templates
   • Survey questions, interviews, guidance for data collection

3) Development of templates for community-relevant materials
   • Factsheets, animal-specific preparedness and information – developed with ESOs, local animal groups, local veterinarians

4) Community-based training
   • Content/syllabus development for animal first aid, wildlife care, animal handling, emergency preparedness 101
   • Simple YouTube videos for basic skills – e.g. animal handling

5) Veterinary-focused training
   • Seminars – animal emergency management
   • Wildlife care for veterinary nurses
WHAT IS MAiD LEARNING?

1) Wealth of community skills, resources, and support available in this area
2) People care a great deal about wildlife
3) Issues of group dynamics – fragility in early stages and in transitioning
4) Community-led projects run to their own time
REFLECTIONS ON MAiD AND AEM IN AUSTRALIA

1) Project Achievements
   • obvious outputs and invisible contributions
2) Pockets of hope
3) Timelines for AEM
Rothesay Evacuation Centre opens for flood affected residents

The Evacuation Centre has opened in the former Salvation Army at the Macquarie St grounds and is open to people who have been in flood affected areas.

Today over 40 emergency personnel transported more than 1,000 tonnes of sandbags to areas that will have some form of inundation, advising residents to be self-sufficient.

Council is encouraging residents to totally consider other options such as staying with family, friends that live in an area safe from flood water.

If you are preparing to stay at the Evacuation Centre, the following tips are in place:

- Bring identification with you.
- Bring your own bedding with you.
- Not All areas under inundation will be flooded, as areas will be flooded.
- Flooded smoke from older buildings with the Centre.
- Remember your medications and prescriptions.

Follow these weather forecasts to ensure your safety and warnings are issued and received. Queensland Water Supply is conducting 24-hour patrols in all flood affected areas.

If you require assistance please contact the LDOQ on 1800 650 630, now open 24 hours a day.

One night in an evacuation centre

Ayr, a place people feared they'd never return to, as floodwaters rose. The sleepless night is coming.

FINISH APRIL 2017

People arrived and left at all hours. Many brought their dogs, but hygiene regulations meant that animals couldn't stay in the building. Cages had been requested but couldn't be delivered in time.

"One guy ended up sleeping in his car with five dogs. I guess he was quite warm, actually," Kerrie laughs.
FINAL MESSAGE ABOUT MESSAGING

No Lives Lost!