MANAGING ANIMALS IN DISASTERS (MAiD)
Improving preparedness, response, and resilience through individual and organisational collaboration

RAF PRESENTATION
8-9 APRIL 2015
AIM AND GOAL

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.
# APPROACH

<table>
<thead>
<tr>
<th>Year</th>
<th>2013/4</th>
<th>2014/5</th>
<th>2015/6</th>
<th>2016/7</th>
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</thead>
<tbody>
<tr>
<td>Month (No.)</td>
<td>1 2 3 4 5 6</td>
<td>7 8 9 10 11 12 13 14 15 16 17 18</td>
<td>19 20 21 22 23 24 25 26 27 28 29 30</td>
<td>31 32 33 34 35 36 37 38 39 40 41 42</td>
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</table>

- **Start-up**
- **Scoping**
- **Field work**
- **Development**
- **Assessment**
- **Consolidation**

## OUTCOMES EXPECTED

- Systematic and critical evaluation of the broad systems issues – challenges and needs
- Identification of gaps in knowledge/action and prioritisation of those areas suitable for development of support tools/materials
- Directed in-depth understanding of the priority areas (through field studies) to inform tool development
- A set of prototype evidence-informed support tools/materials that have been subject to initial assessment
YEAR ONE - SCOPING

- **Critical audit**: formal policies, procedures and local initiatives, current research
- **SA bushfires interviews**: livestock producers’ experiences
- **Responder survey**: responder experiences and needs
- **Stakeholder survey**: organisational challenges and needs, priority groups
- **Knowledge exchange workshop**: one-day meeting (Sydney, August)
SA BUSHFIRE INTERVIEWS

CQUni team members – CFS/BNHCRC community taskforce

Determine the levels preparedness, expectations and experiences of livestock producers during bushfires

- 41 livestock producers – 3 field sites
- Threatened by significant bushfires in January 2014
Few livestock producers had formal bushfire plans
General low concern for bushfire threat
High self efficacy
Stay and defend
No plan B
Insurance (usually under-insured or not at all)
Conduct risky behaviour moving sheep and defending property at the last minute
Don’t utilise materials/information or warnings, or attend community programs or meetings
Don’t utilise emergency management information—rely heavily on local networks

Smith, Taylor, Thompson AJEM (April 2015)
RESPONDER SURVEY

Aims
To assess attitudes towards operational responsibility for animals.

To scope the range and extent of challenges faced by emergency services personnel in their interactions with animals and their owners.

Goal
To gather the views and experiences of a broad cross-section of emergency services personnel operating across Australia and all hazards.

Data collected May – July 2014
165 respondents
RESPONDER SURVEY

<table>
<thead>
<tr>
<th>Themes</th>
<th>%</th>
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<tbody>
<tr>
<td>Examples of dangerous/risky behaviour or inappropriate actions</td>
<td>26.4</td>
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<tr>
<td>Refusal to leave or be parted from animals</td>
<td>22.6</td>
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<tr>
<td>Comments about horses and horse owners as a special case</td>
<td>17.0</td>
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<tr>
<td>Details of emotional responses of owners</td>
<td>13.2</td>
</tr>
<tr>
<td>Experiences with dangerous animals/animal behaviour</td>
<td>13.2</td>
</tr>
<tr>
<td>Issues around owners returning/wanting to return early or being denied access</td>
<td>11.3</td>
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<tr>
<td>Owners’ focus solely on animals and ignoring risk to self and others</td>
<td>9.4</td>
</tr>
<tr>
<td>Owners having unrealistic expectations of the level of help from emergency services</td>
<td>7.5</td>
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<tr>
<td>Problems with response co-ordination - with groups/agencies or absent owners</td>
<td>5.7</td>
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</tbody>
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‘very emotional situations in time of large fires endangers staff and public’

‘Roads used for evacuating communities blocked by horse floats... People helping to evacuate friends’ horses with no plan or idea of the area and not knowing the roads into or out of the area they have gone into to assist.’
RESPONDER SURVEY

- Need for education/clarification and clearer communication about the role and responsibilities of emergency services organisations
- Cultural shift required to meet changing public attitudes and expectations
- Initial quantification of the issue
- Identification of specific issues
  - Logistics
  - Unclear policy/operational responsibility
  - Interactions with owners during response

Taylor et al., BNHCRC Research Forum (December 2014)
Smith et al., PLoS Currents Disasters (January 2015)
STAKEHOLDER SURVEY

Comprehensive national survey of Australian Response Organisations and other relevant stakeholders involved in the management of animals and their owners in emergencies and disasters

AIM - to identify and prioritise the challenges encountered by these organisations in the management of animals and animal owners

Data collected July – August 2014
- 98 respondents
- 68 organisations
- Range of organisations (categorised)

Taylor et al., AJEM (April 2015)
SPECIFIC PROBLEMS AND CHALLENGES

Emergency Services

1. The physical management/rescue of animals in natural disasters
   - Level of impact: 2.89

2. Interactions with animal owners during disaster response
   - Level of impact: 2.85

3. Interactions with animal owners in disaster preparedness and emergency response
   - Level of impact: 1.85

4. Interactions with members of the general public
   - Level of impact: 2.05

5. Post-disaster impacts in management of animals or their owners
   - Level of impact: 2.35

6. The logistics available to respond to animals in natural disasters
   - Level of impact: 2.45

7. Unclear policy or operational responsibilities
   - Level of impact: 2.40

8. Inter-agency coordination
   - Level of impact: 2.30

9. Co-ordination with non-emergency service agencies
   - Level of impact: 1.95

10. Managing spontaneous animal-related responders
    - Level of impact: 2.11
<table>
<thead>
<tr>
<th>MAIN ISSUES BY ORGANISATION CATEGORY</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td><strong>Emergency Services</strong></td>
<td>a. The physical management/rescue of animals in natural disasters (2.89)</td>
<td>b. Interactions with animal owners during disaster response (2.85)</td>
<td>f. The logistics available to respond to animals in natural disasters (2.45)</td>
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<tr>
<td><strong>Primary Industries</strong></td>
<td>a. The physical management/rescue of animals in natural disasters (2.95)</td>
<td>f. The logistics available to respond to animals in natural disasters (2.89)</td>
<td>d. Interactions with members of the general public (2.80)</td>
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<tr>
<td><strong>Local Government</strong></td>
<td>f. The logistics available to respond to animals in natural disasters (3.23)</td>
<td>b. Interactions with animal owners during disaster response (2.69)</td>
<td>a. The physical management/rescue of animals in natural disasters (2.62)</td>
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<tr>
<td><strong>Animal organisations</strong></td>
<td>j. Managing spontaneous animal-related responders (2.87)</td>
<td>f. The logistics available to respond to animals in natural disasters (2.67)</td>
<td>e. Post-disaster impacts in management of animals or their owners (2.60)</td>
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<tr>
<td><strong>RSPCA</strong></td>
<td>f. The logistics available to respond to animals in natural disasters (4.25)</td>
<td>g. Unclear policy or operational responsibilities (4.00)</td>
<td>a. The physical management/rescue of animals in natural disasters (4.00)</td>
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<tr>
<td><strong>Other Govt Agencies</strong></td>
<td>j. Managing spontaneous animal-related responders (3.14)</td>
<td>d. Interactions with members of the general public (2.86)</td>
<td>a. The physical management/rescue of animals in natural disasters (2.71)</td>
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<tr>
<td><strong>Human welfare</strong></td>
<td>e. Post-disaster impacts in management of animals or their owners (3.33)</td>
<td>b. Interactions with animal owners during disaster response (3.00)</td>
<td>f. The logistics available to respond to animals in natural disasters (2.33)</td>
</tr>
</tbody>
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PRIORITY AREAS – OWNER GROUPS/FOCUS AREA

All stakeholders - ‘High priority’

- Companion animal/pet owners: 48.3%
- Small landholders/acreages - with outdoor/larger animals (eg. horses, goats, alpacas): 62.2%
- Owners of small-scale animal-related businesses (eg. kennels, agistments, breeders): 47.2%
- Owners of larger-scale animal-related businesses (eg. stables, zoos, animal shelters, studs): 48.3%
- Agricultural business - farmers/livestock owners: 50.6%
- Responders - yours or other organisations' personnel (skills/education/training): 36.4%
- Mix of response organisations (collaboration/coordination): 29.9%
TYPES OF OUTPUT MOST USEFUL

All stakeholders - ‘Extremely useful’

- Education and training: 33%
- Workshop content: 17%
- Business continuity planning (animal businesses): 30.3%
- Community engagement materials: 34.8%
- Guidelines/manuals: 32.6%
- Re-unification technology (eg. apps, web-based lost and found, GPS tracking): 14.9%
KNOWLEDGE EXCHANGE WORKSHOP

Aim

To assist in planning the field study stage of the project by

- bringing together researchers, end-users, and stakeholders
- discussing and sharing information/knowledge
- 24 stakeholder organisations represented
- police and emergency services, primary industries, university sector, and animal advocacy and welfare

Taylor, Eustace, McCarthy, BNHCRC (December 2014)
YEAR TWO – FIELD WORK

- Emergent informal volunteer groups
- Peri urban animal owners
- Agricultural flood study
EMERGENT INFORMAL VOLUNTEER GROUPS

**AIM** - to explore the integration of informal volunteers into animal emergency management. Sampson Flat bushfire will be used as a case study to explore questions regarding the challenges for, and strengths and limitations of, informal volunteering in this context.

Series of semi-structured interviews

- Coordinators/administrators of emergent informal volunteer groups
- Members of established animal organisations (extending)
- Members of the volunteer group South Australian Veterinary Emergency Management (SAVEM),
- Trained emergency services personnel and personnel from key government agencies
‘PERI URBAN’ ANIMAL OWNERS

What are the needs, issues of and challenges for peri-urban animal owners/enterprise owners in emergency management?

What are the challenges posed for emergency responders?

How can we improve the interface between peri-urban animal owners/enterprise owners and emergency responders to improve emergency management?

- Bushfire risk (Tas) and Flood risk (NSW) contexts
- Mixture of animals requiring different preparations
- May ‘host’ animals not belonging to them (agistment/boarding)
- Stronger, more individuated human-animal bonds with large animals like alpacas and horses, and non-household pets like chickens
AGRICULTURAL FLOOD STUDY

Queensland-based Cattle farmers
PHD STUDENT RESEARCH

Rachel Westcott

Investigating the application of protection motivation theory to the behaviour of animal owners and emergency responders in bushfire natural hazards

- Sequential mixed methods study
- Port Lincoln, SA
- Primary responders
- Secondary responders
- Animal owners