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ANIMAL WELFARE EMERGENCY MANAGEMENT: EDUCATIONAL NEEDS

A thesis presented in partial fulfilment of the requirements for the degree

of

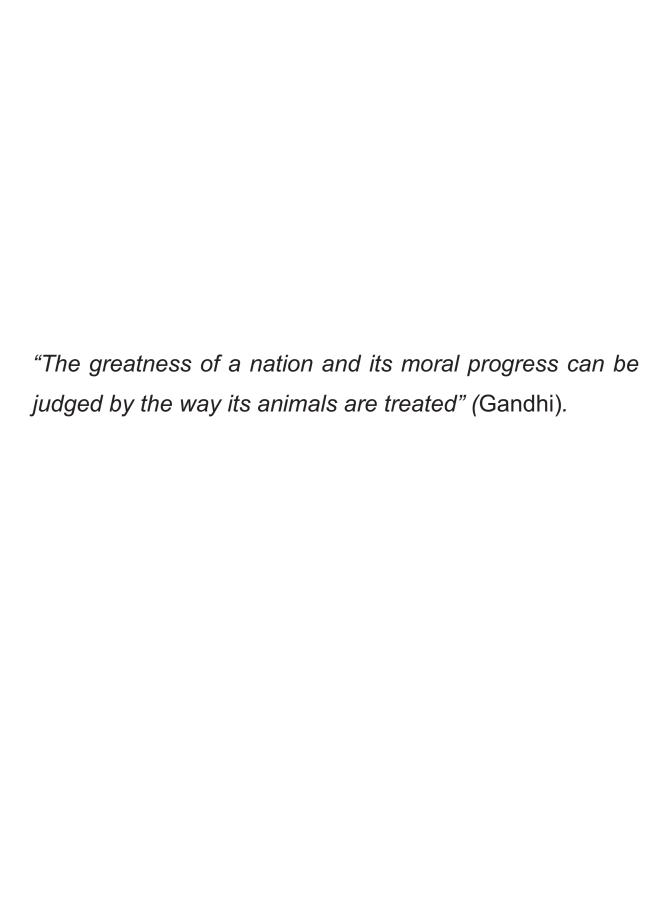
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ABSTRACT

Animal Welfare Emergency Management (AWEM) is an emerging area of emergency management. AWEM is used to describe the management of animal welfare needs, through all phases of emergency management. It is a critical component of modern emergency management, due to the complex bond between humans and animals and the unequivocal evacuation non-compliance of pet owners during disasters. As this is a new area, no studies have been conducted to examine the different personnel involved in animal welfare emergency management, nor has the development of evidence-based core competencies been examined.

The purpose of this research was to define animal welfare emergency management, identify and define different groups of personnel involved in animal welfare emergency management and examine core educational domains along with core competencies and the associated assessable learning outcomes.

This study, from a broad perspective, aimed to provide an overview of current multi-discipline competencies, curriculum and course content in relation to disaster practitioners' requirements, which could shape the development of similar domains and competencies with associated assessable learning outcomes for animal welfare emergency management personnel. The study also explored the requirements for different levels of cognitive knowledge, from low-order to high-order, within different roles of animal welfare emergency management.

Both quantitative and qualitative data have been collected in this study using a combination of triangulated methods and Delphi technique, including scientific document review and analysis, online questionnaire and a panel of subject experts. The findings from the document review informed the development of core educational domains, and the online questionnaire informed and guided the development of core educational competencies and associated learning outcomes.

This study identified three different groups of personnel involved in animal welfare emergency management; (1) policy/planning, (2) emergency animal shelter and (3) emergency animal

rescue, all of which require defined core competencies to adequately fulfil their roles in animal welfare emergency management.

This study also identified eight core educational domains:

- (1) Emergency Management
- (2) Animal Welfare Emergency Management
- (3) Behaviour
- (4) Roles in Animal Welfare Emergency Management
- (5) Co-ordinated Incident Management Systems (CIMS)
- (6) Safety,
- (7) Communication
- (8) Problem-solving;
- and eight core competencies with twenty-eight associated assessable learning outcomes.

This study has developed a foundation for the development of educational and training programmes in animal welfare emergency management in New Zealand. These findings indicate the need for replication of this study on an international scale to extend the generalisability of the results and to test the reliability and validity of the newly developed competencies. This could lead to international standardised educational core competencies for all personnel involved in animal welfare emergency management.

This is the first study which has identified the three groups of personnel involved in animal welfare emergency management and developed animal welfare emergency management competencies, with associated assessable learning outcomes. The corpus of knowledge that has evolved from this study could be used to promote awareness of animal welfare emergency management in government, private and educational sectors. Ultimately, adding to the limited literature available in this area will make a significant contribution to addressing the welfare needs of animals during disasters.

PREFACE

Four years ago I was asked a question by the MidCentral Health Board pandemic planner, "are there any emergency management plans for animals in New Zealand and what resources are available?" I was unable to answer this question and the more research I did on the topic, it became clear that 1) New Zealand does not have an emergency management plan for animals 2) there is very little literature available on this subject and 3) I could make a significant and worthwhile contribution to the welfare of animals in disasters if I pursued this as a research study. For me this has been an enlightening and enriching journey that has encouraged me to continue to contribute to Animal Welfare Emergency Management.

Undertaking the present study has reminded me again of the great privilege and responsibility I have as an educator and veterinary technologist, who can continually make contributions to animal welfare through education.

I sit here with my trusted canine companion who hasn't left my side throughout this whole research study and seems to live life for the moments we can spend together. How could I be expected to leave him (Zia), my other canine companions Meisha and Larka or my neighbours pets behind during an evacuation or be told to shoot them all before I leave? Acknowledgement of the importance of having policy and capability to management animals in a disaster is required by New Zealand's Civil Defence and Emergency Management sector. This acknowledgment will lead to a change in the current omission of animals in emergency management plans.

"Be the change you want to see in the world" (Gandhi).

ACKNOWLEDGMENTS

Embarking on an academic and personal journey of a Masters degree is one that not only encroaches on the life of the student; it filters its way into the lives of those around you. The success of such a journey can only be achieved through the support, encouragement and belief in the researcher from family, friends, colleagues and supervisors. I would like to acknowledge and thank the following for their support during the completion of this study:

This study would have not been possible without the participation of Animal Welfare Emergency Management personnel through the two phases of this study. I would like to thank you for completing the questionnaires and offering valuable information and support, which has shaped this study.

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To Steve Glassey, your infectious enthusiasm for Animal Welfare Emergency Management, friendship, invaluable support and advice has helped tremendously throughout this study.

The National Animal Welfare Emergency Management Liaison Group (NAWEM) for offering me the opportunity to develop a research study in this area and to contribute to AWEM in New Zealand.

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Glossary of Terms

Term	Definition
Act	Civil Defence Emergency Management (CDEM) Act 2002
Administering authority	As required by Section 23 of the CDEM Act 2002, which is responsible for the provision of administrative and related services required by the Group
Agencies	Government agencies, including public service departments, non-public service departments, Crown entities, and Offices of Parliament; and Non-governmental organizations; and Lifeline utilities
Animal Rescue Unit	A team which conducts search and rescue efforts of animals during an emergency. Displaced animals, animals that have been left behind are rescued from buildings and on the streets and transported to animal welfare centres. Animals may require first aid out in the field. Personnel in this unit/team are highly trained in animal handling and emergency rescue response
Animal Response Unit	Incorporates the animal rescue unit and the animal welfare centre personnel
Animal Welfare Inspector	Inspector means an inspector appointed under Section 124 (1) or 124(2) of the Animal Welfare Act 1999 and includes every member of the Police
Capability	Means the effectiveness of co-operation and co-ordination arrangements across agencies for the delivery of resources in the event of an emergency
Capacity	Means the adequacy of resources in terms of quantity, and suitability of personnel, equipment, facilities and finances
CDEM	Civil defence emergency management
CDEM Group	A Group established under s 12 or re-established under Section 22 of the CDEM Act 2002. Can be read to mean any of the 16 regional CDEM Groups in this Guideline
CIMS	The New Zealand Co-ordinated Incident Management System. An agreed method of incident management to be employed by emergency responders for efficient incident management
Competency / Competencies (plural)	The level of performance demonstrating the effective application of knowledge, skill and judgment
District Health Board	Means the provider of publicly funded health services for the population of a specific geographical area in New Zealand
Emergency	 Means a situation that: is the result of a happening, whether natural or otherwise, including without limitation, any explosion, earthquake, eruptions, tsunami, land movement, flood, storm, tornado, cyclone, serious fire, leakage or spillage of any dangerous gas or substance, technology failure, infestation, plague, epidemic, failure of or disruption to an emergency service or lifeline utility, or actual or imminent attack or warlike act; and causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property of New Zealand or any part of New Zealand; and cannot be dealt with by emergency services, or otherwise requires a significant and co-ordinated response under the CDEM Act 2002

EOC	The CDEM Group's local Emergency Operations Centre(s) for
100	the co-ordination of local response activities by all local
	responders, the management of local Evacuation Centres, and
	the care of local communities
- ·	
Euthanasia	Literally euthanasia means "good death" or a "mercy killing".
	Euthanasia is offered as a release from pain or debilitating
	disease states in animals
Evacuation	The temporary relocation of all or part of a particular population
	or geographical regional region from a location that has been or
	is about to be affected by an emergency, to a place considered
	to be safe
NAWEM	National Animal Welfare Emergency Management Liaison
	Group
Pet Friendly Hotel/Motel	Is an establishment where people who are evacuate may seek
,	shelter where consent has been given by the establishment to
	allow animals occupy the rooms with the owners
Pet Friendly Shelter	Shelters that put owners and their animals in close enough
	proximity that the owners can provide the majority of the care
	for their pet(s)
State of emergency	Has the same meaning as in Section 4 of the CDEM Act 2002
- State of officigority	and means a state of national emergency or a state of local
	emergency
Temporary Animal Shelter (TAS)	Shelters set up to house animals either in a building which has
Temporary Ammar Sheller (176)	been previously identified as suitable to house animals; or
	temporary housing situations in boarding facilities
Veterinarian	A person with the relevant qualifications who is currently
Vetermanan	
	registered with the New Zealand Veterinary Council as a
Mataria and Danamata asiana d	practicing veterinarian
Veterinary Paraprofessional	A veterinary nurse or veterinary technologist who holds a
	qualification in either a certificate in veterinary nursing, diploma
	in veterinary nursing or Bachelor of Veterinary Technology or
	equivalent
WAG	Welfare Advisory Group established under Section 8.6.1 CDEM
	Act 2002
Welfare Centre	The CDEM Groups local centres for direct involvement with the
	public for:
	The provision of advice and information about an
	emergency
	Temporary shelter for evacuees
	Registration of evacuees and relocation to
	accommodation; and
	The provision of aid to affected communities
Zoonotic Disease (zoonoses)	An infectious disease that can be transferred from animals to
	humans or conversely to humans to animals