

Supplementary Material

How much time, effort and money is spent caring for wombats?

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Appendix S1

To complete this survey, you must:

- Be 18 years of age or older
- Live in Australia
- Be involved in a wildlife rescue or conservation

The survey should not be completed if you do not meet these requirements. The aim of this survey is to understand the time and effort wildlife carers put into rehabilitating wildlife, more specifically wombats. It is also being used to determine the reasons why wombats are taken into care and the success rate of rehabilitation.

This survey consists of five different sections; demographics, wombat care, sarcoptic mange, joeys and conservation. The survey will consist of a series of questions and/or images in each section. It is important to provide an honest response and remember there are no right or wrong answers.

Depending on your individual responses, this survey may take approximately 10 minutes or more to complete.

If you complete this survey, you grant the researcher permission to analyse your answers. Your participation will remain confidential, and any information you provide will not be used to identify you. At any point throughout the process, you can withdraw from the survey without penalty and have your answers removed from the database.

Please note that all questions are required to be answered.

If you have any questions or concerns please contact the students' supervisor: Associate Professor Julie Old (j.old@westernsydney.edu.au).

Wildlife carer survey questions

NOTE: This survey focuses on wombats coming into a facility for treatment rather than providing treatment in the field

DEMOGRAPHICS

This section will enable the researchers to identify how demographics influence individual responses and enable the researchers to compare responses between subgroups.

1. What is your age?
 - 18-25
 - 26-35
 - 36-45
 - 46-54
 - 54-65
 - 65+

2. What is your sex?
 - Male
 - Female
 - Other
 - Prefer not to say

3. What is your postcode?

4. What was your main reason for becoming a wildlife carer?
 - My passion for animals and desire to help them
 - To help conserve wildlife
 - To give back to my community
 - To raise awareness and educate the public about the importance of wildlife
 - Other (please specify)

5. What is your employment status regarding wildlife care?

- Employed, full time
- Employed, part time
- Employed, casual
- Volunteer

6. What type of facility/organisation do you work/volunteer for? E.g. Zoo, National park's licensed group, conservation centre.

7. How long have you worked/volunteered as a wildlife carer?

- <1 year
- 1-3 years
- 4-6 years
- 7-10 years
- 11-14 years
- 15+ years

8. How many hours a week do you spend working in wildlife care?

- 1-10 hours
- 11-20 hours
- 21-30 hours
- 31-38 hours
- 38+ hours

9. What is your highest level of education?

- No formal schooling
- Primary school

- Secondary school (Year 10)
 - Secondary school (Year 12)
 - Apprenticeship or trade qualification
 - Certificate I-V
 - Diploma
 - Advanced diploma
 - Bachelor's degree
 - Honors degree
 - Masters degree
 - Doctorate degree
 - PhD
 - Other (please specify):
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GENERAL WOMBAT CARE

This section will enable the researchers to identify the reasons why wombats enter care and rehabilitation.

10. What species of wombat do you treat the most?

- Bare-nosed
- Southern hairy-nosed

11. Select the reasons why adult wombats come into your care (choose the 2 most common reasons below)

- Sarcoptic mange
- Bushfire/natural event
- Motor vehicle trauma
- Attack from predator
- In-situ treatment
- Other - please specify

12. What are your most common costs associated with caring for adult wombats? Please choose multiple answers.

- Feeding
 - Housing (blankets, heat packs, shelter)
 - Medicine
 - Veterinary care
 - Rehabilitation therapy
 - Transport
 - Portable/permanent enclosures
 - Other, please specify
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13. Based on your response from Q12, please provide a rough estimate of the economic value of costs associated with adult wombat care for a monthly period.

14. In care, do you spend more time working with adult or juvenile/joey wombats in warmer months?

- Adult
- Juvenile/joey

15. In care, do you spend more time working with adult or juvenile/joey wombats in colder months?

- Adult
- Juvenile/joey

16. How many hours a week do you spend working with adult wombats?

- 0-1 hour
- 2-4 hours
- 5-6 hours
- 7-9 hours
- 10+ hours

17. In general, on a scale of 1-5, what is the likelihood a wombat that comes into care responds to treatment and recovers? (Recovers refers to the wombat being independent whether in conservation care or in its natural habitat)

1 2 3 4 5

Very likely

Very unlikely

18. Under what circumstances would you be prepared to stop treatment?

19. On a scale of 1-5, what is the likelihood of an adult wombat that enters care as a result of motor vehicle trauma/injury responding to treatment and recovering? (Recovers refers to the wombat being independent whether in conservation care or in its natural habitat)

1 2 3 4 5

Very likely

Very unlikely

20. On a scale of 1-5, what is the likelihood of a joey that enters care due to being removed from their mothers pouch as a result of motor vehicle trauma/injury, responds to treatment and recovers? (Recovers refers to the wombat being independent whether in conservation care or in its natural habitat)

1 2 3 4 5

Very likely

Very unlikely

21. How many wombats do you currently have in care?

- 1-5
- 6-10
- 11-15
- 16-20
- 20+

If you have more than 20+ wombats in care please specify the number.

22. How many adult wombats (above 19kg) does your facility treat per year?

23. To care, treat and rehabilitate wildlife, what funding does your facility rely on the most?

Please select one.

- Public donations
- Government funding
- National grant program
- Research grant program
- Emergency relief grants
- Funding via licensed group you are authorised under
- Other, please specify

24. When recovered wombats get released, where do you release them?

- Their original home range
- In a National park close by
- State forest
- A sanctuary or conservation centre

- Private properties

SARCOPTIC MANGE

This section will enable the researchers to identify the outcome and treatment methods for wombats with sarcoptic mange.

25. Has a wombat in your care been treated for sarcoptic mange?

- Yes
- No (skip to question 28)

26. If yes to question 24, what was the original reason the wombat came into care?

- Sarcoptic mange
 - Bushfire/natural event
 - Motor vehicle trauma
 - Attack from predator
 - Other - please specify
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27. If selected yes to question 24, please specify the outcome of the wombat?

- Remained in care
- Remained in care and received other treatment for other reasons
- Re-introduced into natural habitat
- Introduced into captivity (wildlife park, conservation centers, sanctuary)
- Died

28. If selected yes to question 24, what treatment was given to the wombat?

- Moxidectin
 - Fluralaner
 - Other, please specify
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29. If selected yes to question 25, please specify the treatment regime.

WOMBAT JOEYS

This section will enable the researchers to specifically focus on wombat joeys and the reasons they come into care.

30. Select the reasons why joey wombats come into your care (choose the 2 most common reasons below)

- Sarcoptic mange
- Orphan (under 19kg)
- Bushfire/natural event
- Motor vehicle trauma
- Attack from predator
- Other - please specify

31. How many hours a week do you spend caring for joeys?

- 0-1 hour
- 2-4 hours
- 5-6 hours
- 7-9 hours
- 10+ hours

32. In response to the question above, what was the condition of the joey? E.g. furless, has fur.

36. What is the average age of joeys that come into care, using the image as a guide?

- <90 days old
- 90 days old
- 120 days old
- 150 days old
- 180 days old
- 210 days old
- 240 days old
- 270 days old
- 12-15 months old

Age	Weight (approximate)		Stages of development
	Common wombat	Southern hairy-nosed wombat	
90 days (3 months)	150 grams	130 grams	Hairless, ears unfolded, lips partially open
120 days (4 months)	390 grams	290 grams	Beginnings of fine fur, eyes open, lips separating
150 days (5 months)	800 grams	530 grams	Fine fur, lower incisors erupting
180 days (6 months)	1430 grams	880 grams	Upper incisors erupting
210 days (7 months)	2250 grams	1350 grams	Thicker fur, emerging from pouch
240 days (8 months)	3350 grams	2200 grams	Fully furred, starting to emerge when out of burrow
270 days (9 months)	4600 grams	3250 grams	Leaves pouch permanently
12–15 months	12–19 kilograms		Weaned at 12–15 months

Approximate weight and developmental stages in wombats based on age (Modified from (Bryant and Reiss 2008): Bryant B & Reiss A 2008, Wombats, in *Medicine of Australian Mammals* (Eds L Vogelnest, R Woods), pp. 329–358, CSIRO Publishing, Melbourne.

37. How many wombat joeys does your facility care for and rehabilitate per year?

41. On a scale of 1-5, do you believe improving governmental policies and procedures is an effective way to conserve wombats?

1 2 3 4 5

Very likely

Very unlikely

42. Is there anything you feel as though you need to add regarding current conservation practices, mandatory frameworks, governmental policies and procedures?

Appendix S2

List of Facebook pages/groups where survey was shared

A. Wombat

About Wombats

ACT Wildlife carers & Member Forum

Animal Rescue Cooperative (ARC) Tasmania

Aussie Wildlife Carers

Australia Wide, Wombats of the Dooralong and Yarralong Valleys

Blue Mountains Wombat Conservation Group

Bonorong Wildlife Sanctuary

Fourth Crossing Wildlife Council

Help from experienced carers for Possums and Aussie Wildlife

Humane Society for Animals

Jack's Place- NW Tasmania wombat lovers

Macropod Help for Carers

Mudgeroo Emu Farm and Animal Refuge

New South Wales Wildlife Council

Northern Tablelands Wildlife Carers

Rescued Wombats NSW

The rescue Collective Community

Warrego wildlife rescue, rehabilitation and education

WCS Wildlife and Carer Support

Wild Animals Australia Carers Specials

Wildlife Carers and Supporters

Wildlife Heroes

Wildlife Protection Association of Australia Inc.

Wildlife Rescue Contacts

Wildlife Rescue Volunteers (Victorian Network Group)

Wombat Care Bundanoon

Wombat Carers Discussion Group

Wombat Rescue Support Workgroup

Wombat Stomp Wildlife

Wombat Warriors (Central Coast, NSW)

Woolly Wildlife Warriors- Blue Mountains NSW

Appendix S3

Additional comments made by participants

- Educate the public more. Stop issuing permits to kill them. Support the mange programs.
 - Educating the general public would make positive changes and conservation programs to assist. Mange treatment available for every farmer or rural resident with wombats in their region.
 - Government have the ultimate say in any conservation
 - I believe it is time the government steps in to provide protection and not issue culling licenses for farmers.
 - I have been caring for wombats for over 40 years during that time I have not noticed any government practices that have changed for the welfare of wombats
 - More awareness and education starting in our schools and hopefully the next generation will be more aware
 - More driver education
 - More money
 - Research into population treatments. Research into mange resistance
 - Revise the National Parks Act to include specific roles and responsibilities for wildlife, in consultation with licensed rescue groups. Recognise the wealth of experience and knowledge in rescue groups. Provide sustained practical and financial help to volunteers; that currently shoulder the burden. Fund a wildlife rescue force within the NPWS. Fund wildlife hospitals and wombat rehabilitation facilities. These are the most difficult species to care for until they can survive release at 2 years of age and a weight of 25kgs, with maturation hormones making them aggressive.
 - Send out letters to all active registered carers for wombats not just coordinators and people who make themselves very known
 - The government are not doing enough for any of our wildlife or the environment
 - There is a huge need for more carers. All the carers I know are completely overwhelmed. Many work, and are also trying to care for way too many animals. There are good people wanting to be carers but each shelter can only seem to have 3 carers so they don't have availability and if they do, are too busy and stressed to train new people. I know of highly trained and experienced vets who would love to have a few wombat joeys in their homes but can not get a Licence. There needs to be a different system. Carers should be able to do a course that then gives them a license. And vets should be able to care for wildlife
 - There is not enough being done to protect wildlife in Australia
 - We need more for our woms. More protection, more safe guards, more funding, more native grass sites
 - Wombat mange management organisation need to become a bit more funded and collaborative. Mange management program in Victoria is very hidden. People (including call centres like Wildlife Vic) don't know who or where to call and sometimes euthanasia is encouraged prematurely without giving the animal a chance to undergo treatment.
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