

A Review Of Handling Methods Of Rabbits Within Pet, Laboratory And Veterinary Contexts

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Introduction & Aim

- Approximately 0.8 million pet rabbits are in the UK and 14,000 laboratory procedures involving rabbits occurred in 2014 (Home Office, 2015; PFMA, 2016).
- Rooney *et al.* (2014) found that the majority of pet rabbits UK were handled at least weekly.
- Previous research relating to rabbit handling generally focuses on the effects of handling (e.g. fear) within farming or a laboratory setting with little description of handling method used (e.g. Podberscek *et al.*, 1991; Verwer *et al.*, 2009).
- ‘Handling’ and ‘Restraint’ are broad terms, widely used in research involving rabbits and lack definition.
- Some handling methods are controversial, such as Scruffing and Tonic Immobility (TI) (a.k.a. trancing, dorsal recumbency, hypnotising).
- Little research has been conducted on rabbit handling by pet owners and methods used within pet, veterinary and laboratory contexts.
- This study aimed to investigate methods of handling between contexts by conducting a review of books.

Figures 1–5: Common handling methods

Method

- A range of textbooks were selected from the years 2000 – 2015 that were available on both Google books and the Amazon website.
- A List of books reviewed are available upon request.
- Books were included where specific handling/restraint sections could be identified which were aimed at pet owners, veterinary staff and/or laboratory staff.
- To identify the recommended handling methods and evaluate information available the following was recorded:
 - Number of handling and restraint methods described and use of images,
 - Justification for suggested methods (e.g. animal welfare/human health and safety) and hazards,
 - Identification of inappropriate handling methods.

Results

- In total 20 books were reviewed, ten pet rabbit, seven veterinary animal/rabbit and three laboratory animal/rabbit books.
- Handling and restraint methods were defined according to the description in each book. For results see the tables below.

Pet Books (10)

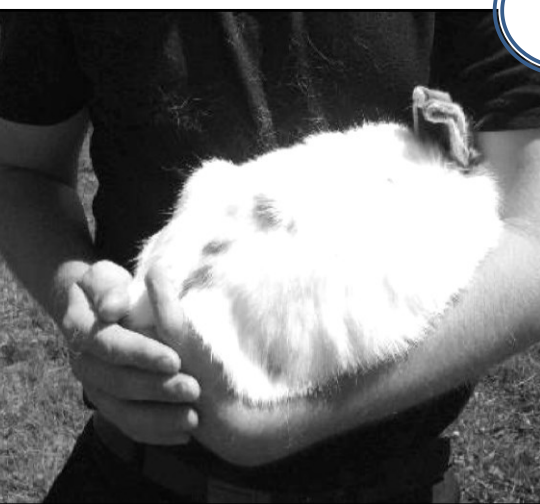
No. of different handling methods:	7 handling methods (range: 0 – 2 method(s) per book)
Handling methods:	<ul style="list-style-type: none">One hand under rear, other hand across back of headOne hand under rear, one hand over shoulder (fig. 1)One hand under rear, one hand under chest (fig. 2)Head under arm and other arm supporting body (fig. 5)Scruffing (fig. 4)‘Keep close to chest’All four feet held against body
No. handling images:	5 images (range: 0 – 1)
No. of Restraint methods:	4 restraint methods (range: 0 – 2)
Restraint Methods:	<ul style="list-style-type: none">Tonic immobility (fig. 3)TI (on back and stroke chest / abdomen / sides of head)Support body and gently hold earsWrap in a towelPlace on a non slip surface and restrain by hands
No. Restraint Images:	1 image (range: 0 – 1)
Justification of handling/restraint:	<ul style="list-style-type: none">None: 2Health & Safety only: 1Animal Welfare only: 5Both AW/H&S: 2
Inappropriate methods:	By the ears (7)
Hazards identified:	Back legs, kicking, scratching/claws, escaping

Veterinary Books (7)

No. of different handling methods:	5 handling methods (range: 0 – 2 method(s) per book)
Handling methods:	<ul style="list-style-type: none">One hand support rear and one hand under chest (fig. 2)Head under arm and other arm supporting body (fig. 5)‘Held close to chest’‘Against body’
No. handling images:	6 images (range: 0 – 2)
No. of Restraint methods:	8 restraint methods (range: 2 - 4)
Restraint Methods:	<ul style="list-style-type: none">Tonic immobility (fig. 3)Wrap in a TowelScruff and support rear (fig. 4)Scruff and rear on flat surfaceVertical hold against body with one hand supporting chestHold vertical with rear on flat surface‘Cat Bag’‘Hold against table’
No. Restraint Images:	12 images (range: 0 – 5)
Justification of handling/restraint:	<ul style="list-style-type: none">Health & Safety only: 0Animal Welfare only: 1Both AW/H&S: 6
Inappropriate methods:	<ul style="list-style-type: none">By the ears (4)Scruff alone (1)
Hazards identified:	Jumping/back legs, struggling, kicking, scratching/claws, teeth

Laboratory Books (3)

No. of different handling methods:	2 handling methods (range: 1 – 2 method(s) per book)
Handling methods:	<ul style="list-style-type: none">Head under arm and other arm supporting body (fig. 5)Scruff and support hind (fig. 4)
No. handling images:	2 images (range: 0 – 1)
No. of Restraint methods:	5 restraint methods (range: 0 - 5)
Restraint Methods:	<ul style="list-style-type: none">Plastic/metal restraint deviceTonic immobility‘Cat bag’Cloth/towelScruff on secure surface
No. Restraint Images:	5 images (range: 0 - 5)
Justification of handling/restraint:	<ul style="list-style-type: none">Health & Safety only: 0Animal Welfare only: 1Both AW/H&S: 2
Inappropriate methods:	None stated
Hazards identified:	Jumping, kicking, scratching/claws



Conclusion

- Overall this study found that a number of handling and restraint methods are available and differ between contexts. Frequency of imagery between contexts also differs.
- Current research is being conducted by the authors on various factors relating to different handling methods used by owners, veterinary professionals and laboratory staff.
- Different lifting, handling and restraint methods may result in different behavioural and physiological responses by individuals rabbits. The welfare implications of these needs further research.

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