Getting to grips with correct rabbit handling

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ABSTRACT

Vets have a vital role to play in the dissemination of information to owners regarding the handling and behaviour of their pets. Historically, picking up and cuddling rabbits has been seen as an acceptable way of showing affection and interacting with them. However, an increasing body of evidence suggests this interaction is perceived as unpleasant by rabbits.

Vets can improve this situation in various ways – by educating owners on good rabbit husbandry, discussing early life socialisation with breeders and handling rabbits in the veterinary practice in a way that reduces stress and sets a good example. This should extend to the marketing materials of the practice, as images of vets and VNs holding rabbits for publicity shots should not be regarded as acceptable.

As a vet, what is your reaction to an image such as Figure 1**?**

Figure 1. It is common for vets to be photographed holding rabbits, with the images used for publicity or advertising. An increasing body of evidence suggests being picked up and held is unpleasant for rabbits. To ensure vet marketing materials do not incentivise inappropriate handling of rabbits by owners, and ensure rabbits do not suffer unnecessarily, such images should no longer be used by vets. Image: © Fotolia/tan4ikk.

Our understanding of the essentials for good rabbit welfare is increasing all the time. Publications have focused on improving diet (Prebble and Meredith, 2014), exercise (Dixon et al, 2010) and companionship (PDSA, 2011) – all of which will improve rabbits' lives in terms of quality and length. However, another source of considerable stress exists in the lives of many pet rabbits – many owners often pick their rabbits up (Bradbury and Dickens, 2016).

Rabbits are a ground-living prey species that socially interact by proximity and facial contact. For such an animal, being lifted off the ground is usually a precursor to death and is, therefore, extremely stressful. By contrast, humans interact with the world primarily with their hands – mothers lift their children to show affection or protection and friends greet each other with a hug. These very different social communication strategies mean there is a large difference between the way humans and their pet rabbits want to interact. This is why we have no instinctive distaste for the situation in **Figure 1**.

Rabbits are usually small enough to be easily picked up. Some may show fear through growling, lungeing or biting; others may freeze or learn to tolerate being picked up. Unlike in the case of the

human-dog relationship (Hare et al, 2002), humans have not co-evolved alongside rabbits, so have no instinctive recognition of rabbit behaviour.

“Freezing” when lifted, either from fear or through learned helplessness, may be interpreted as acquiescence or willingness. Subtle signs of fear or discomfort (facial tension, pupil dilation and abdominal flattening response; Mayer, 2007) are usually overlooked. One study of the behaviour of pet rabbits found those belonging to owners who frequently picked them up were significantly less likely to voluntarily approach their owners (Mullan and Main, 2007). They also found rabbits housed singly were more likely to tolerate being lifted.

A study using laboratory rabbits also found rabbits housed singly were less likely to struggle when lifted. The authors suggested this was due to social deprivation in a socially dependent species (Podberscek et al, 1991).

Rabbits, unlike dogs, cannot kill or badly injure humans when stressed or scared. To many owners, this makes the problem of inappropriate handling seem less pressing. When the human-animal bond is strong, owners are more motivated to meet the various welfare needs of their pet (Wensley, 2008). If owners pick up their rabbits frequently, that human-animal bond inevitably suffers.

Teaching owners how to correctly interact with their rabbits will strengthen the bond, providing more motivation for the owner to improve rabbit husbandry in other areas. The perfect human-animal bond is mutually rewarding – it should not be imposition by one and tolerance by the other.

Figure 2. Rabbits solicit social interaction by lowering their head towards a familiar rabbit. If the request is successful, the second rabbit will lick the face of the first rabbit.

So, how can we improve this aspect of the welfare of the 1.3 million pet rabbits in the UK? Two main approaches exist – we should decrease the number of times rabbits are lifted while ensuring, when this is absolutely necessary, stress is minimised (Bradbury and Dickens, 2016). We can achieve the former by encouraging owners to interact appropriately with their rabbits and discourage picking them up. The latter requires a two-pronged approach – developing a strategy

for increasing tolerance in the pet rabbit population prior to the rabbits' sale at eight weeks of age and ensuring, when lifting of the rabbits is unavoidable (in the veterinary clinic, for example), this is done as humanely as possible.

Suitable interactions

Which human-rabbit interactions can actually be described as mutually pleasant? Owners who keep several rabbits (recognising good rabbit welfare is impossible without a conspecific companion) will see social allogrooming behaviours (Bozicovich et al, 2016).

Sometimes, one rabbit will groom another spontaneously. Sometimes one rabbit will actively solicit grooming by lowering the head and ears towards the other – if the second rabbit participates, it will usually lick the first rabbit on the top of its head, ears or around the eyes (**Figure 2**). It may also put its own head down – usually the rabbit who can get the head lowest is successful in being groomed (Bradbury, 2016).

Mutual grooming in areas that are not the head are usually objected to – attention on the back and rump is often sexually motivated, and attempts to lick the hind feet or anogenital region usually cause withdrawal.

What can we learn from these behaviours? We can see there is a way to "ask" a rabbit whether it wants physical interaction, proffering a closed fist near the ground in front of the rabbit's face (**Figure 3**). If it wishes to be groomed, it will lower the head.

Withdrawal or failure to lower its head indicates stroking is not desired, and this should be respected – giving an animal choice enhances its welfare by giving it greater control over daily events (McGlone, 2010) – this may also increase trust and strengthen the human-animal bond. If the rabbit lowers its head, stroking should be focussed on the head and ears (Swennes et al, 2011). Owners should be aware of this essential form of rabbit communication.

Tonic immobility, or "trancing", has been demonstrated to be stressful in rabbits (McBride et al, 2006; Oxley and Ellis, 2015). However, the popularity of internet memes of rabbits on their back may suggest to owners this process is acceptable or even enjoyable for the rabbit. Vets need to ensure owners are educated about the stress caused by this procedure and should lead by example. With good handling, it is extremely unlikely a rabbit will need to be immobilised in this way in a veterinary clinic (Varga, 2013).

Figure 3. Humans can mimic the social interaction behaviour of rabbits by proffering a closed fist at ground level. If the rabbit lowers its head, it is willing or wants to be groomed on the head.

Encouraging owners to stop picking up rabbits requires a change in how rabbits are managed. PDSA recommends runs attached to hutches to eliminate the need for rabbits to be lifted (PDSA, 2015). Rabbits can be easily trained to recall to a whistle, go into their cage or hutch on command and do simple tricks for food rewards (Brown, 2012; Bradbury, 2015).

Together, these allow the rabbit some freedom of movement while reducing stress, not only for the rabbit, but also for the owner, who no longer has to catch the rabbit to return it to its enclosure. Furthermore, training helps to create a bond between the trainer and animal (Bayne, 2002).

The other reason rabbits are lifted by owners is for important regular health checks recommended by vets. However, much less invasive ways of checking health exist that do not require lifting. Observation of normal behaviours, such as feeding, activity and resting postures, provides information as to the general state of the animal. Changed responses to trained commands may also indicate a change in health.

The claw length can be visually assessed, the head can be palpated for injuries, lumps or pain during normal interaction without lifting and the anogenital area can be checked by using a food reward above the animal's head to encourage it to stand up on its hindlegs (Bradbury, 2015). Needless to say, this should be done on the floor.

Beneficial breeder/vendor interventions

Two areas exist where rabbit breeders could make a significant difference to the welfare of the general rabbit population with respect to picking up.

Firstly, selective breeding – the majority of rabbit owners do not choose a pet based on its breed. Indeed, many sold are crossbreeds (Petplan, 2011). This dramatically widens the pool of potential matings and would allow breeders the freedom to not breed from especially fearful rabbits and choose those that are calm and confident around humans. This means when there is no alternative

but to pick up a rabbit, the stress caused to the animals produced by selective breeding is likely to be less.

Secondly, breeders must accept the responsibility of ensuring adequate socialisation of young rabbits. It used to be thought handling during a “critical period” was essential for socialisation (Anderson et al, 1973), but this has been contested (Pongrácz and Altbäcker, 1999).

Some work suggests simply exposing neonatal rabbits to human scent alters their behaviour towards humans in later life (Dúcs et al, 2009). Placing a used piece of clothing in the doe’s cage could be a practical method of socialisation of young rabbits. If breeders socialised all juvenile rabbits in this way, their stress, when picked up as an adult, would be significantly reduced.

Appropriate vet interactions

If a vet needs to lift any animal, it should be supported sufficiently to feel secure. In the case of rabbits, this includes supporting the paws, allowing the rabbit to brace and stabilise itself against the movement.

Figure 4. Securely lifting rabbits in a towel can avoid some of the distress caused by direct contact between the paws of the rabbit and the hands of the handler.

Everyone knows rabbits should not be lifted by the ears (although the prevalence of this statement implies it was once common practice), but neither can “scruffing” be recommended – the skin is not adapted to support the weight of an adult animal. Supporting the rabbit’s thorax and forelimbs with one hand while holding the hind paws in the other, or supporting the rabbit’s back end with all of its paws on your chest, seem to be the least-worst solutions.

If required, lifting a rabbit in a towel prevents direct contact with the paws, which seems to be especially distressing (Bradbury, 2014; **Figure 4**). Owners can train rabbits to voluntarily sit on a towel to be lifted and moved.

However, regardless of correct lifting styles, we must recognise that to improve the welfare of the rabbits at the veterinary clinic, the vet should try to pick them up as little as possible. The majority of the clinical examination can be performed with the rabbit remaining in a basket that opens at the top.

If the vet cannot avoid picking up a rabbit, it can at least be handled correctly. However, there is another time vets and VNs will pick up rabbits. This is for publicity photos (**Figure 1**) and is not acceptable. It causes substantial distress to the rabbit (an internet search for “rabbit vet” yields an educational display of facial tension in rabbits, an indicator of stress) for dubious self-aggrandisement for the vet. Any owner who cares about rabbit welfare should avoid vets who advertise themselves with such pictures. A vet posing with a rabbit is evidently one who is ignorant or who cares more about his or her image than the welfare of the animals under his or her care.

Conclusion

Vets have a vital role to play in improving rabbit welfare by education. We can do this by teaching owners about appropriate rabbit interactions and leading by example. If a rabbit does need to be picked up at the clinic, the vet should highlight the stress of this procedure and emphasise the importance of avoiding it where possible.

Vets working with breeders or vendors should encourage selective breeding for confidence, the socialisation of the young animals and the communication of evidence-based advice to new rabbit owners.

Working in cooperation with breeders, vendors and owners, vets have a key role to play in continuing to improve the welfare of our pet rabbit population.

References

- Anderson CO, Denenberg VH and Zarrow MX (1973). Effects of handling and social isolation upon the rabbit’s behaviour, *Behaviour* **43**(3): 165-175.
- Bayne K (2002). Development of the human-research animal bond and its impact on animal well-being, *Institute for Laboratory Animal Research Journal* **43**(1): 4-9.
- Bozicovich TF, Moura ASA, Fernandes S, Oliveira AA and Siqueira ERS (2016). Effect of environmental enrichment and composition of the social group on the behavior, welfare, and relative brain weight of growing rabbits, *Applied Animal Behaviour Science* **182**: 72-79.
- Bradbury A (2014). Picking up larger rabbits, https://bunnybehaviour.wordpress.com/video-gallery/expert-pack/picking-up-larger-rabbits (accessed 2 January 2016).

- Bradbury G (2015). Misconceptions regarding rabbit behaviour, *Veterinary Record* **176**(15): 392.
- Bradbury G (2016). Managing conspecific overgrooming in rabbits, *Veterinary Record* **178**(12): 298-299.
- Bradbury G and Dickens G (2016). Appropriate handling of pet rabbits: a literature review, *Journal of Small Animal Practice* **57**(10): 503-509.
- Brown SA (2012). Small mammal training in the veterinary practice, *Veterinary Clinics of North America: Exotic Animal Practice* **15**(3): 469-485.
- Dixon LM, Hardiman JR and Cooper JJ (2010). The effects of spatial restriction on the behavior of rabbits (*Oryctolagus cuniculus*), *Journal of Veterinary Behavior: Clinical Applications and Research* **5**(6): 302-308.
- Dúcs A, Bilkó Á and Altbäcker V (2009). Physical contact while handling is not necessary to reduce fearfulness in the rabbit, *Applied Animal Behaviour Science* **121**(1): 51-54.
- Hare B, Brown M, Williamson C and Tomasello M (2002). The domestication of social cognition in dogs, *Science* **298**(5,598): 1,634-1,636.
- Mayer J (2007). Use of behavior analysis to recognize pain in small mammals, *Lab Animal* **36**(6): 43.
- McBride EA, Day S, McAdie TM, Meredith A, Barley J, Hickman J and Lawes L (2006). Trancing rabbits: relaxed hypnosis or a state of fear? *Proceedings of the VDWE International Congress on Companion Animal Behaviour and Welfare*, Sint-Niklaas, Belgium.
- McGlone JFS, Mitloehner F, Grandin T, Ruegg P, Stull C, Lewis G, Swanson J, Underwood W, Mench J, Mader T, Eicher S, Hester P, Salak-Johnson J and Galyean M (2010). *Guide for the Care and Use of Agricultural Animals in Research and Teaching*, Federation of Animal Science Societies: 46.
- Mullan SM and Main DC (2007). Behaviour and personality of pet rabbits and their interactions with their owners, *Veterinary Record* **160**(15): 516-520.
- Oxley J and Ellis C (2015). Misconceptions regarding rabbit behaviour, *Veterinary Record* **176**(13): 339-340.
- PDSA (2011). Animal Wellbeing Report, https://www.pdsa.org.uk/~/media/pdsa/files/pdfs/veterinary/pdsa_animal_wellbeing_report_2011.ashx?la=en (accessed 20 December 2015).
- PDSA (2015). What you need to know about your rabbits, https://www.pdsa.org.uk/~/media/pdsa/files/pdfs/veterinary/2015/what-you-need-to-know-about-your-rabbit.ashx?la=en (accessed on 23 August 2016).
- Petplan (2011). Petplan pet census, https://www.petplan.co.uk/petcensus/censusinfo.pdf (accessed 7 December 2015).
- Podberscek AL, Blackshaw JK and Beattie AW (1991). The behaviour of group penned and individually caged laboratory rabbits, *Applied Animal Behaviour Science* **28**(4): 353-363.
- Pongrácz P and Altbäcker V (1999). The effect of early handling is dependent upon the state of the rabbit (*Oryctolagus cuniculus*) pups around nursing, *Developmental Psychobiology* **35**(3): 241-251.
- Prebble J and Meredith A (2014). Food and water intake and selective feeding in rabbits on

four feeding regimes, *Journal of Animal Physiology and Animal Nutrition* **98**(5): 991-1,000.
- Swennes AG, Alworth LC, Harvey SB, Jones CA, King CS and Crowell-Davis SL (2011). Human handling promotes compliant behavior in adult laboratory rabbits, *Journal of the American Association for Laboratory Animal Science* **50**(1): 41.
- Varga M (2013). *Textbook of Rabbit Medicine*, Elsevier Health Sciences.
- Wensley SP (2008). Animal welfare and the human–animal bond: Considerations for veterinary faculty, students, and practitioners, *Journal of Veterinary Medical Education* **35**(4): 532-539.