Vets Newsletter
Winter 2022

Rabbit Friendly Practice:
Part 2b (Kennels)

This is the third in the series, in which we look at the options for making your practice e more rabbit (and, hopefully, other similar species) friendly.

In this one, we continue with the kennels, looking at their construction and contents.

Opinions on the ideal height of cages to place rabbits into are divided. There is an argument for putting them in relatively high cages to make them feel more secure, but there does not seem to be much if any evidence for this. Higher up cages tend to be smaller and the lower level cages allow access into and out of them onto the floor without picking them up, as well as being closer to the ground and therefore safer if they jump out of one's arms when handling. For those reasons where there is a choice I would have them in as low down a cage as possible, preferably on the ground level.

An additional issue is that E cuniculi can be spread via urine from infected rabbits, being ingested or inhaled and as rabbits may urinate out through the cage fronts, or it may drip out and down, infected rabbits (if not kept entirely isolated or kept in a separate bank of kennels) should be put on the bottom level.

Size:

well ideally as large as possible but that's not very helpful. As a minimum, a kennel should be large enough for a litter tray, food and room for two or perhaps even three rabbits to stretch fully out. To complicate matters rabbits come in different sizes, from under 1 kg to around 10 kg. For at least a pair of the latter, walk-in dog kennel would be more appropriate. As patients are hopefully not in the kennel for too long kennels may be smaller than permanent accommodation. But being unable to move around hop jump and run doesn't help with either urinary or gastrointestinal motility. Ideally they should have some time out of the kennel (supervised or after careful preparation and safety checking of the ward).

Cage height should allow the rabbit to stand upright, however this is not usually the case when using standard kennels designed for cats. As an absolute minimum their ears should not touch the ceiling when they stand fully upright.

Photo credit Vetanidoc

Materials:

Possible materials to make kennels out of include stainless steel, acrylic and fibreglass. The most commonly available veterinary kennels tend to be stainless steel but the problem with these is that their thin walls are no barrier to sound and in fact can creates reverberations and echoes when rabbits walk or thump their feet. Metal is also a good conductor of heat and can therefore help chill rabbits after surgery. Acrylic tends to be thicker and better at insulating sounds and heat, and does not reverberate. Fibreglass is rarely used except for vivaria.

What should go in the kennel?

If it's stainless steel: some form of solid floor material helps to stop the flexing and reverberation of the floor. On top of that, or as the only substrate in the acrylic kennels the choice is probably between washable material such as artificial sheepskin -type products, or towels; or disposable paper or incontinence pads. Beware rabbits eating such things by supervising them and checking them regularly.

Some form of floor-based heating may be required, particularly postop. Electrical heat pads are excellent, but must have any cable shielded with rabbit chew-proof material. Microwaveable heat discs are also a good alternative. Hot water bottles and wheat bags (and particularly hot hands) are definitely not recommended for the conscious patient, as if chewed, can burn or soak the rabbit. And do remember to remove any supplementary heat provision as soon as it's not required as rabbits can easily overheat.

Water provision:

Bottles are convenient and don't tend to spill although be careful that they can't be chewed through the bars which will release the vacuum and empty them. However some rabbits may not be used to them and rabbits will drink faster from a bowl, so providing both is a good idea. The problems with bowls include contamination with food, urine and faeces and the fact that rabbits seem to enjoy rearranging the furniture and picking things up to move or upturn, spilling water everywhere. Heavy bowls or fixing them to solid floor material help prevent this.

Food:

Whilst rabbits should eat a diet consisting of around 80 to 90% hay, 5% pellets and the rest as green leafy fibrous vegetation, hospitalisation is not the time to change too much about their diet if it is suboptimal but palatable. If the current health issue does require a diet change, make it slow and ensure the rabbit doesn't go into a negative energy balance.

Also, rabbits with dental malocclusion and/or pain may not be able to eat hay, and whilst treatment should be carried out ASAP, other foodstuffs such as fibrous green vegetation should be provided. Dental pain and malocclusion and tongue ulceration from lingual dental spurs will also make drinking, especially from the water bottle, painful and difficult, so parenteral fluid therapy will be required.

"Abundance feeding": ensuring that food is all over the place, everywhere the rabbit looks, is messy but often effective. However it can make it difficult to tell how much if anything the rabbit is eating. Having companions together also makes this difficult. Patient weight and faecal output (differentiating their faeces is easier if they are different sizes obviously, but often an ill rabbit has smaller poorly formed, darker or unusually shaped faeces).

Hey racks avoid contamination, but it can be difficult to feed from if the rabbit has any neuromusculoskeletal issues, and may be dangerous, if the rabbit tries to climb into it and gets a limb caught.

What goes in the cage?

Many companion rabbits are litter trained and not having a litter tray present will mean that they pass urine and faeces all over the place, potentially contaminating food and potentially infecting other rabbits. A litter tray should be quite low sided for rabbits who have mobility problems or who are post-operative. Litter trays should be large enough for one or even both rabbits to lie fully stretched out in. Food should be provided in bowls as well as scattered and the amount of food provided noted or even weighed out to assess appetite.

Placing a large amount of hay into the kennel can help make the rabbit feel comfortable and at home. As well as providing important nutrition the rabbits can burrow into it, simulating a burrow environment, and the hay can insulate the rabbits from the smell and sound of predators.

In addition, cardboard boxes can be made into simple disposable hides for rabbits and something as simple as placing a towel over the front of the cage can often be helpful in reducing the stress of being easily visualised.

Additional stress mitigation can be provided by the use of inhaled products. "Pet remedy" has been evaluated for a number of species including rabbits and whilst the evidence base is not great, it does appear to help reduce stress in this species. I feel that it also contributes to lower stress levels in the veterinary practice staff, and the strong smell may mask the smells of predator species. A new product based on rabbit maternal pheromone shows promise in reducing stress in rabbits in veterinary practice situations. It is available in two brands with three forms, a spray vaporiser and a solids block that lasts for 30 days.

I'd like to issue a plea for feedback at this point. If you have any comments on any of the 3 parts of this series so far, or any tricks, tips or methods which have worked for you in your practice, please do send them in to us. The intention is to combine the completed series into a set of notes and guidelines on making your practice rabbit friendly, updated as required. Submissions may be anonymous, but if you do want to give your name and practice details, we will include them to credit your contribution.

Rabbit Welfare Association & Fund