

Ferret handling, nutrition and common health problems

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Wendy Bament RVN, in the second part of her article (part 1: [VNT13.10](#)), discusses correct handling techniques as well as advice on managing the general health of the ferret

AGGRESSIVE ferrets are rare, but they can be scruffed ([Figure 1](#)). However, it is important to appreciate their bite is tenacious, so it may be necessary to wear thick gardening gloves when approaching ferrets with unknown temperament. Most ferrets tolerate handling well and will become calm when well secured by restraint around the pectoral girdle and also supporting the weight of the pelvic girdle in the other hand, ensuring their long body doesn't twist ([Figure 2](#)).

Nutrition

Ferrets are obligate carnivores, requiring a higher proportion of protein in their diet than cats (30 per cent to 35 per cent crude protein)¹. Ferrets are not capable of digesting carbohydrates efficiently and any eaten are accidental by-products when consuming the stomach contents of their herbivorous prey. There are good quality, dry, pelleted ferret foods widely available that provide the required daily nutrition, particularly protein and essential amino acids, but ferrets will benefit from a varied additional protein source such as chicken, fish and eggs. Ad lib fresh water should be offered every day, especially when offering pellets.

Ferrets can pose a challenge when trying to introduce new, more appropriate dietary items as they seem to establish a food preference by three months of age¹. In doing so, they create a "search image" or set food preference ready for when they would leave the nest if in the wild. Feeding the recommended ferret pellets and meat should be encouraged if rearing young, to prevent near-

impossible dietary transition.

Nursing

Nutritional therapy

Ferrets can be relatively easy to administer nutritional therapy to, as most are hard-wired to eat as soon as they get the opportunity, even when they are feeling ill. There are a variety of supportive diets for ill or recovering ferrets. These should be offered to ferrets as soon as they show coordinated movements following anaesthesia, when dehydrated or following periods of anorexia. Care needs to be taken when offering such diets, or when force-feeding in collapsed or weak patients, to avoid the risk of aspiration pneumonia. It is possible to insert a nasogastric tube to ferrets in much the same way as cats.

Fluid therapy

Ferrets should be maintained on 75ml/kg/day to 100ml/kg/day fluid and, as with other small mammals, they should receive 10ml/kg/hr during anaesthetics. Small intravenous catheters (26G) can be used in the cephalic or saphenous veins and successfully maintained in collapsed patients, and it is useful to apply local anaesthetic to the clipped insertion site (author's personal experience). Elizabethan collars can be employed, although they often don't stay on owing to the ferret's slim jaw being perfect for slinking through small holes. If intravenous routes are not available, then intraosseous catheters (spinal needles) can also be used (proximal femur or proximal tibia). For rapid fluid administration, hyaluronidase can be added to subcutaneous fluids to enhance the permeation through the tissues for more rapid availability to the patient.

Common health problems

Owing to their very different lifestyle and the likelihood of contracting certain diseases, pet ferrets and working ferrets will differ in the conditions commonly presented to a vet. In this section, only the most commonly encountered illnesses will be reviewed and further reading is encouraged.

I hope this overview of ferret husbandry and health for veterinary nurses has provided you with a practical tool for informed nursing and supporting ferret owners. This article is merely a platform for further investigation and the following reference list should be consulted for more in-depth information on ferrets.

Online table

Table 2, featuring common health problems in ferrets – including cataracts (**Figure 3**) – is at <http://tinyurl.com/vnt13-11>

Websites

www.ferretcentral.org/faq/history.html#furo

www.jstor.org/discover/10.2307/40267091?uid=3738032&uid=2129&uid=2&uid=70&uid=4&sid=21102040032903

Black-footed ferret – www.iucnredlist.org/details/14020/0

Twycross zoo information:

http://wildpro.twycrosszoo.org/S/0MCarnivor/Mustelidae/mustela/Mustela_putorius_furo/06Mustela_putorius_furoAM_Detail.htm

References

- 1. Brown S A (2004). Chapter 1: basic anatomy, physiology and husbandry. In Quesenberry K E and Carpenter J W (eds), *Ferrets, Rabbits and Rodents: Clinical Medicine and Surgery*, Saunders Elsevier, Missouri.
- 2. <http://en.wikipedia.org/wiki/Ferret>
- 3. McKay J (1999). *Introduction to Ferrets*. James Wellbeloved.
- 4. Fisher P G (2006). Ferret behaviour. In Bradley-Bays T, Lightfoot T and Mayer J (eds), *Exotic Pet Behaviour: Birds, Reptiles and Small Mammals*. Saunders Elsevier, Missouri: 360.
- 5. Dudley J (2011). Welfare worries over pet ferrets, *VN Times***11**(12): 5.
- 6. Girling S (2003). *Veterinary Nursing of Exotic Species*. Blackwell Publishing: 314.
- 7. Longley L (2008). Ferret anaesthesia. In Longley L (ed), *Anaesthesia of exotic pets*, Saunders.
- 8. Thompson L and Bament W (2012). Chapter 7: anaesthesia and analgesia. In Varga M, Lumbis R and Gott L (eds), *BSAVA Manual of Exotic Pet and Wildlife Nursing*. BSAVA, Gloucester: 304.
- 9. Schoemaker N J (2002). Chapter 9: Ferrets. In Meredith A and Redrobe S (eds) *BSAVA Manual of Exotic Pets*. BSAVA, Gloucester.
- 10. Wesche P (2009). Rodents: clinical pathology. In Keeble E and Meredith A (eds), *BSAVA Manual of Rodents and Ferrets*. BSAVA, Gloucester.
- 11. Bell J A (2004). Chapter 5: periparturient and neonatal diseases. In Quesenberry K E and Carpenter J W (eds), *Ferrets, Rabbits and Rodents: Clinical Medicine and Surgery* (2nd edn). Saunders Elsevier, Missouri: 461.

- 12. Hofer H L and Bell J A (2004). Chapter 3: gastrointestinal diseases. Quesenberry K E and Carpenter J W (eds). *Ferrets, Rabbits and Rodents: Clinical Medicine and Surgery*, Saunders Elsevier, Missouri.
- 13. Pollock C G (2004). Chapter 4: urogenital diseases. In Quesenberry K E and Carpenter J W (eds). *Ferrets, Rabbits and Rodents: Clinical Medicine and Surgery*. Saunders Elsevier, Missouri.
- 14. Petrie J P (2004). Chapter 6: part I: Cardiovascular and other diseases. In Quesenberry K E and Carpenter J W (eds). *Ferrets, Rabbits and Rodents: Clinical Medicine and Surgery*. Saunders Elsevier, Missouri.
- 15. Paterson S (2006). Chapter 17: skin diseases and treatment of ferrets. In Paterson S (ed), *Skin Diseases of Exotic Pets*. Blackwell Publishing.
- 16. Meredith A (2006). Chapter 17: skin diseases and treatments of ferrets, dermatology of mammals. In Paterson S (ed), *Skin Diseases of Exotic Pets*. Blackwell Science.
- 17. Lindeberg H (2008). Reproduction of the Female Ferret (*Mustela putorius furo*), *Reproduction in Domestic Animals***43**: 150-156.
- 18. Pollock C G (2004). Chapter 4: urogenital diseases. In Quesenberry K E and Carpenter J W (eds) *Ferrets, Rabbits and Rodents: Clinical Medicine and Surgery*. Saunders Elsevier, Missouri.



Figure 1 (above). Using the “scruffing” technique to handle aggressive adult male albino ferret.



Figure 2 (right). Handling a calm ferret by supporting both pectoral and pelvic girdles. This “polecat” ferret is malnourished.



Figure 3 (right). Cataracts in an adult “polecat”ferret.

Lifespan (years)	Male (hobs)	5-10
	Female (jills)	5-10
Adult body weight (kg)	Male (hobs)	1-2
	Female (jills)	0.5-1
Dentition	I 3/3, C 1/1, PM 3/3, M 1/2	
Respiratory rate (breaths/min)	40-80	
Heart rate (beats/min)	180-250	
Rectal temperature (°C)	37.8-40	
Daily water intake	75-120ml/kg	
Daily food consumption	140-190g	
Urine analysis	Daily production	25-30ml/kg
	pH	5.5-6.5
	Specific gravity	1.015-1.048
	Consistency	Clear with small amounts of protein (protein/creatinine ratio <0.4)
Oestrus cycle (days)	Up to five months if not taken out of oestrus	
Duration of oestrus	Until mated but possibly up to six months	
Length of gestation	41-42 days	
Litter size	2-14 (average eight) up to two litters per year	
Normal birth weight	6g-12g	
Weaning age	42-56 days (6-8 weeks)	
Sexual maturity (months)	Male (hobs)	4-6
	Female (jills)	4-8 (or the next spring)
Optimal environmental temperature	(Nesting jills no >21.1°C)	
Other species specific information		
Neonates	Eyes open at three weeks, ears at 10 days	
Haematology	High PCV (46-63 per cent in healthy adults). White blood count often lower than seen in cats and dogs	
Breeding season (northern hemisphere)	March-September	
Activity	Nocturnal	
Behavioural traits	Sociable	

TABLE 1. Normal biological parameters and species-specific parameters for ferrets (*Mustela putorius furo*). Adapted from [3](#), [6](#), [9](#), [11](#), [14](#), [16](#), [17](#)