Introduction to the Veterinary Profession

VETS30030 / VETS90122













Module 4 - Non-production species

Exotic and unusual pets:2

Small Mammals

Rabbits and Ferrets

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- Lagomorphs
- From the Greek "lagos" = hare; "morphe" = form/likeness
- Characteristic long ears, short upturned tail or "scut", and hopping gait



- Over 60 breeds and 530 varieties
- Many pets are cross breeds
- Lifespan 8-12 years or more















Breed to Breathe is not just for Dogs!







Rabbits - general points

- Dental formula 2/1 0/0/3/2 3/3
- All teeth grow continuously
- Maxilla wider than mandible, occlusal surface slopes laterally
- Herbivorous, hind gut fermenters, very large caecum
- Coprophagic
- Dental and GI health reliant on high fibre diet







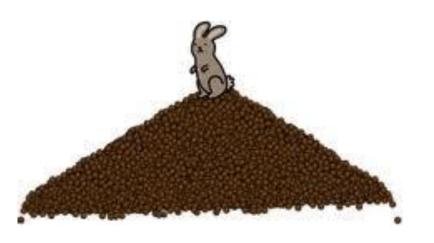
Maxillary cheek teeth

Mandibular cheek teeth

Rabbit faeces

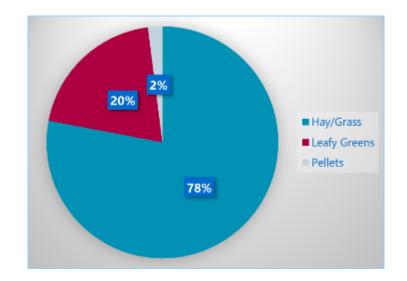
<u>Faecal Pellets – 2 types</u>

- Formed fibrous pellets dry
- Caecotrophs: Fluid and soft particles
 - Product of caecal microbial fermentation
 - Highly nutritive
 - 1. Amino acids
 - 2. VFA
 - 3. Vitamins B and K
 - Coated in mucous
 - Expelled as soft paste in 'honey comb'
 - Pass rapidly through the colon to the anus
 - Eaten directly from anus





- Prey species, easily stressed Social animals; best in pairs or groups -form strong bonds. FN/MN or MN/MN combos work well
- Diet: 70-80% grass hay (Oaten) + 20-30% fresh, leafy greens + 0-5% pellets and treats (Oxbow)
- Housing: Variable, but need lots of room to run (time out of cage essential)







Environmental Enrichment

A Hutch is NOT Enough!



Ideally all rabbits should have a large, secure hutch or indoor cage with access to a large run to allow freedom to express natural behaviour

Substrates

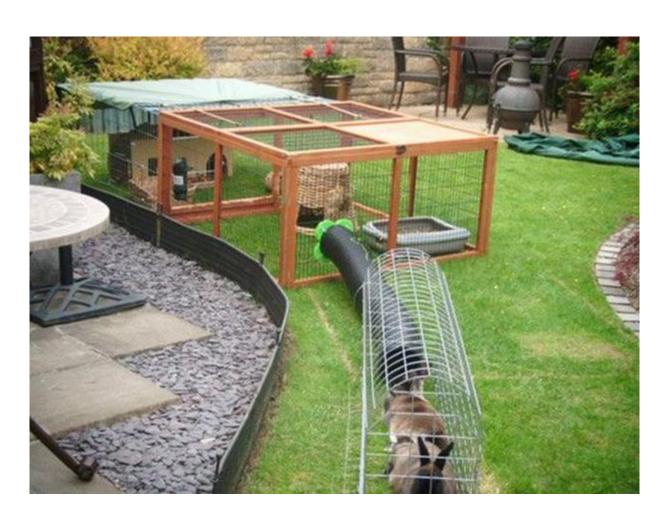




- Cat litter for the latrine areas wood based pellets is best
- Newspaper
- Dust free woodshavings, paper based e.g. Carefresh, compost soil for digging
- Hay, hay and hay!!! For eating, for bedding, for eating!
- Grass and concrete
- Carpet and laminate



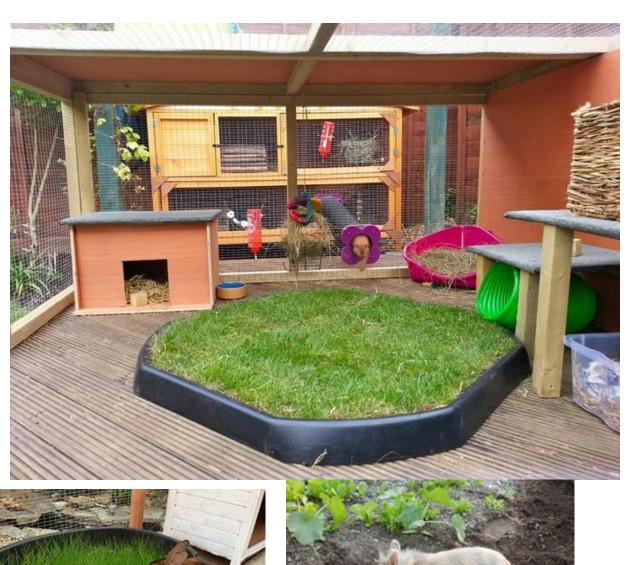
Environmental Enrichment



Express natural behaviours:

- Running
- Jumping
- Standing up on hind legs
- Digging
- Chewing
- Hiding









House Rabbits

Rabbits can make good house pets and can be litter trained



However they are:

- Messy (hay)
- Destructive
 - Chewing
 - Digging

NORMAL BEHAVIOUR

House rabbits

- Secure cage for when unsupervised
- Rabbit proofing













- Litter tray
- Opportunity to dig











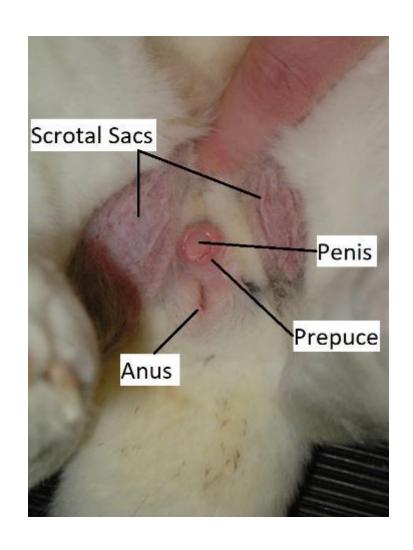
- Hide box to sleep
- Mimics the burrow
- Allows escape from companions, humans, other pets etc

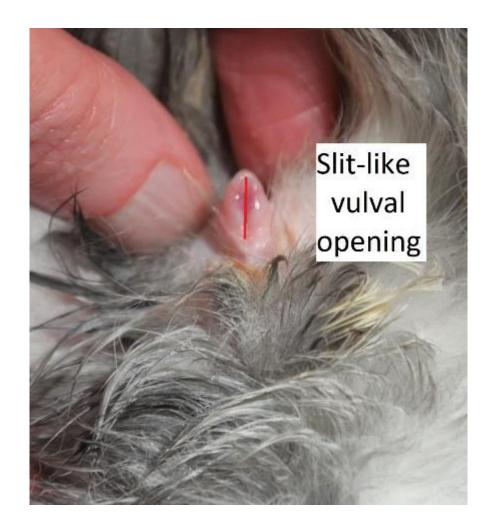






Sexing





Reproduction

- Induced ovulation
- Take doe to buck as doe very territorial
- Nest-building pluck hair
- Altricial young; suckle for only 3-5 minutes per day







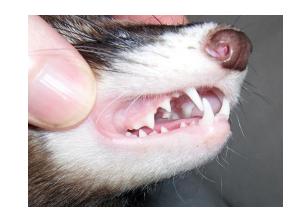
Preventative health:

- Desexing (females >2yo= uterine adenocarcinoma)
- Vaccination- Calicivirus (RHDV), currently recc 6 monthly boosters: Myxomatosis (not Australia)
- Ectoparasites- Selamectin (NB-FIPRONIL KILLS RABBITS)
- Common diseases:
 - Gut stasis,
 - Dental disease (congenital vs acquired)
 - Pododermatitis
 - Encephalitozoon cuniculi (protozoan parasite) neurological and renal disease

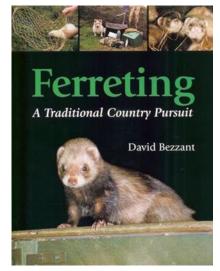


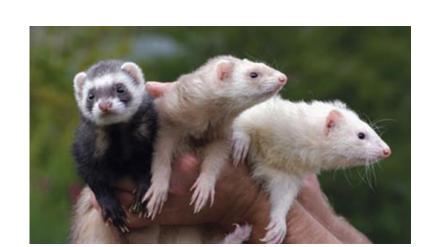
Ferrets

- Domesticated European polecat
- Males= hobs, females=jills
- Used for hunting, racing, pets
- Intelligent, playful, inquisitive, sleep 18 hrs/day
- Seasonal weight and hair loss













Ferrets

- Housing: Outdoor hutch or enclosure; use one area/litter tray for latrine,. Indoor – secure cage/room when unsupervised. Regular exercise
- *Diet*: Commercial dry food or whole prey. Stash food, eat frequent small meals









Control of breeding

- Prolonged oestrus if unmated hyperoestrogenism
- Vasectomised males for sterile matings (induced ovulation).
- Surgical neutering linked to adrenal gland disease so NOT recommended.
- Hormonal neutering:
 - "Jill Jab" proligestone short term
 - GnRH agonist implants males and females





Ferrets

Preventive medicine:

- Hormonal neutering (Deslorelin).
- Annual distemper vaccination
- Flea/ear mite treatment eg Selamectin

Common diseases:

- Adrenal gland disease (if surgically neutered)
- Insulinoma
- Gastric ulcers
- Cardiomyopathy
- Lymphoma

