



## **HOUSING A RABBIT**

### **The Habitat**

Rabbits should be housed in the largest enclosure possible which is used primarily as a “home-base” for when there is no direct supervision. The bottom of the habitat should be solid plexiglass, stainless steel, or hard plastic. Avoid habitats with wire bottoms. When able habitats should also include multiple (at least 2) sources of clean, fresh water and an area for them to hide, which is essential in managing stressors for prey species.



### **Bedding/litter**

Use only paper-based products (i.e. Carefresh, Oxbow Pure Comfort, Yesterday's News), newspaper, or computer paper in the litter box and cage. Many people use towels/fleece as an alternative bedding/liner in the enclosure but care must be taken to ensure that the rabbit is not chewing and eating them. The habitat and litter box should be kept clean, with feces and dirty/wet bedding removed daily. Clay/clumping cat litter and natural wood shavings can cause eye, skin, and respiratory problems and are generally not recommended.

### **Litter Box Training**

Some rabbits are able to be litter box trained which helps a great deal when monitoring their health and with clean-up! Encouraging rabbits to use a litter box can take some patience but can be accomplished by putting a few fecal pellets inside, and then placing the box in the rabbit's favorite place to eliminate in the habitat (this is typically a corner). A litter box should be available at all times.

### **Cleaning The Habitat**

In addition to removing waste and soiled/wet bedding daily, more thorough cleaning of the habitat and its fixtures (water bottles/bowls, food dishes, etc) should be performed daily to every few days, depending on the size of the enclosure. During the “deep cleans” a rabbit should be moved to a separate location, and the cage components washed with hot soapy water or dilute bleach (approximately 1:30 bleach to water ratio) and then rinsed and dried. Regular cleaning will reduce contact with waste and associated aerosolized debris which can cause skin and respiratory tract irritation.



## **BEHAVIOR**

### **Enrichment**

Just as it is important to fuel a rabbit's body with proper nutrition for physical health, mental health and well-being is an equally important factor when considering total pet health. Animals can be enriched nutritionally, behaviorally, and physically by allowing the expression and engagement of natural behaviors within a captive setting. For rabbits, key natural behaviors to promote are playing, hiding, chewing, and exploring. To keep interest and provide maximum engagement, multiple enrichment items should be present simultaneously within the habitat/living area and they should be rotated frequently (at least once a month).

### **Handling**

Rabbits do not typically enjoy being handled and it is best to interact with rabbits on the ground. Should a rabbit need to be picked up or carried for any reason, it is best to hold it "like a football" and make sure that its back is supported; never hold a rabbit by the ears or scruff. Improper handling can easily injure the rabbit (back is especially susceptible to injury) or the handler (via scratches, kicks, etc) so it is essential that any necessary handling is done in a calm, quiet environment with an experienced handler.

### **Playtime**

Rabbits should be allowed supervised time out of the habitat daily both for exercise and to interact with calm individuals. Rabbits are crepuscular and are naturally more active during dawn and dusk, which are usually ideal times to provide these playtime opportunities. This time allows for the rabbit to have safe, appropriate interaction with humans and provides value to both parties, increasing the human/animal bond.

### **Safety**

Supervise a rabbit when it is outside of its cage; do not allow your rabbit to chew on items such as carpeting, furniture, or electrical wires. Safe items, such as cardboard, unvarnished baskets, and untreated wood can be offered to encourage healthy chewing. Bunny proofing an area is an important part of responsible pet ownership. Key areas of bunny proofing include keeping electrical cords out of reach via plastic tubing or other protective coverings, moving potentially toxic house plants out of the area, and covering or making baseboards or other wooden furniture inaccessible. Providing safe and fun chewing alternatives will assist in redirecting their natural chewing behavior to appropriate outlets.

### **Roommates**

Rabbits tend to be social creatures and often enjoy the company of others. A bonded pair of rabbits help keep one another properly groomed and cared for. Pairing rabbits together



requires someone with experience in the matter since not all rabbits get along, and un-bonded rabbits may fight and injure one another. If a companion for your rabbit is being considered, it is strongly recommended to work with a rescue group well-versed in the process that will allow rabbits meet for short visits, or “dates” (think eHare-mony), with suitable partners.

## **DIET**

### **Hay**

This should always be offered in unlimited quantities; a rabbit should never be without hay. Timothy, orchard grass, oat hay, or meadow grass can all be offered. *Avoid* alfalfa and other hays high in calcium in pets over 6 months of age, as these may predispose to development of excess urinary bladder sediment. Providing a variety of grass hays for adult animals can increase interest (and therefore consumption) of hay as well as decrease natural picky tendencies that rabbits can exhibit with natural variations in hay from bag to bag.

### **Pellets**

Pellets may be offered to supplement the diet of hay. Use a timothy hay-based pellet. *Avoid* pellets mixed with seeds and dried fruits, as many rabbits eat the high fat seeds and leave the pellets. Selecting a high quality fortified, uniform, and age-specific rabbit pellet ensures the animal receives the same nutrition in every bite that is specifically formulated for its age and species. Follow the feeding guidelines on the pellet package unless otherwise directed by your pet’s veterinarian.

It should also be noted that any abrupt changes in your rabbit’s diet can cause digestive upset and other health problems. If it is necessary to transition from one diet to the next, transitions should be gradual and over at least a 4-week period.

### **Fresh greens**

Offer approximately 1 cup of leafy greens per 2 pounds of your rabbit’s weight per day. Good choices include the following: romaine lettuce, red/green leaf lettuce, escarole, watercress, clover, bok choy, endive, and turnip tops. *Avoid* offering too much dandelion, collard greens, turnip greens, mustard greens, kale, spinach or Swiss chard due to their high calcium and/or oxalate content, which may predispose them to excess urinary bladder sediment/stones. A good rule of thumb is that darker greens tend to have higher calcium levels and should be avoided.



### **Fresh vegetables**

Offer approximately 1 tablespoon of vegetables per 2 pounds of your rabbit's weight per day. Good choices include: bell peppers (seeds removed), cucumber with leaves, kohlrabi, summer/zucchini squash, and celery. Avoid offering too much broccoli, brussels sprouts, or cabbage as they may cause some gastrointestinal discomfort (gas, bloating). Veggies such as carrots and parsnips, which include a higher concentration of calories and simple carbohydrates, should be fed sparingly or only as a treat.

### **Water**

Fresh water should be offered at all times in either a bottle or spill-proof dish/bowl. Water bottles should be checked often for continued function, as they can easily become jammed or stop working. It is recommended to offer both a water bottle and a crock within the habitat, as some animals prefer one over the other and encouraging hydration is very important.

An overall basic diet guide can be found in the table below:

Rabbit Weight (lbs)	Hay	Pellets (Cups)	Greens (Cups)	Veggies (Tbsps)
1	Unlimited	1/8	0.50	0.50
2	Unlimited	1/8	1.00	1.00
3	Unlimited	1/8	1.50	1.50
4	Unlimited	1/8	2.00	2.00
5	Unlimited	1/4 - 1/3	2.50	2.50
6	Unlimited	1/4 - 1/3	3.00	3.00
7	Unlimited	1/4 - 1/3	3.50	3.50
8	Unlimited	1/3 - 1/2	4.00	4.00 (1/4 cup)
9	Unlimited	1/3 - 1/2	4.50	4.50
10	Unlimited	1/3 - 1/2	5.00	5.00
11	Unlimited	3/4	5.50	5.50
12	Unlimited	3/4	6.00	6.00
13	Unlimited	3/4	6.50	6.50
14	Unlimited	3/4	7.00	7.00
15	Unlimited	3/4	7.50	7.50



## HEALTH AND PREVENTATIVE MEDICINE

### Finding A Rabbit-Savvy Veterinarian

It is important to locate a veterinary office before welcoming a rabbit to the household comfortable seeing rabbits, which can be challenging.

- Boarded-specialists specializing in exotic companion mammals can be found by visiting the American Board of Veterinary Practitioners' webpage (<https://abvp.com/animal-owners/find-an-abvp-specialist/>)
- Veterinarians who have a particular interest in small exotic mammals can be found by visiting the Association of Exotic Mammal Veterinarians' webpage ([www.aemv.org](http://www.aemv.org)).

### Examinations

It is recommended that all newly acquired rabbits receive a complete physical examination. Thereafter, you should have your pet examined by a veterinarian every 6-12 months and as soon as any signs of illness/disease are noted. Beginning at the age of three years, annual blood work is recommended in order to assist with early detection of disease. Early treatment of disease processes is essential to promoting a long and healthy life.

### Changes in appetite or defecation

Rabbits need to be constantly eating and defecating. If there are any changes to appetite or stool size/number that is noticed for a period >4 hours, a call to a veterinarian is warranted. Reduced appetite or reduced/no feces is usually considered a same day medical emergency in rabbits and referred to as, gastrointestinal stasis (ie, slowing down of the gut's normal movements). If not addressed in time, GI stasis can be fatal.

### Cecotrophs

Soft, mucus-covered bowel movements are also known as nighttime or first-pass feces. Rabbits usually eat these soft pellets directly from their rear which provide essential proteins, vitamins, and minerals, and replenish normal bacterial flora. Overweight or arthritic rabbits often cannot reach their rear in order to eat cecotrophs, which can result in matting/fecal pasting of the fur on their hindquarters. A physical exam is recommended in any rabbit with hygiene issues.

### Dental Disease

A rabbit's teeth never stop growing, hence the importance of stimulating normal chewing behavior by offering dense fibrous food (hay) and safe, appropriate chews within the habitat. The natural chewing behavior helps contribute to the normal wearing down of teeth. If a



rabbit is exhibiting drooling, spitting out partially chewed food, and/or weight loss, a veterinary appointment should be made.

### **Spaying and Neutering**

In addition to preventing unintentional breeding of animals, spaying (ovariectomy or ovari hysterectomy) and neutering (castrating) can have significant health and welfare benefits in pet rabbits. Although it can be performed in healthy animals of any age, it is ideally performed between 4 and 6 months. Spaying is one of the most important measures of preventative health care to be performed in female rabbits since approximately 80% of unspayed female rabbits will develop cancer associated with their reproductive tracts as adults. Spaying reduces this risk considerably. Neutering of male rabbits helps curb aggressive and territorial behavior, such as inappropriate elimination.

### **“Hairball” Prevention**

Frequent brushing/combing, or use of a “sticky roller” to remove excess fur, can help reduce fur ingestion. Feeding a high fiber diet of mostly timothy hay is always the most important part of promoting GI tract health. In general, bathing rabbits is not recommended except for in extreme circumstances. Rabbits have very thick hair coats and it is difficult to get them completely dry. If they are not completely dry, they can develop skin irritation/infections. Rabbits are excellent self-groomers and generally do a very good job of keeping themselves clean.

### **Nail Trims**

Rabbits need to have their nails trimmed on a regular basis. Nail trims may be scheduled during routine physical exam appointments but may need to be completed more frequently, varying dependent upon the rabbit.

### **Urine**

Normal rabbit urine contains a lot of sediment (mostly calcium), and the color often varies from white to light brown. Under certain circumstances, such as when stressed, sick, or receiving medications, the urine may appear orange or red-tinged (sometimes mistaken for blood) due to a normal pigment. Rabbits can, however, develop urinary tract infections causing blood in the urine. Should this be suspected, a veterinary appointment should be made.



## HELPFUL LINKS

How to Litter Train Your Rabbit

<https://www.oxbowanimalhealth.com/blog/how-to-litter-train-your-rabbit>

Providing Daily Enrichment

<https://www.oxbowanimalhealth.com/blog/five-ways-to-provide-daily-enrichment-for-small-animals>

<https://www.oxbowanimalhealth.com/blog/all-about-enrichment-handout>.

Fortified Foods

<https://www.oxbowanimalhealth.com/blog/all-about-fortified-foods>

<https://www.oxbowanimalhealth.com/blog/quick-tips-on-correctly-offering-fortified-food>

Transitioning Your Pet to a New Diet

<https://www.oxbowanimalhealth.com/blog/how-to-transition-your-pets-food>

Urinary Bladder Sludge

<https://www.oxbowanimalhealth.com/blog/bladder-sludge-in-rabbits-and-guinea-pigs>