

CHECKLIST FOR NEW RABBIT GUARDIAN

Housing

- Roomy cage, six times size of adult rabbit (optional); pen
- Front opening door is preferable for rabbit to come in and out on her own; top opening cages are nice too in that they allow humans to reach in and out. Door must be large enough for litter boxes. If cage has a large pan type bottom, use this whole pan as a large litter box and fill with litter to minimize cleaning time.
- NO WIRE-BOTTOMED CAGES!
- Litterbox fastened inside cage to reinforce litterbox training. You can drill holes in the lip of the litter box (cat litter box) and use cable ties to secure into place. Use the largest litter box you can fit in the cage. Allow for two litter boxes, one for 'necessaries' and one for lounging in a soft spot on soft bedding such as CareFresh or Aspen (**NO PINE OR CEDAR! THESE EMIT TOXIC FUMES!**)
- Heavy pellet bowl or clip-on feeder
- Water bottle or crock, preferably both since rabbits easily become dehydrated and many do not drink as much as they should.

Running Space

- **INDOORS:** gradually increase freedom. Bunny-proof electric cords by covering with split flex electrical or automotive tubing. Place second litterbox outside cage.
- **OUTDOORS:** fenced patio, porch or wire playpen (with floor), daytime only

Consumables

- Rabbit pellets (**5% OF DIET**)
- Fresh water, filtered if possible. Little rabbit kidneys are susceptible to the runoff (silt, pesticide and chemical residues) in tap water.
- Fresh vegetables (**5% OF DIET**) and fruit (only as treats such as one banana slice or apple slice daily). Introduce gradually and in give fruit in small quantities. Give plentiful vegetables especially romaine, green leaf or red leaf lettuce. **NO ICEBERG LETTUCE.** See **Rabbit Care Info Guide** for complete list.
- Hay – **90% OF DIET** - (for fiber and nutritional value): timothy, oat, alfalfa
- Wood (organic apple, organic willow) for chewing and recreation. Be sure these are untreated and meant to be chewed by small animals or sold specifically for this use. See busybunny.com for samples.
- Papaya enzymes/multiple enzymes (especially Prozyme for prevention of fur-block and enteritis). **PINEAPPLE** does not help prevent fur-block! The best way to prevent fur-block is to feed **90% HAY** of good quality.

Socializing

Demonstrate to the rabbit that you are the source of petting, treats, freedom, and anything else the rabbit likes. Pet the rabbit on the broad area on top of her head. Try short sessions several times a day. Don't chase the rabbit unless necessary. Don't punish her. Distract or remove rabbit from chewing or digging destructively. Give her something she CAN play with. Rabbits readily develop habits — good or bad — and can be influenced by humans.

Health

Spay your female bunny at age 6 months, males at 4 months. Regularly check eyes, nose, ears, teeth, weight, appetite, and droppings. If droppings reduce in size, rabbit is not eating. Entice to eat with tasty herbs such a basil, dill, cilantro. A rabbit who stops eating has only a short time to live. Notice any behavior change. Avoid stress, heat and sudden temperature changes. Find an experienced rabbit vet **BEFORE** a problem develops. Groom regularly.

New Bunny Shopping List

House Supplies:

- cage: at least 6x the size of your stretched out bunny, preferably with 2 levels and a ramp *
- water bottle or crock
- food crock - heavy enough so your bunn can 't throw it!
- hay rack
- plastic litter box
- edible litter, such as Carefresh or aspen (no pine or cedar!)*
- pet carrier
- blankets/sheepskin rugs to protect feet from wire floors
- bunny toys *
- cardboard box or tube to hide in and run through
- collapsible fence for exercise area

Cleaning Supplies:

- spray bottle
- white vinegar
- clean sponge
- bucket
- rubber gloves
- old towel
- broom and dustpan
- vacuum

Food:

- timothy or alfalfa pellets (alfalfa for babies only) *
- unlimited grass hay: timothy, oat, orchard grass *
- fresh vegetables-at least 3 kinds each day *
- apple twigs or other untreated wood to chew on *



Health Care Supplies:

- *House Rabbit Handbook*
by Marinell Harriman
- *Rabbit Health in the 21st Century*
by Kathy Smith
- comb
- nail clippers/styptic powder
- Petromalt
- papaya enzyme digestive aid

Medical Kit:

- disinfectant: hydrogen peroxide (diluted)
- antibiotic: Neosporin or triple antibiotic (NOT Neosporin Plus)
- calendula lotion to sooth minor wounds
- Vaseline or corn starch for urine scald
- Infant's simethicone: gas relief medicine for babies or ¼ Gas-X tablet
- Pedialyte to rehydrate
- saline eye wash
- sterile bandages
- cotton swabs
- cotton balls
- eye dropper or syringe for oral meds
- tweezers and scissors
- plastic rectal thermometer/KY lubricant
- rubbing alcohol to clean thermometer

House Protection:

- a) electrical cords:
 - pvc tubing/hacksaw
 - aquarium tubing/exacta knife
 - electrical cord wrap from Radio Shack
- b) off limit rooms, bookshelves, baseboards, furniture:
 - baby gates
 - chicken wire
 - fabric covers

SAFE GROOMING AND HANDLING TECHNIQUES

Rabbits can act as if they're hardy creatures, but they are, in fact, extremely delicate—from their skin to their spines to their external systems. Care must be taken to maintain their good health. The following basics are necessary to groom rabbits safely and to help keep them healthy. For information specifically geared towards caring for long-haired rabbits, see the *House Rabbit Journal* article, "The Well-groomed Rabbit."

FLEAS Cat flea products are generally safe for rabbits with fleas. It's better to stick with powders and sprays only from your vet **ONLY**. Carbaryl is the ingredient. Advantage is also safe in lower doses (kitten dose). One must be hesitant to treat rabbits' fleas aggressively, because the cure can be more stressful than the infestation, so flea baths and dips are not recommended. A flea comb is a non-toxic device, which takes more patience, but is both physically and psychologically rewarding. Many rabbits learn to love the attention of being flea-combed, and it can be used as a supplement to or as your main flea-control program. If you want to control fleas in the environment with sprays or a flea bomb, do only one room at a time and keep your rabbits out of that room for at least 24 hours.

BATHS Although some bunnies grow up swimming in the family pool and going on camping trips where they paddle around in the lake, most rabbits are not used to this routine and would find even an occasional bath quite stressful. **NEVER**—unless your vet advises it to bring down a fever—should you bathe a sick rabbit. Because seemingly healthy rabbits can have undiagnosed problems, it's best not to subject them to the stress of a bath. If your rabbit is very badly infested with fleas, there's a good chance that he is already compromised and may go into shock when bathed. Also, a thoroughly wet rabbit takes a very long time to dry, so spot cleaning the dirty area is better than an over-all bath. Normal rabbit body temperature is 102°. Since they are subject to heat stress, use a warm dryer, not hot.

MATS Rabbit skin is delicate and highly susceptible to cuts, so mats should not be cut off with scissors. Instead, use a mat splitter or mat rake to take the mass apart. Bunny fur usually requires a finer blade than most cats and dogs.

SKIN Scratchy, flaky skin with bald patches is usually a symptom of skin mites or an allergic reaction to fleas. Cat flea powder clears up either condition. A vet should be consulted for other skin irritations.

FEET House rabbits who spend all of their time in homes with carpeting and linoleum periodically need to have their toenails trimmed, in the same way as dogs and cats. Because of risk of infection, as well as humane consideration, declawing is definitely **NOT** recommended for rabbits. If excessive digging or scratching is a problem, then a large box of hay or straw, where bunny can pursue these activities, may help. Spayed/neutered rabbits are less likely to dig excessively.

If the padding (fur) on the feet is worn down, exposing inflamed or callused skin, then soft dry resting pads (rugs) should be provided. Exposed skin that becomes urine burned or broken is very likely to infect. Take extra care that rugs and litterboxes are kept clean and dry.

INCONTINENCE A rabbit with urinary infection or a disabled older rabbit may not be able to project urine away from the body. The result may be saturated fur around the hindquarters. For milder cases, shave the areas that get wet so the skin can dry (remember, rabbit fur takes a long time to dry), rinse the affected areas daily, and follow up with a dusting of baby powder or corn starch. For more infirm cases, disposable baby diapers—turned backwards so the tabs are up—do wonders for keeping the moisture away from the skin. (Huggies Step 2 work well for an 8-LB rabbit.)

EARS Ear wax can be lifted out with a cotton swab, being careful not to push on wax in the canal, or you can try a mild ear cleaner containing Chlorhexadine, such as Nolvasan Otic. For ear mite infestation, apply a topical medication such as Mitox. The vet may also prescribe Ivermectin.

TEETH Bunnies with straight teeth will keep them worn down with everyday gnawing and chewing. Those with malocclusions, or crooked teeth, will need to have their teeth kept trimmed with guillotine-type clippers.

EYE DISCHARGE Watery eyes or any eye discharge needs to be diagnosed by a vet. In addition to any medications or eye drops, the cheek needs to be kept dry and clean so the area will not become chafed nor the fur peel off. Clean tissues will absorb mild wetness. Ophthalmic saline solution (what people use with their contact lenses) carefully poured onto the cheek will crystallize the tears so that they can be removed with a clean flea comb. A touch of prescription anesthetic powder on a finger can be applied to the area if there are painful lesions.

APPROACHING A RABBIT The safest initial approach with rabbits is to begin by stroking the top of the head. Do not offer your hand for a bunny to sniff the way you would to a dog, because most seem to find this gesture offensive and may attack (lightning-fast lunge with a snort). Most rabbits also do not like having the tips of their noses or chins touched. Their feet also tend to be ticklish.

HYPNOSIS Often a bunny can be “hypnotized” by cradling him on his back in your arms or across your lap, tipping the head backwards until he’s “out.” It’s helpful to do this when cleaning bunny’s sensitive areas, like the cheek, feet, and under the tail. If the hind feet seem to be vibrating, touching them will stop it.

LIFTING Bunnies should NOT be lifted by the ears or scruff. See the HRS handout, “Getting off the Ground,” for safe ways to lift and carry rabbits.

Compiled with the assistance of Dr.Carolynn Harvey, DVM

Rabbit-Proofing Your House

Rabbit Proofing one's home involves three things:

- 1) Preventing destruction of your property;
- 2) Protecting your companion rabbit(s) from harm; and.
- 3) Providing safe and fun chewing alternatives for your rabbit.

Preventing rabbits from chewing on electrical cords is of utmost importance, since rabbits can be badly burned or electrocuted. The consequences of biting into an electric wire are too severe to risk relying on training alone. Instead, you must take action to move the cords safely out of reach. Some ways of doing this follow.

- ⇒ Plastic tubing (similar to that used in fish tanks, or with "swamp coolers") from a hardware or aquarium store can be slit lengthwise with a blade and the wire can be tucked safely inside. A harder, black, pre-slit type of tubing is also available.
- ⇒ Decorative gold and wood-grained wire-concealers that stick to the base of walls come in strips, corners, etc., so they can follow the shape of the wall. This is a more costly and time consuming method than the clear plastic tubing above, but is more permanent, and rabbit proof, as well.

⇒ Of course, wires can be run under or behind furniture or carpets in order to hide them.

Most houseplants are toxic. Putting them on high furniture may not keep a rabbit away. Hang them from the ceiling if you have an active bunny, but watch for falling leaves! If you are unsure which plants may be toxic, the *House Rabbit Handbook* (Drollery Press) has a complete list of poisonous plants (indoors and outdoors), as do two back issues of *House Rabbit Journal*.

If a rabbit insists on chewing baseboards, edges of chairs, etc., a board can be put over the places of temptation, making them inaccessible while also providing an acceptable chewing surface. This method should be combined with training your rabbit not to chew on these items.

Rabbits can't resist digging at the end of "tunnels" (any place that furniture forms a narrow path to a wall). Lay a piece of wood or hard plastic at the end of the tunnel, holding it down with the furniture on either side to protect the carpet. You can also place a tub full of hay, shredded newspaper, or a phone book, here as well for bunny to dig in.

Upholstered furniture and beds that are several inches off the ground are wonderful places for rabbits to hide underneath. However, some will burrow up into the soft underside and make a nest. A flat cardboard box or frame of 2x4s, smaller than the area of the future base, will keep the rabbit out, and won't be seen from human level.

Rabbits chew to exercise their minds, not just their teeth. Provide lots of entertaining alternatives for your bun to chew on. If she enjoys chewing a hole into the back of the couch, give her a closed cardboard box filled with paper or straw, with a small hole in it to start, and let her finish the job. Be imaginative!

CHEWING BEHAVIOR

Why does your rabbit chew things other than her meals? Chewing is a normal, natural, necessary — and highly enjoyable — activity for rabbits. Here is an outline of some considerations to help you understand the why of chewing, as well as the how of preventing destruction of your favorite wicker furniture.

I. Psychological factors

A. Sex. Females often have a stronger urge to burrow than males, although this is not the only reason rabbits chew. The hormone/age factors below also apply to males. Both males and females can and should be spayed or neutered as soon as they are sexually mature (3 1/2 to 6 mos. old).

B. Hormone/age. Is she spayed?

If young (under 2 yrs.) & unspayed, spay her.

If young & spayed, her chewing will lessen with time.

If mature (over 2 yrs.) & unspayed, spay her but get a checkup first.

If mature & spayed, her behavior isn't governed by hormones.

C. Personality. Chewers are often intelligent, outgoing, affectionate individuals who like to be in charge and get lots of attention. Does she chew to get attention? Would a companion alleviate boredom? Anything that would entertain her/make her happier might lessen her chewing.

II. Environmental factors

A. Diversions: keep trying to find something harmless she enjoys doing. What kind of "burrow" (such as a cardboard box stuffed with hay), can you provide for her?

B. Protecting the environment: Besides the more traditional wire protection devices (plastic tubing), a box or wire basket can go over a group of wires. Browse a large hardware store for products to use for bunnyproofing.

C. Confinement (to a cage or room). This simply buys you time, while you bunny-proof, get her spayed, or wait for her to mature.

Discipline (clapping hands, saying “no”) has a small role in stopping chewing behavior. Most people report that it’s easy to make their bunnies understand them, but difficult to make them stop the behavior through the use of discipline only, especially if the bunnies are left alone for periods of time.

Since swallowing indigestibles such as carpet presents a health hazard to your bunny, follow up excessive chewing incidents with a petroleum laxative such as Petromalt or Laxatone (sold at pet-supply stores).

Remember: A spayed rabbit will chew less and less as she matures. It may be just a matter of riding out a high energy stage of your bunny’s life.

Suggested Toys for Rabbits

Toys provide:

1. Mental stimulation. Without challenging activities to occupy your rabbit when you’re not home, your rabbit, especially a solitary rabbit, will get bored. This could lead to depression and/or excessive destruction. The creative use of toys can extend your rabbit’s life by keeping him interested in his surroundings, by giving him the freedom to interact with those surroundings, and by allowing him to constantly learn and grow.

2. Physical exercise. Your rabbit needs safe activities to keep her body in shape as well as her mind. She needs things to climb on, crawl under, hop on and around, dig into, and chew on. Without outlets for these physical needs, your rabbit may become fat or depressed, or may create jumping, chewing, or crawling diversions with your furniture.

3. Bunny proofing for your home. As is clear from the above descriptions, toys are not just for your rabbit, they also keep your house safe. By providing your rabbit with a selection of toys chosen to meet her age, sex, reproductive status and temperament, you have fulfilled most of the requirements of bunnyproofing your home. Some good toys to start with:

- Paper Bags and Cardboard boxes for crawling inside, scratching, and chewing
- Cardboard concrete forms for burrowing
- Cardboard roll from paper towels or toilet paper
- Untreated wicker baskets or boxes full of: shredded paper, junk mail, magazines, straw, or other organic materials for digging
- Yellow Pages for shredding
- Cat toys: Batta balls, and other cat toys that roll or can be tossed
- Parrot toys that can be tossed, or hung from the top of the cage and chewed or hit
- Baby toys: hard plastic (*not* teething) toys like rattles and keys, things that can be tossed
- Children's or birds' mobiles for hitting
- "Lazy cat lodge" (cardboard box with ramps and windows) to climb in and chew on. Also, kitty condos, tubes, tunnels, and trees
- Nudge and roll toys like large rubber balls, empty Quaker Oat boxes and small tins
- "Busy Bunny" toys

- Rainbow slinkies
- Toys with ramps and lookouts for climbing and viewing the world
- Dried out pine cones
- Jungle gym type toys from Toys R Us
- A (straw) whisk broom
- A hand towel for bunching and scooting
- Untreated wood, twigs and logs that have been aged for at least 3 months (apple tree branches can be eaten fresh off the tree. Stay away from: cherry, peach, apricot, plum and redwood, which are all poisonous.
- Untreated sea grass or maize mats from Pier One or Cost Plus Imports

Dietary Recommendations

In General:

A rabbit's diet should be made up of good quality pellets, fresh hay (alfalfa, timothy or oat), water and fresh vegetables. Anything beyond that is a "treat" and should be given in limited quantities.

Pellets should be fresh, and should be relatively high in fiber (18% minimum fiber). Do not purchase more than 6 weeks worth of feed at a time, as it will become spoiled. Pellets should make up less of a rabbit's diet as he or she grows older, and hay should be available 24 hours a day.

When shopping for vegetables, look for a selection of different veggies--look for both dark leafy veggies and root vegetables, and try to get different colors. Stay away from beans and rhubarb.

Hay is essential to a rabbit's good health, providing roughage which reduces the danger of hairballs and other blockages. Apple tree twigs also provide good roughage.

Babies and "teenagers"

- Birth to 3 weeks--mother's milk
- 3 to 4 weeks--mother's milk, nibbles of alfalfa and pellets
- 4 to 7 weeks--mother's milk, access to alfalfa and pellets
- 7 weeks to 7 months--unlimited pellets, unlimited hay (plus see 12 weeks below)
- 12 weeks--introduce vegetables (one at a time, quantities under 1/2 oz.)

Young adults: 7 months to 1 year

- introduce grass and oat hays, decrease alfalfa
- decrease pellets to 1/2 cup per 6 lbs. body weight
- increase daily vegetables gradually
- fruit daily ration no more than 1 oz. to 2 oz. per 6 lbs. body weight (because of calories)

Mature adults: 1 to 5 years

- Unlimited grass hay, oat hay, straw
- 1/4 to 1/2 cup pellets per 6 lbs. body weight (depending on metabolism and/or proportionate to veggies)
- Minimum 2 cups chopped vegetables per 6 lbs. body weight
- fruit daily ration no more than 2 oz. (2 TBL) per 6 lbs. body weight

Senior rabbits: Over 6 years

- If sufficient weight is maintained, continue adult diet
- Frail, older rabbits may need unrestricted pellets to keep weight up. Alfalfa can be given to underweight rabbits, only if calcium levels are normal. Annual blood workups are highly recommended for geriatric rabbits.

Note: When you feed a lower quantity of pellets, you must replace the nutritional value without the calories, which is done by increasing the vegetables. Also, a variety of hay and straw must be encouraged all day long, we do this by offering fresh hay a couple of times a day.

Living Arrangements

Cages.

- Rabbits were not designed to live on wire floors--they're hard on their feet (which have no pads on the, like cats or dogs). If you must use a cage with a wire floor, you need to provide your rabbit with a resting board or rug for her to sit on, otherwise she will spend all of her time in her litterbox.
- You can find cages with slatted plastic floors, which are more comfortable, or you can use a solid floor. As long as your rabbit has a litterbox in the corner that he chooses as his bathroom, there shouldn't be much of a mess to clean up.
- Bigger is better! A cage should be at least 4 times the size of your bunny--more if he is confined for a large amount of the day. You can build your rabbit a two-story "condo" with the floors connected by a ramp--they love this!
- An untrained rabbit probably should be kept in a cage while you're not home to supervise and at night when you sleep. Rabbits are crepuscular, which means that generally they sleep during the day and during the night but are ready to play at dawn and at twilight. Be sure to let them out during the evening when you are home, and if possible, in the morning while you get ready for work.
- A cage should be seen as the rabbit's "nest." A special place where he can feel safe and secure. Make the nest enjoyable and she will enjoy being there, even when the cage door is open! Keep it stocked with baby toys, a synthetic sheepskin rug, a piece of wood attached to the inside (like a baseboard), and when you put him to bed at night, a nice veggie or fruit snack.

Rabbits in the House.

- When your rabbit is better trained, and when your house (or the part that your rabbit will have access to) has been sufficiently bunny-proofed, your rabbit can be allowed free run of the home (or part of it) even when you are not home. The more room your rabbit has to run around in, the more delightful you will find her as a companion.
- Even when a rabbit has a lot of room to run around, he may still get bored. A bored rabbit is often a naughty rabbit. If you don't make every attempt to provide your rabbit with *lots* of entertainment, in the form of boxes, baskets, brooms, sticks, magazines, phone books, grass mats, etc., then he will make his own entertainment in your carpet, behind your couch or under your recliner.

Rabbits Outside.

- Always supervise your rabbit when she's outside. It takes just a few seconds for the neighbor's dog to jump the fence and attack or frighten your rabbit to death.
- Make sure that the grass has not been sprayed with pesticides or fertilizers. Check the yard for holes in the fence and poisonous plants.
- Under no circumstances should rabbits be left outside after dark. Predators are possums, raccoons, skunks, coyotes, dogs and occasionally cats. If you have an outside enclosure that you feel is very secure, a rabbit can still die of fright while a predator taunts the rabbit from outside.

Litter-Training Your Bunny

By nature, rabbits choose one or a few places (usually corners) to deposit their urine and most of their pills. Urine-training involves little more than putting a litterbox where the rabbit chooses to go. Pill training requires only that you give them a place they know will not be invaded by others. Here are some suggestions to help you to train your rabbit to use the litterbox.

Age. Older rabbits are easier to train than younger rabbits, especially babies. A rabbit's attention span and knack for learning increases as they grow up. If you have a baby, stick with it! And if you are deciding whether to adopt an older rabbit, or littertrain your older rabbit, go for it!

Spay/Neuter. When rabbits reach the age of 4-6 months, their hormones become active and they usually begin marking their territory. By spaying or neutering your rabbit, he will be more likely to use his litterbox (as well as be much healthier and happier).

Types of litter. House Rabbit Society recommends organic litters, made from alfalfa, oat, citrus or paper. (Some brands to look for: Care Fresh, CitraFresh, Cat Works, Cat Country, Critter Country) Stay away from litters made from softwoods, like pine or cedar shavings or chips, as these products are thought to cause liver damage in rabbits who use them. Another approach is to place a handful of hay in each box, or to simply use hay as litter. Obviously, you need to change the hay fairly frequently (daily), since your rabbit will be eating it.

Cleaning and Disposal. Clean litterboxes often, to encourage your rabbit to use them. Use white vinegar to rinse boxes out--for tough stains, let pans soak. Accidents outside of the cage can be cleaned up with white vinegar or club soda. If the urine has already dried, you can try products like "Nature's Miracle" to remove the stain and odor. To dispose of organic litters, they can be used as mulch, or can be composted. Rabbit pills can be directly applied to plants as fertilizer.

The cage. Use a cage large enough to contain a small litterbox (along with bunny's food and water bowls, toys, etc.) and still allow enough room for the rabbit to stretch out. Place the box in the corner of the cage that he goes in. With a litterbox in the cage, when the rabbit is confined to his cage when you're not home, cage time is learning time.

Pills vs. Urine. All rabbits will drop pills around their cages to mark it as their own. This is not failure to be litter-trained. It is very important for your rabbit to identify the cage as her property so that when she leaves the cage for the bigger world of your house, she will distinguish the family's area from her own and avoid marking it. To encourage this, make the rabbit the king of his cage. Try not to force him in or out of it--coax him. Do not do things to his cage that he doesn't like, or things to him that he doesn't like while he's in the cage.

The running space. Even if your goal is to let your rabbit have full run of the house, you must start small. Start with a cage and a small running space, and when your rabbit is sufficiently well-trained in that space, gradually give her more space. But do so gradually! If you overwhelm her with too much freedom before she's ready, she will forget where her box is and will lose her good habits.

The method. Start with a box in the cage, and one or more boxes in the rabbit's running space. If she urinates in a corner of the cage not containing the box, move the box to that corner until she gets it right. Don't be concerned if your bunny curls up in his litterbox--this is natural. Once she's using the box in the cage, open her door and allow her into her running space. Watch her go in and out on her own. If she heads to a corner where there's no box, or lifts up her tail in the characteristic fashion, cry "no" in a single, sharp burst of sound. Gently herd her back to her cage and her litterbox, or into one of the boxes in her room. Be careful, however. You don't want to make the cage or the litterbox seem like punishment. A handful of hay in the box makes it a more welcoming place. After she first uses the box, praise her and give her her favorite treat. Once she uses the box in her room a couple of times, you're well on your way, as her habits will be on their way to forming. As she gets better trained in her first room, you can increase her space. Don't hurry this process. And if the area becomes very big, or includes a second floor, be sure to include more litterboxes, so as not to confuse her. Remember, as she becomes more confident and uses fewer boxes, you can start to remove some of her early, "training" boxes.

How many litterboxes? The more, the merrier, especially if your rabbit is a bit of a slow learner, or is especially obstinate about where she wants her box(es) to go. As her habits improve, you can decrease the number of litterboxes.

Special problems. Some rabbits love to kick their litter out of the box. You can get a covered litterbox (with a hood) to help solve this problem. You can also try experimenting with different litters. A second problem is that rabbits often back up so far in the litterbox that the urine goes over the edge. Again, a covered litterbox can solve this problem. Another solution would be to get a dishpan or other type of tub with much higher sides. Still another solution would be to get a "urine guard" to place around the back of the cage, to keep the litter from spraying outside of the cage.

Consistency. Get your rabbit into a daily routine and try not to vary it. Rabbits are very habitual and once a routine is established, they usually prefer to stick with it.

Compromise. If your rabbit continually urinates in a spot where there is no litterbox, put his box where he will use it, even if it means rearranging his cage or moving a table in the living room. It is much easier to oblige him than to try to work against a determined bunny!

MEDICAL CONCERNS FOR PET RABBITS

RED URINE: Rabbits' urine varies in color from clear to yellow to brown to bright red. This is usually not a cause for alarm UNLESS there are additional signs such as sitting & straining to urinate, loss of appetite or a temperature. When you see red urine, don't panic, just keep your eyes open for other signs that might indicate a problem. The red color will usually be gone in a day or two, but can last for a much longer time. If you're in doubt, your vet can test to see whether or not there is blood in the urine.

AMOXICILLIN DANGER: Never let a vet give your rabbit amoxicillin. (It is an antibiotic and is recognizable as a pink liquid that smells like bubble gum. It has killed a large percentage of the rabbits who have received it.) All drugs in the penicillin family can be dangerous for your rabbit as they kill the "good" germs in the rabbits intestines and can cause other organs to malfunction. There are other very effective antibiotics that can be safely given to rabbits, such as Baytril. Occasionally a rabbit can't tolerate one antibiotic. For instance they may stop eating or experience diarrhea, and another antibiotic will have to be tried instead.

CEDAR & PINE SHAVINGS: These are very bad for your rabbit and other pets. There are numerous studies available that demonstrate the dangers of both pine and cedar. These softwoods can cause cancer, skin sores and respiratory diseases in all small animals (and in humans in the wood industry). Please pass the word to pet shops and others who carry this material for small animals. They don't use it for lab animals so we sure don't want it for our house rabbits. Use a plant or paper based organic litter for the litter box and put newspaper in the tray under the cage.

SPAY/NEUTER: The House Rabbit Society has had over 3,000 (as of March 1994) rabbits spayed or neutered with 4 reported deaths from anesthesia. Autopsies revealed other reasons for the death, (lung or kidney disease). To a knowledgeable vet a rabbit neuter (male) is relatively simple and quite safe. A rabbit spay (female) can be dangerous and life threatening if improper technique or general anesthesia is used. If the female is over 18 months old it is recommended that blood tests be done to assess liver and kidney function prior to using anesthesia in an elective procedure.

Why Spay/Neuter? Up to 80% of unspayed females will get uterine or ovarian cancer between two and 5 years of age. Preventing cancer by spaying your rabbit will give her the potential to reach her possible life span of 8 - 10 years of age. Some rabbits that we are aware of have lived to be 16 years old.

Upon reaching sexual maturity the male rabbit will often become a real nuisance. He will fight with other males. He will fall in love with your slippers (both off and on your feet) and will spray you, your slippers and other items that he wishes to make his very own. Neutering has completely stopped that behavior in all of the males that we've had altered, although it's probably not a guarantee. Two large rabbits in different foster homes took 8 and 9 months before their hormonal urges dissipated. This is extraordinarily unusual, but don't expect instant changes immediately following surgery. Allow 2-4 weeks for changes to occur.

AMPUTATIONS: Rabbits can live as amputees. You may have to help them off and on the couch, but if an accident or illness causes you to make a decision to amputate or to consider euthanasia, please also consider that they can get along just fine on (for instance) just 3 legs.

PARAPALEGIC RABBITS: It does not happen often, but it is not uncommon for a rabbit to become paraplegic. Not everyone can put the time and energy into caring for a paraplegic rabbit, but be aware that it is possible for a paraplegic rabbit to live out his life with you. If he's an only rabbit, you might even consider getting him an older, quieter female rabbit as a friend to help with the grooming. The House Rabbit Society can put you in touch with other people living with a disabled friend.

TEETH: Rabbits' teeth can be misaligned. This condition is known as a malocclusion, which means that their constantly growing teeth do not wear properly. If the misalignment is bad, the teeth will need to be clipped periodically so that the rabbit can eat. One of my rabbit's teeth must be clipped weekly, but it is usually required only once every 2 to 4 weeks. Your veterinarian can do this for you or show you how to clip your rabbit's teeth at home. The misalignment of the front teeth can be easily seen. The back teeth usually cannot be seen and the veterinarian may have to anesthetize your rabbit in order to check the molars. Indications that their back teeth may

be a problem is a wet chin that is caused by drooling and a frequent "mouthing" motion of their jaws.

HAIRBALLS: Rabbits shed their hair every 3 months. Every second shedding is light, followed three months later by a heavy shedding. Hairballs are a secondary problem caused when the GI tract shuts down and is responsible for a large percentage of problems and deaths in rabbits. You **MUST** brush & comb your rabbit to get the hair off of them when they start to shed. Rabbits groom themselves like cats and will ingest all of the loose hair on them and their rabbit companions. They must have grass or timothy HAY available 24 hours **FREE CHOICE** (do not give the small compressed hay blocks as the fiber is too small and therefore not helpful) as well as plenty of exercise, in order to help the hair that they do ingest to pass through their systems. The hay will not eliminate the need for brushing. Rabbits who ingest carpeting and other material may also suffer from the same symptoms.

The first sign of hairballs: Droppings will be strung together with very thick strands of hair. (It is *normal* for rabbits to have feces with single strands of hair strung between them and with hair enclosed within the droppings, this shows that the roughage is doing its job. As time goes on, the droppings will become smaller with less hair (since it won't pass through the system and the rabbit's stomachs will get larger and appear to be quite fat, but when petting or rubbing his back, you'll begin to feel the bones as he loses weight on his way to starving to death.

Another idea is to give your rabbit Petromalt or Laxatone (2 brand names of a cat hairball remedy) once a week when not shedding and then daily or twice daily when they shed. Some rabbits like the taste and will lick it from the container. For other rabbits you can smear it on the top of their paw and they will (usually) lick it off. If this gives your rabbit diarrhea then don't give it to him.

Treating the first signs of hairballs is controversial. The first thing to do is to get them to eat as much roughage as they can. Hay, tree branches, blackberry vines (stickers and all), etc.

SURGERIES: Food and water should NOT be removed from a rabbit the evening before surgery! Ignore this direction if given by the front office staff and discuss this with your vet if the instructions come from him/her. Rabbits cannot throw up and possible vomiting is the reason that food is removed from cats & dogs. It is harmful to the rabbit and causes a longer recovery time if food is removed. The rabbit should also be tempted to eat as soon as they are awake to assist with the recovery process.

PARASITES: Rabbits can get the common dog or cat flea. Be very careful about the products you use to treat the home & yard, as well as the products you use on your rabbit. If the yard is treated do not allow your rabbit on it for at least a week and then water it thoroughly to wash off any residual chemicals. Use a spray or "bomb" that contains "pyrethrins" and "Precor" (methoprene). Flea powders labeled for use on *kittens* that contain pyrethrins can be used.

A mite that lives on the skin dander of rabbits will cause your rabbit to scratch and if left untreated will eventually develop thick crusts on their bodies. An injectable drug called ivermectin can be given twice, 2 weeks apart, to eliminate this problem. Rabbits can die if the ivermectin dosage is not correct, so please see your veterinarian for this.

Earmites cause rabbits to shake their heads frequently and scratch at their ears. If left untreated a middle ear infection could develop which can cause a problem with their balance. Ivermectin is again the preferred treatment.

An internal parasite called coccidia can infect the small intestines. Symptoms can be loss of appetite to chronic diarrhea and occasionally death. A rabbit is considered to have diarrhea if the droppings are not firm and round. If the droppings are round but squish when you pick them up, your rabbit has diarrhea.

The Great Outdoors?

The pleasures of being outdoors include fresh air, sunshine, and freedom to run, chew and dig. For a prey animal such as a rabbit, your garden can also be a place of danger from:

- Predators
- Theft or teasing by humans
- Moldy or poisonous plants
- Toxic pesticides or fertilizers
- Exposure to sun, heat, wind, or wet
- Bacteria contained in dirt
- Diseases spread by flies and mosquitoes

Of these, the greatest threat is attack by predators. These occur primarily at night, but can also happen occasionally in the daytime. Hutches or cages do not provide enough protection to make it safe to leave the rabbit outdoors 24 hours a day. The House Rabbit Society receives many calls every week from baffled people whose rabbit died during the night while confined in a hutch. “I don’t understand — the hutch wasn’t even unlocked, and the rabbit didn’t have a mark on him. What happened?” With her acute vision, hearing, and smell, a rabbit can sense the presence of a predator such as a raccoon even in your neighbor’s yard. She may panic and injure herself, or she may die of shock. Many raccoons can open hutches. Other predators include coyotes, owls, hawks, possums, cats and dogs.

Some outdoor rabbits avoid death by predator or the other risks mentioned. But what is the quality of life for an animal living outdoors all the time? And what sort of relationship can you build if your bunny is out there and you’re indoors? A life spent confined to a hutch is boring, depressing, and stressful for a sensitive creature such as a rabbit. A life spent unconfined but outdoors is simply too dangerous for domestic animals. By domesticating them, we have deprived them of whatever natural ability they had for survival on their own.

For safe daytime exercise, we suggest a pen within your fenced yard, one with a top and bottom as well as sides, to keep the rabbit from digging out and unwelcome visitors from climbing or jumping in. A plan from the House Rabbit Handbook (Drollery Press, 1991) describes an 8’L X 32”W X 32”H made from a frame of pine 2 X 4’s and 1” welded wire. A plywood top gives shelter and shade, and a wire floor covered with clean straw provides the rabbit with safe material to burrow in.

If your rabbit currently lives outdoors, we strongly urge you to bring her in at least during the night, when predators are most common. Even if she’s confined to a smaller cage, or a bathroom or utility room, she’s safe, and she’s making a first step to being part of your family. There’s no magic in turning an “outdoor rabbit” into a house rabbit. It can begin in a single evening. Don’t think your yard is free of predators just because you live in the city. Raccoons come up through storm drains and arrive in very urban areas. These agile animals can climb trees and open doors. Wire cages are no protection for your bunny. If your bunny cannot stay in your house at night, make sure that he’s enclosed within solid walls and behind a solid door — a garage, shed, or basement — with a good lock.

Why You Should Spay or Neuter Your Rabbit

1. Altered rabbits are healthier and live longer than unaltered rabbits. The risk of reproductive cancers (ovarian, uterine, mammarian) for an unspayed female rabbit stands at approximately 85% is virtually eliminated by spaying your female rabbit. Your neutered male rabbit will live longer as well, given that he won't be tempted to fight with other animals (rabbits, cats, etc.) due to his sexual aggression.

2. Altered rabbits make better companions. They are calmer, more loving, and dependable once the undeniable urge to mate has been removed. In addition, rabbits are less prone to destructive behavior (chewing, digging) after surgery.

3. Avoidance of obnoxious behavior. Unneutered male rabbits spray, and both males and females are much easier to litter train, and much more reliably trained, after they have been altered.

4. Altered rabbits won't contribute to the problem of overpopulation of rabbits. Over 15 million adorable dogs, cats, and rabbits are killed in animal shelters in this country every year. In addition, unwanted rabbits are often abandoned in fields, parks, or on city streets to fend for themselves, where they suffer from starvation, sickness, and are easy prey to other animals or traffic accidents.

5. Spaying and neutering for rabbits has become a safe procedure *when performed by experienced rabbit veterinarians.* The House Rabbit Society has had over 1000 rabbits spayed or neutered with approximately .1% mortality due to anesthesia. A knowledgeable rabbit veterinarian can spay or neuter your rabbit with very little risk to a healthy rabbit. Don't allow a veterinarian with little or no experience with rabbits to spay or neuter your rabbit.

Surgery can safely be performed on a male rabbit as soon as the testicles descend (3-4 months) and for females, at 6 months. After two years, it is a good idea to have your doctor perform blood work on your rabbit if you are going to have her spayed at this time.

Make sure your rabbit is in good health prior to the surgery. Food and water should not be removed from a rabbit the evening before surgery! Any change in diet can upset a rabbit's sensitive digestive tract and cause problems in post-operative recovery. One of the reasons some veterinarians recommend removing animals' food before surgery is the possibility that they may vomit. Rabbits cannot throw up, thus this is not a concern. After surgery, make sure the rabbit's cage is clean, and check her incision site daily for swelling or discharge. Do everything you can to get your rabbit to eat again as soon as possible after returning home. If your rabbit has not eaten for 48 hours after surgery, consult your veterinarian.