



HARELINES



Volume 11 Number 2 THE NEWSLETTER OF THE BUCKEYE HOUSE RABBIT SOCIETY Spring/Summer 2007

TEN ...

nine, eight, seven, six, five, four, three, two, one and the Buckeye HRS hops into its second decade of service! Even those of us involved in our chapter's inception can hardly believe we've completed ten years of fostering homeless rabbits and educating the public on house rabbit care.

Officially founded in August 1997 by Kristi Cole, Libby Armstrong and Herta Rodina, and financed entirely from personal funds, we began with three volunteers and a membership list of eleven individuals. We sure have grown. Names and faces have changed over the years and we now have close to twenty volunteers spread across the state. This edition of *Harelines*, our 30th, has been mailed to just under 300 addresses.

Most importantly, to date we've rescued 752 rabbits! Who knows what hardships and fears these sweet and gentle creatures would have faced if no one had been able to step in and help. Each rescue comes with a story, of course; sometimes we know it, sometimes we can only guess. Some bunnies have been discarded after hours at animal

shelters, dumped in the woods or a park or even a dumpster; others have been seized by authorities from situations of neglect or rescued by Good Samaritans from parking lots and school yards. A handful of abused fosters have even had their day in court.

We know all too well that we haven't been able to help all those who have needed it; there are simply too many homeless rabbits and while our organization has grown, volunteers, resources and time are limited. Saying "no" is one of the most difficult situations volunteers face and we all hope for a day when we won't be needed anymore, when there simply won't be any needy

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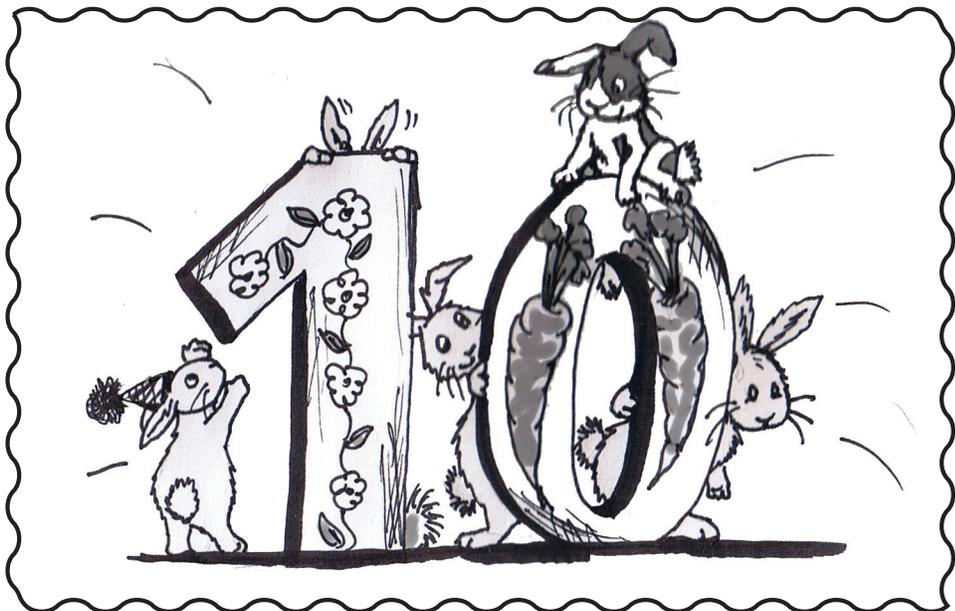
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rabbits. It's unlikely that day will ever come, of course, but we continue to wish for our own obsolescence.

In the meantime, with the support, loyalty and amazing generosity of our members, we will continue our fostering and education mission, one rabbit and one decade at a time.





Harelines, the Buckeye House Rabbit Society Newsletter, is published by the all-volunteer, non-profit Buckeye House Rabbit Society, Athens, OH.

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Visit the House Rabbit Society
at <http://www.rabbit.org> and the
Buckeye House Rabbit Society at
<http://www.ohare.org>

**THE BUCKEYE HRS RESPECTS YOUR
PRIVACY**

We know our members value their privacy and that's why we never, ever, sell our mailing list or distribute it to any other party. All of our members' information is held in the strictest confidence.

Special Thanks to:

Gary and Sue Embree, for their most generous gift in loving memory of **Ophelia**, who crossed the Rainbow Bridge on January 6, 2007.

Rhonda Marr's technical services staff -- Inge, Mary and Sandy -- for their thoughtful donation in tribute to **Whisper**.

Germaine Weis, for her wonderful contribution in memory of her daughter **Holly**.

The many kind and generous members who have continued to donate money, supplies and their time to help the **Lorain County bunnies**.

The following members, whose monetary and in-kind donations allow us to meet our ongoing fostering and educational goals:

Harold Chittum and Tracy Soltesz, Sue Milewski, Lynda Schreibman, Stevi Kovalik, Pam Loch, Denice Laderman.

Our new and continuing **Sanctuary Rabbit Sponsors!** This program would not be possible without the compassion and generosity of the following individuals:

Adriana Mastroguiseppe, Doris Mastroguiseppe, Gary Savage, Deb and John Raddish, Deb Raschke, Jim and Laura Gills, Rob Lovicz and Kim Johnson, Ken Kramer, Germaine Weis, Paul and Sherri Ward, Barbara Mirlenbrink, Dennis and Shirley Wood, Jody Slain, Jacqueline Nolan, Frank Kusttner, Paula Otter.

As always, the **Monks Copy Shop** of downtown Columbus, for their discount on printing our newsletter.





Spotlight On... Merry and her babies

By Michele Roth Kerley

It was the night before Christmas Eve and a soon-to-be mother had no place to go. Thanks to several kind people, she found her way to the Buckeye House Rabbit Society. There she was safe to care for the newborns she was about to deliver.

Much to my surprise this courageous mother gave birth to ten babies. All ten kits survived and have been a joy to watch grow over the past three months. They are now at an age where they can be adopted and are ready and in need of good homes.



Merry (the mother) is a sweet, gentle, laid back bunny who will be a wonderful companion. She can be a little shy at times, but she quickly snaps out of it when the prospect of hugs and pets arises. She has been an exceptional mother and I'm sure her greatest hope is that she and her babies find loving homes.

Since the babies were born in a rabbit-friendly environment they have been handled, loved and well taken care of literally since the day they were born. It is a wonderful feeling to know that nothing bad has ever happened to these rabbits. They have the opportunity to live the rest of their lives not knowing the hardships some misfortunate rabbits have had to experience.



If you are interested in making Merry or her babies a part of your family, please contact **Michele Roth Kerley (Cincinnati/Northern Kentucky)** at 859-261-0556 or email michele@ohare.org.



Pellet Selection for Rabbits

By Daniel Linden, MS

The next time you need to buy a bag of pellets for your rabbit, this information will help you determine which kind is the best choice.

What to look for on a Forage/Feed analysis sheet:

There are two ways that sample analysis sheets will report nutrient content. The first is As Fed. This is the nutrient content of the sample as it comes from the bag or bale. An example would be an analysis of a pellet that is 14% crude protein. This means that 1.0 pounds of this pellet will supply 0.14 pounds of crude protein.



The second way to report nutrient content is Dry Matter content. Dry Matter is the amount of feed that is left when all of the water has been cooked out.

An example would be grass that 80% moisture. This same pound of grass that is fed only supplies 0.20 pounds of dry matter (100 – (1.0 pounds x 0.80 moisture content) = 0.20 pounds dry matter). Dry matter is the best way to compare several items that may differ in form. To continue with our grass and grain samples, we would look at the protein content of each on a dry-matter basis.

How much protein is being fed per pound of each food type?

1 pound Grain @ 95% Dry matter = 0.95 pounds of grain fed on dry matter basis

1 pound Grass @ 20% Dry matter = 0.20 pounds of grass fed on dry matter basis

1 pound Hay @ 85% Dry matter = 0.85 pounds of hay fed on dry matter basis

0.95 pounds grain DM @ 14% crude protein = 0.13 pounds protein fed

0.20 pounds grass DM @ 12% crude protein = 0.02 pounds protein fed

0.85 pounds hay DM @ 20% crude protein = 0.17 pounds protein fed

This shows us how to compare the different types of food when they are all on a similar basis.

Crude Protein:

Crude Protein (CP) is an estimation of protein based on the nitrogen content of the sample (Proteins are made up of amino acids which all contain at least one nitrogen atom). This value can be used to determine the estimate of protein, but it does not give an estimate of usable protein. This is sometimes (though not often enough) reported on the analysis or even on some feed labels as digestible protein.

Protein is important for the building of muscle and regeneration of tissues and to a limited extent as an energy source, but can be harmful in large quantities. Excess nitrogen from protein must be removed from the body by the kidneys and liver. High levels of protein can cause damage to these organs. Excess dietary protein may also lead to an increase in ammonia building up in your rabbit's cecum. This may lead to a change in the gut microbes which would alter the ability to digest food. Legumes, such as alfalfa-based pellets, contain higher levels of protein than grasses and for this and several other reasons should not be fed in large amounts. It has been estimated that up to 35% of



the total nitrogen intake of rabbits comes from cecotrope ingestion from the anus of the rabbit.

The National Research Council (NRC) recommendations for rabbit protein levels are reported as 12% for maintenance animals, 16% for growing animals, 15-17% for pregnant and lactating females (a situation occasionally faced by Buckeye HRS fosterers when rescuing abandoned rabbits). This does not differentiate between which amino acids are present or at what levels.

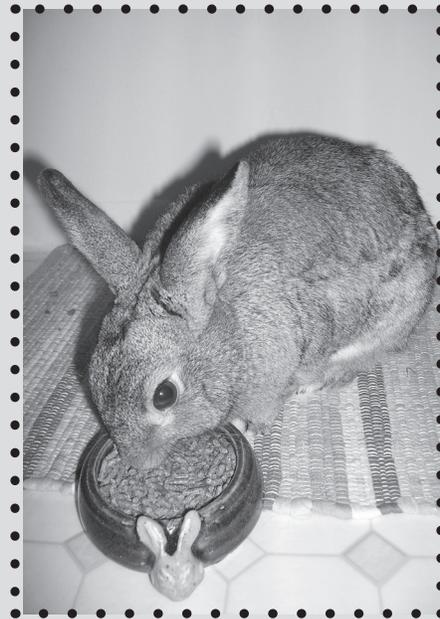
Crude Fiber:

Crude fiber (CF) is an estimate of the fiber content of the food. This includes structural and non-structural carbohydrates. This list includes cellulose and lignin, which are not digested as well as hemicellulose, starches, sugars, and pectins, which are digested to differing degrees.

Fiber is important for normal gut function. It has been estimated that rabbits require 100 to 120 grams of indigestible fiber per day to maintain normal gut motility. Without indigestible fiber, rabbits lose cecal-colonic motility which may lead to diarrhea. Adequate levels of

fiber in the diet have been shown to reduce fur chewing as well.

Minimum dietary fiber concentration given by Irlbeck, 2001, ranged from 20-25%, with less than 20% resulting in reduced gut motility, reduced cecotrope formation, and enteritis.



Crude Fat:

Fat has been shown to increase the palatability of some pelleted feeds for rabbits. However, too much fat can also decrease palatability usually due to rancidity of feeds over time, which is another reason to buy pellets in small quantities. The NRC reported that animals had a preference for feed that was 10% fat over feed that was 20% fat. The House Rabbit Society

recommends a much lower fat percentage; 1-2% is plenty for most indoor bunnies.

This is a brief introduction to feed analysis interpretation. For additional information consult your veterinarian and animal nutritionist. For further reading see the bibliography.

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4. Partridge, GG. "Nutrition of farmed rabbits." *Proceedings of the Nutrition Society*. (48). 1989. 93-101.





Somebunny Needs YOU!



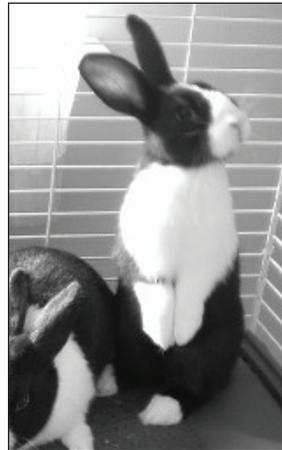
Belle is a real cutie! She loves to be petted on her little nose. Belle also enjoys digging in her hay box and napping in her cardboard tunnel. She is a bit on the shy side but is really coming around. Can you welcome Belle into your home? **Please contact Sue Zimmerman (sue@ohare.org) 419-355-8433.**



Sylvester is quite a unique looking bunny with his stripes and two-toned face! He LOVES his free time and pellets. This handsome guy would make a great addition to your home. He has lots of love to give. Why not make an appointment to meet him? **Please contact Sue Zimmerman (sue@ohare.org) 419-355-8433.**



This is **Pumpkin!** She is a very sweet young lady. Just look at her awesome blue/gray fur! What a beautiful bunny! Pumpkin enjoys playing with her toys and she especially loves to chomp on hay. Wouldn't you love to make Pumpkin a member of your family? **Please contact Sue Zimmerman (sue@ohare.org) 419-355-8433.**



Coalby is one of Hope's 3 babies. She loves to play with her cardboard box and her other toys. Coalby has adorable fuzzy cheeks and extra long ears. She is very neat and has great litter box habits. Why don't you make an appointment to meet her? **Please contact Sue Zimmerman (sue@ohare.org) 419-355-8433.**

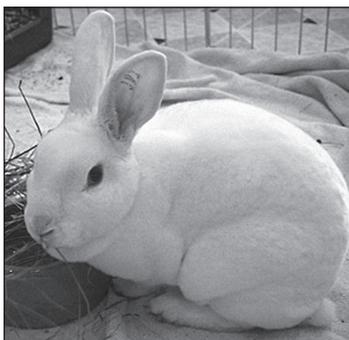


Meet **Benji.** He's a domestic bun who looks a lot like a wild cottontail rabbit. Benji was part of a group of over 20 rabbits seized from a backyard breeder who was not feeding and caring for them. Benji is an active young male. Since he was never kept as a "pet" bunny, he needs some socialization time

with a family that will help him to learn to trust humans. He's not afraid of people, he just needs to bond with someone who will take the place of his former hutchnmates! **Please contact Sue Zimmerman (sue@ohare.org) 419-355-8433.**



Abbey Rose has blossomed in foster care, but she will bloom beautifully in a forever home. This 5 1/2 pound lop is an eager eater and explorer. She will be a little shy initially, but then will hop next to you on the couch (looking for a raisin treat, maybe?) or jump on you if you happen to recline on the floor. Like most bunnies, she's not fond of being carried, but is very



Softer than the softest velvet, snow-white **Feather** will win your heart with her gentle ways and calm disposition. About two years old, this mini-rex has a healthy appetite and stellar litterbox habits. Once you gain her trust, she won't mind being picked up and will snuggle onto your lap

for long pets. Who could resist stroking this beyond-soft bunny? **Please contact Herta Rodina (herta@ohare.org) 740-797-7616.**

fond of petting. She is not quite a year old, and has all the energy and curiosity of a wonderful pet. **Please contact Jann Kuntavanish (jann@ohare.org) 937-435-6899.**



Meet **Robby**, one of the Lorain County rescues. Robby is looking for his forever loving family. If you have room in your heart and home for a little three-pound dutch bunny who loves his salads, does wild dances and binkies when he is out to play, then he may be the bunny for you. He adores nose pets; he runs to the front of his cage to get

them and tooth purrs to show how much he enjoys them. He doesn't even mind being picked up and held. What a great little bun! **Please contact Keni Morris (keni@ohare.org) 513-469-0840**



Bonnie is a curious and friendly 5.5 lb girl who gobbles all of her hay and comes running for pets. **Please contact Kristen Doherty 440-543-4959.**

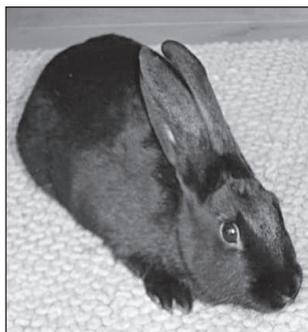


Sebastian is an adorable male Dutch rabbit who is a year and a half old. He likes to sit on top of a cardboard box and check out his surroundings when he's not busy standing on his tiptoes at the edge of his pen looking for affection. He is healthy with excellent litterbox habits and enjoys his daily veggies. Wouldn't you like

this cutie as part of your family? **Please contact Kristi Cole (kristi@ohare.org) 330-484-8416.**



Verde is a 5.5 lb black Havanna who likes to sleep on top of her box. Verde was born in November 2002. She's very tidy with her litterbox and loves to run through her cardboard tunnel. She's an excellent hay eater, too! **Please contact Kristen Doherty 440-543-4959.**



Scarlet is one of Maya's daughters with sleek black fur and a pleasant demeanor. She is now full-grown. She likes to be petted and to lay stretched out in her litterbox. Scarlet weighs about 5 lbs. **Please contact Kristen Doherty 440-543-4959.**



Alfonso, a little mini-rex, gets so excited for his meals that he runs round and round frantically until he is fed. If you pick him up however, he melts in your arms and nuzzles his face under your chin. He weighs about 3.5 lbs, is perfect with his litterbox, and eats a ton of hay for such a little guy. He also loves cruising through his miniature tunnels and boxes. **Please contact Kristen**

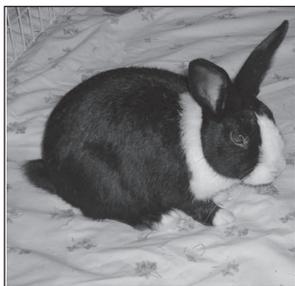
Doherty 440-543-4959.



This is **Basil**, born in June 2006. A mini rex and soft as velvet, this little guy is as sweet as can be and fun as all get out to watch. He came into foster care along with his brother, Pete. Add some flavor to your life, adopt Basil! **Please contact Kristen Doherty 440-543-4959.**



Somebunny Needs YOU! Cont'd.

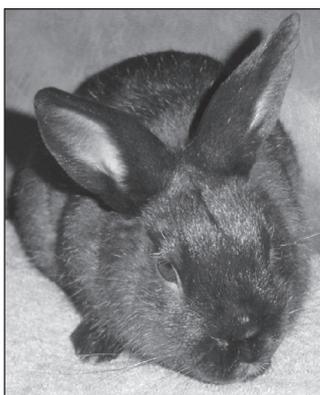


Introducing **Harry** -- Harry Houdini -- who makes all his timothy hay and fresh salads disappear in an instant. He even greets you at the door when he knows you are serving the goodies. Harry is a playful guy who does wild dances and binkies, twisting and turning high in the air. This three-pound dutch fellow could make it in a

professional ballet company if they took bunnies. Do you have room in your heart and home for Harry? He is patiently waiting ... **Please contact Keni Morris (keni@ohare.org) 513-469-0840.**



Nacho is easily a snuggle-bun who likes to hunker down on the floor with you for pets. He likes to sit in your lap too, and would do well with kids. Weighing about 5 lbs., this bunny is very calm and gentle. Nacho came into foster care from the crisis in Elyria, where 50+ rabbits are still waiting to be placed. **Please contact Kristen Doherty 440-543-4959.**



Tamale looks just like Molly; he is a small 3 lb. part-dwarf mix with a dark brown and black coat. He and Molly were both abandoned, along with three other rabbits, in a house where the family was evicted. Tamale is curious and playful and enjoys being petted for a long time. Tamale will not get any larger than he is at 9 months old (as of Jan 07) and would make a perfect bonding

partner for Molly. **Please contact Kristen Doherty 440-543-4959.**



One glance at this comical character will have you smiling! **Chaplin** (you'll see his 'mustache') is as loving as he is entertaining. This soft-as-velvet mini rex will cuddle forever in your lap and loves zoning out on his back, as long as a gentle hand is petting him. Chaplin is about two years old and has a strong appetite. He hasn't completely mastered the litterbox yet, but his habits are improving. **Please**

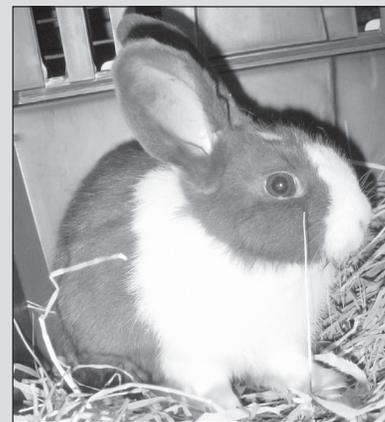
contact Herta Rodina (herta@ohare.org) 740-797-7616.

Lorain County Bunnies

Won't you consider letting one of these adorable and very friendly little bunnies into your home?

How about a matching pair?

Please contact Kristen Doherty 440-543-4959.





Treatment of Spondylosis in Rabbits

By Rob Lovicz

Once again you, the reader, are treated to another medical condition of my rabbit, Otis. Otis is now seven years old and has been diagnosed with a mild case of Spondylosis.

What is Spondylosis?

It is a degenerative condition of the spine. In the early stages of the disease, the vertebrae in the back gradually develop 'spurs', which may rub against each other causing pain. As the disease progresses, these 'spurs' eventually bridge together. This bridging actually fuses the vertebrae together and decreases the spine's flexibility. As they degenerate, the vertebrae may also pinch nerves causing pain and/or musculoskeletal weakness.

Spondylosis is fairly common in rabbits over four years of age and is most common in medium to large breeds, especially females. About two years ago, we noticed that Otis did not look comfortable when he was resting or lying down. He was resting in a tense ball and appeared as though he was in pain.



Drugs and physical activity help manage spondylosis. Cayenne, like Otis, is ready to explore!

Otis was notorious for his comfortable sleep positions. He would lounge like a Roman emperor spread out reclined on his hip in an obvious position of comfort. It is very important that YOU respond to anything different in your bunny's routine or mannerisms. As a prey animal, a rabbit will want to a disguise an injury or a condition and any slight deviation from the norm must be investigated.

Off to the vet we went. The veterinarian diagnosed him with fused vertebrae (Spondylosis) via x-rays. He gave us and treatment options, and we also went online to get some of our own information. We found an optimal treatment plan.

Treatment of Symptoms

The primary goal is to control the pain and keep Otis mobile without creating gastrointestinal (GI) problems. Always remember that immobility can trigger an attack of GI stasis, which is a life-threatening condition.

The doctor gave his prescription of METACAM (NSAID). NSAID's (Non-Steroidal Anti-Inflammatory Drugs) include aspirin, ibuprofen, or rimadyl. NSAIDs are the most common treatment for Spondylosis. In more serious cases of Spondylosis or arthritis, more potent medications such as steroids are required (dexamethasone and prednisone). Always remember



that NSAIDs and steroids should never be mixed, because they cause GI upset.

Physical Therapy

It is very important that your bunny gets plenty of exercise every day. This is especially true when your bunny is afflicted with Spondylosis. Otis, after a long day of slouching and being lazy (like most rabbits), will usually kick out and hop with discomfort and stiffness when he finally decides to be mobile. Once he shakes off his mild symptoms, he acts like a young rabbit again. There is also documentation that daily massages and acupuncture are also effective therapy for rabbits with more severe conditions.

In more dire cases, you may have to be more creative. For buns who have trouble moving or standing at all, you will have to try a few different experiments:

1. If your bunny cannot move easily on his own, make a sling out of a narrow towel, place it under his body long ways, and use this to hold him upright. This support will encourage bun to move his legs. You may be surprised at his mobility level if you just give him a little help at the start.

2. If that doesn't work, you may have to make or purchase a cart or scooter that will help your bun get around the house without

your help. The cart is usually attached to his hind end. K-9 Carts – k9carts.com – and Doggon' Wheels – doggon.com – are among several companies that specialize in such products.

3. If your rabbit has trouble hopping into his litter box, make one side lower so he can easily step in.

4. If your rabbit has weakness in his hind legs, be sure to check his ears regularly. He will not be able to clean the wax out of his ears on his own and you will need to do it for him. Ask your veterinarian to show you how.

5. If your rabbit has trouble hopping into his cage, make a ramp to help him out. Put a carpet or towel on the ramp so his feet don't slip.

6. If your rabbit can only move in a small area of the house, be sure to move all his things to one place.

This place should be where your family spends most the time. It is very important for your bunny to know he is a vital part of the family.

Conclusion

Spondylosis and arthritis are treatable through both medication and in physical therapy. Otis's drug therapy and daily exercise regime has truly improved his quality of life with this condition. He no longer appears to be in pain and has gone back to his usual mode of resting and playing. He has some bad days, but most are happy binky days.

References

Smith, Kathy & Noella Allan, DVM. *Rabbit Health in the 21st Century: A Guide for Bunny Parents*. Second Edition. 2003.



Cayenne and Rocky, at rest after play time.



MEMBERSHIP FORM

Your \$33.00 annual membership in the Buckeye HRS includes:

- National membership (\$18.00) and 3-4 issues of the *House Rabbit Journal*
 - Local membership (\$15.00) and issues of Harelines
- If you are already a national member, your local fee is \$15.00

- I would like to donate \$_____ to help a foster rabbit (vet care, supplies)
- I would like to donate \$_____ in memory of _____.
The grieving family receives an acknowledgment of your gracious gesture.

I would like to volunteer to:

- Distribute information to vets
- Assist with mailing
- Help at Buckeye HRS booth at Pet Expos and fairs
- Other _____

Name _____

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City, State, Zip _____ Phone _____

E-mail address _____

Bunnies' names and special dates _____

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