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Dedicated to educating the public and to fostering and adoption of companion rabbits. 781-431-1211 or www.rabbitnetwork.org.

RABBIT TRACKS

Fall 2004

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Renal Failure: When Kidneys Give Up

by Astrid M. Kruse, DVM

As the body ages, organs begin to show the strain of time. Kidneys are frequently the first major organs to lose enough function for illness to develop. This is true in rabbits, as it is in many other species. Kidneys are abdominal organs that filter toxins out of the blood, help maintain calcium and water balance, and produce a hormone that stimulates red blood cell production in the bone marrow. Substances filtered out by the kidneys, along with any excess water, are expelled during urination. Kidneys are essential to survival, and with total loss of kidney function (renal failure), the body can live a few days at most.

The signs of kidney disease in an aging bunny include increased thirst and urination in the early stages (vets call this “PUPD” for polyuria/polydipsia, which just means increased urination/increased thirst). This happens when more than 75% of the kidneys are not working, because the kidneys can’t pull enough water out of the urine. As more water is lost in urination, the body takes in more water through drinking. (This also happens in other diseases, like diabetes, and some endocrine disorders.) Litterbox habits can decline at this stage.

With long-term kidney disease, the patient begins to feel tired and ill. Appetite decreases, because toxins begin to build up in the blood, causing nausea and often weight loss. Anemia (decreased red blood cells) develops because the diseased

kidneys are not producing enough hormone to stimulate the bone marrow. Being anemic makes the patient tired, because fewer red blood cells are carrying oxygen to the body.

Tests that a vet may run include a urinalysis, bloodwork, and X-rays. A urinalysis gives very useful information about kidney function. In early kidney disease, increased water content in the urine is the first sign of a problem. Try to bring a clean urine sample to your vet, if you notice increased thirst and urination. (Try scrubbing out a litterbox and rinsing it well, then see if your bunny will pee in it without the litter.) X-rays can show if there are stones in the kidneys. Bloodwork should be monitored regularly in any older pet, and especially in rabbits being treated for kidney disease. As kidney disease progresses, creatinine and blood urea nitrogen (BUN), which are toxins the kidneys are supposed to filter out, build up in the blood. Phosphorus also increases and contributes to nausea, and along with calcium, to mineralization.

The main goal of treating kidney disease is to increase quality of life for as long as possible. First, the treatable is addressed – antibiotics for infections, surgery or dietary therapy, along with pain management, for stones. The mainstay of therapy is fluids given under the skin (subcutaneous), which you can learn to do at home. This helps the kidneys flush out toxins.

Rechecking levels of creatinine, BUN, and phosphorus helps your vet see if treatment is working. Always remember that whether your bunny is feeling well or not is the only real “test” result that matters. Depending on how severe the anemia is, your vet may also give injections of erythropoietin. These are very expensive and don’t always work. Other species are treated with a low protein diet, because BUN comes from breaking down protein in the diet (but because our rabbit friends aren’t carnivores, this diet doesn’t apply). Pepcid can help reduce some of the gastrointestinal upset that can develop.

As a last resort, hemodialysis and kidney transplants are options for some pets. In hemodialysis, the pet is hooked up to a machine that pulls out blood and rinses it of the accumulating toxins. However, most rabbits are too small for the machine which is designed for humans. It is very expensive and only available locally at Tufts. Transplants have not been done in pet rabbits, and the low survival rate, difficult recovery period, and ethical issues surrounding the donor rabbit, who gives up a kidney, can’t be minimized.

The causes of chronic kidney disease are not known. Some people think that long-term infections in any part of the body spill bacteria into the blood, and that these bacteria end up in the kidneys (as well as other organs) and cause small amounts of damage over a long time. In addition, any event that

lowers blood pressure below a critical point, such as severe illness and sometimes anesthesia, can injure the kidneys when blood flow is too low. Kidney stones or infections, and long-term exposure to toxins will cause damage too. Kidneys may also fail suddenly

at any age from some toxins (e.g., overdose of drugs like Advil [ibuprofen], some poisonous plants, antifreeze) and infectious diseases. However, acute kidney failure like this is rare in house rabbits.

The key to managing kidney disease is catching it early before the bunny

is very sick. Some pets can live with treatment for over a year. However, as with most chronic diseases, quality of life is everything, and only your bunny can tell you when it's time to let go.

Baby Bunnies: Growing Up on *Fast-Forward*

by Carol Youngclaus

The Sighting:

"There's the head! We've got her!" What a welcome exclamation that was after hours of frustration and worry on a rainy August evening.

Earlier that week, an unidentified man had released more than a dozen rabbits to fend for themselves in and around that Andover field. He either did not know or did not care that it is illegal to simply abandon a domestic animal. His callous act would have been an almost certain death sentence for these hapless rabbits if the field hadn't been adjacent to a Little League ballpark. Each afternoon, just as the game began, the rabbits would emerge from the underbrush along the left field border to munch on grass and weeds for their evening meal. For several days, a posse of concerned players, parents and coaches did everything they could to effect a rescue. These wonderful people took in as many of the rabbits as they could catch, but the last few eluded them. Not knowing that the people chasing them were

saviors rather than predators, the wary rabbits became better and better at escaping capture. So the Little Leaguers and their families turned to the House Rabbit Network for their knowledge of rabbit behavior and their assistance in rounding up the few animals still fending for themselves.

The Capture:

One of the last rabbits had been hiding under a dugout, beyond reach and stubbornly determined to stay there. We knew where she was, but we couldn't flush her out. Finally, an idea came to me: as a kite enthusiast, I had plenty of line and accessories in my trunk, so I tied an especially flashy tail to a length of line, fed the line under the dugout, and then reeled in the kite tail. It worked! Out popped first the

head of a very spooked rabbit, and then the rest of her, right into the enclosure we had set up.

And that is how Greta and her babies-to-be came into my life: I decided then and there that I was going to foster this courageous young bunny and find a wonderful new home for her.

We determined on the spot that she was female, and strongly suspected that she was pregnant (as were most of the female rabbits from the Andover rescue). A visit to my veterinarian confirmed the pregnancy. In fact, Greta had a growth on her rear end that worried my vet, so Dr. W. performed an ultrasound to be sure. I watched in awe as a tiny, perfect



Greta's 7 babies, 1 day old (in cardboard tray), and 2 days old snuggled up together in mom's fur and hay.

spine and several shadowy outlines appeared on the ultrasound monitor. Yes, Greta was indeed pregnant, and to treat her growth would harm the unborn babies. So the growth (which turned out to be benign, thank goodness) as well as Greta's spay had to wait until after the babies had been born and weaned.

For the first few days after this revelation, my husband and I struggled with the alternating emotions of dismay (there are so many unwanted rabbits, each new one born adds to that terrible problem), excitement and trepidation. After all, rabbits had been part of our lives for over 10 years, but newborn baby bunnies were uncharted territory. Fortunately, others in the group had had experience fostering pregnant females and were able to coach us through the process.

We scrubbed a large, two-story cage and filled it with two boxes of absorbent, nontoxic litter topped with sweet, fragrant hay – one for Greta's comfort and one we hoped would soon be used as a nest. Greta munched happily away on the hay and wonderful greens we lavished on her. She also enjoyed her time out, exploring the bunny-proofed area we set up for her, safely removed from our other free-range rabbits. And through the cage wires she was able to sniff noses with Matt and Josie, who shared her living quarters on our enclosed back porch.

The Blessed Event:

Though gestation for a rabbit is only 28-32 days, and Greta was at least two weeks along when she came to us, the waiting seemed endless.

Every day, I'd ask her if she was ready to have those babies yet, and every day she gave me the same blank bunny look. Even after she started pulling fur to line the second box, there were still two days of waiting. Finally, late on the afternoon of August 15th, I peeked into her cage and saw the tiniest movement in the fur-lined nest box. Greta had very quietly had seven babies while I wasn't paying attention.

The first step was to count the babies and make sure they were all alive



Greta nursing her babies.

and warm. Then, using a postal scale, my husband and I weighed each one and recorded the results. Every morning and evening we repeated this ritual, gently stroking the babies and telling them what sweet darling things they were. Although they became accustomed to our voices and hands, convincing them to hold still on the scale was a challenge. But it was important to make sure each one was steadily gaining weight. It soon became apparent that two were much smaller than the others, so we gave them extra nursing time with Greta to help them catch up. Greta turned out to be a wonderful mother, never

complaining about the untimely extra feedings, and all the babies thrived.

Growing Up:

Within days, the biggest babies were beginning to crawl, exploring their surroundings even before their eyes opened. They would wobble and tumble, but each day they became visibly stronger and more adept. And before long, we could see shiny slits as their eyes began to peep open – first the largest two bunnies, and then the others, one by one, started to see the world around them. They also began to look more like real rabbits: their ears, once small and flat against their heads, began to grow long and upright. Their legs started to support their weight. They began to hop and even attempt binkies (that wonderful side-kick motion made by a happy rabbit). OH NO...at about three weeks, they started to escape from their nest box!

At first, catching them was a simple matter of paying attention and nabbing the escapees before they could get too far. But it wasn't long before all seven were running in different directions, and we were too helpless with laughter to chase them. We settled for baby-proofing the area and letting them have their fun. They were almost unbearably cute, and we were utterly smitten. Certain now that all would survive, we began to give them names. We called the largest, a tan-colored cutie, "Pumpernickel." The smallest, also tan, we named "Piccolo." So in a spirit of alliteration, we called the remaining five (all of them pure black) "Pepper," "Pringle," "Popsicle," "Peanut" and "Pistachio."

The babies spent each evening playing in an area bounded by our living room walls and sofa, blocked off by a gate. They spent the remainder of the night back in their cage on the porch where our big bunnies, Matt and Josie, roam free. One morning, we discovered that the cage door had somehow been left open and the babies had escaped. We frantically searched the porch, expecting to see injured babies – or worse! – until my husband noticed that Mattie, far from hurting the little ones, was watching over them, protecting them from our more aggressive adult bunnies.



“Are we cute or what!?”

Ever since that morning, he has been their “Uncle Mattie,” and his bunny mate Josie has followed his nurturing lead.

Greta’s Recovery From Childbirth:

The change in Greta is dramatic. When we first took her in, we remarked on her beautiful tortoise coloring as well as her rather thin coat. We now think the unusual coloring was due to malnutrition – once the babies were weaned, Greta’s coat filled in and is now

a rich, glossy black, full of healthy highlights. Not only has Greta’s physical health improved, she has also gone from a withdrawn, frightened creature to a content and outgoing companion animal, seeking affection from us or stretching luxuriously beneath our (her) coffee table. The waif of early August has become a cherished fixture in our lives.

The Terrible Teens:

As any mother knows, babies don’t stay babies. Sooner than we were ready for it, the boys started to become young men. Old enough for raging hormones but still too young to be neutered, they had to be separated from their sisters. HRN provided a huge cage, and it became home for the boys while the girls enjoyed the freedom of the porch. It was a difficult time, rife with misbehavior and redolent of hormone-laced urine spray. Boys will be boys, and we were expecting the onslaught, but it was difficult to live with (and stinky, too!). Still, we were lucky that through all the chasing, spraying and mock battling, there was no serious fighting. Nobody got hurt other than our upholstery.

The day finally came that our boys were old enough to be neutered (the girls would have to wait longer for their spays). We knew it was the kindest, best thing we could do for them, but it also meant saying good-bye forever to their baby days and preparing ourselves to let them go to new homes.

Four successful operations (one each on four bunnies) and a few days of healing later, our boys were already starting to mellow out. Soon, our girls would follow suit, and the whole crew would be primed for adoption.

Big Decisions, Hard Choices:

With a house full of our own rabbits, we knew we couldn’t keep all the babies, but we simply couldn’t part with all of them, either. And we were sure it would break Mattie’s heart to lose every one of his little charges. So we adopted Momma Greta, Pumpnickel and Pistachio ourselves. They will spend the rest of their lives right here under the watchful eye of Uncle Mattie and Aunt Josie.

Piccolo also found a wonderful new home. He now shares quarters with his new bunny friends Smokey and Scooby. I cried and cried on the day I delivered him to his adoring new mom. I wonder if he misses us as much as we miss him?

Pringle (a.k.a. Big Red, even though he is pure black) is paired with his brother Peanut, and they are hoping for a new home that will let them romp as they are accustomed to doing. Pepper and her brother Popsicle (a.k.a. Poppy, Master of Mischief) have complementary personalities that will make them a great pair for an adoptive home. And my husband and I, anticipating an empty nest (literally), are talking about taking in sanctuary rabbits – those too old or too ill to be adopted – to fill the hole left by our little darlings.

The College Rabbit

by Suzanne Trayhan

Many college students are living on their own for the first time and they find that they really miss having a pet around. They like the companionship and look into options for having one while they are in school. Often a rabbit will seem like the ideal pet for them. They are small, quiet, can be caged, and not to mention irresistibly cute. Unfortunately there are many other issues that are often overlooked.

Whether you are getting a rabbit or any other pet, you should first learn everything you can about them, to make sure they are the right pet for you. We encourage everyone to read our Bunny Basics. Think through issues such as how will you prevent your rabbit from chewing electrical and computer cords? Where will you store supplies? Will your room be quiet or noisy? In addition to the standard concerns, college students are often faced with other circumstances which make having a rabbit or any pet more difficult.

School schedules are an important issue. Sure everything is fine while school is in session. However, college students often travel for school and summer breaks. Sometimes these trips are home, other times to fun places like Florida. What happens to the rabbit during this time? You cannot rely on other students to watch your rabbit when they most likely will be away too. What about the student that needs to fly home? Taking rabbits on a plane is very expensive. Unless your parents are a short (less than two hour) drive away, this is a serious problem.

Finances are another issue. Most college students are tight on funds. They need to save up the adoption fee and even save to pay for gas. If money is this tight, what happens when the rabbit gets sick? Vet bills can easily run \$300. If you can't afford the vet bills, you can't possibly provide adequate care for your bunny.

Vet visits also bring up the issue of transportation. Many students

don't have a car. You have to worry about rides in order to pick up rabbit supplies. This isn't critical, but if you have a sick bun and need to get to a vet quickly, finding a friend who can give you a ride might be difficult.

Finally, life changes. Rabbits are fun while you are in the dorm, enjoying your college life. Too many students graduate, move to a new town and fail to find rabbit friendly housing. Many rabbits end up at the shelter then. Bunny was part of the college days, not part of the future.

Unless you have supportive parents nearby, plenty of money, a car, and plan on keeping your rabbit after graduation, a rabbit (or any pet) is not a good choice for a college student. However there are other ways to get a bunny fix. You can always volunteer with a local shelter or rescue group. Most groups can use help cleaning cages and socializing animals.



Time:

4:00 pm to 8:00 pm

Place:

Baja Fresh in Stoneham
113 Main Street, Redstone Plaza

Date:

Sunday, October 24th

Help us Raise Money for



www.rabbitnetwork.org

We cordially invite you to join us for a fundraiser dinner at Baja Fresh to raise funds for the House Rabbit Network.

15% of your dinner purchase will be donated directly to the House Rabbit Network and will provide all foster buns with the care they deserve!

Bring the whole family! We're looking forward to seeing you there!



Welcome back, Readers!
It's autumn — a time for the leaves to fall, and for some rabbits the fur to fly due to heavy shedding. Rabbits

spend a lot of time grooming themselves, and their partners if they are bonded. There's a great potential that your rabbit will ingest fur from all those tongue baths. How do you prevent it?

I bet you'd like to learn from other rabbit parents how they deal with shedding, grooming, fur balls, and airborne fur. I'm sure you all have great tips on this subject, so email me, Calvin, at calvin@rabbitnetwork.org and share what you do when your bun sheds!

This edition's care tips are actually coming from two newly-adopted rabbits who are getting used to their new home and parents. They emailed me [with some help] with ideas that their folks did to help them acclimate to their new digs.

From Cae: When we moved to this new house I was so excited to go adventuring with my brother Finn. When he ran unafraid from the hall rug to the living room rug, I couldn't follow him because I was terrified of the hardwood floor area in between. He could even run through the dining room then through the kitchen and back to me and not worry about the flooring! I got left behind, and that made me real sad. So Mom put a huge plank of cardboard down to cover the transition area from the hall rug outwards. I was like Yah, I can walk on cardboard! So I ran after Finn day after day from the hall rug to the living room rug. Then one day I ran out and realized she took away the cardboard, and I was OK on

the wood! I was so excited that I ran into the dining room then through the kitchen all by myself. Now I don't need cardboard to explore with Finn.

From Finn: I am apparently "nosy." I like to nose everything I come across—sometimes I nudge, sometimes I push things over. Apparently that behavior isn't always cute. I guess tipping the plastic water bowl over and spilling it everywhere isn't a good thing. So my dad Krazy Glued a super-huge, heavy metal washer to the underside of the water bowl and put a waterproof pet mat under our bowl to cover the rug. Now when I try to tip it, it's too much work, so I can only nose it around. They don't fill it too full, so the spilling has decreased, and I am apparently being A Good Boy.

Do you have a cool idea that you used to ease your new rabbit into his/her home? Let me know! Send an email to me at calvin@rabbitnetwork.org!

HRN News

Williamsport Rescue Update

This past July, HRN played a key role in rescuing and relocating rabbits from a closing meat farm in Williamsport, PA. Working with local animal advocates, HRN volunteers were able to save 16 rabbits from the slaughterhouse. Most of the rabbits are young, and any minor

health issues were immediately addressed and subsequently have cleared up.

Many thanks to all the generous donors who gave \$1,425 — their gifts were invaluable for this rescue effort. To date, HRN has spent \$893.20 on the rabbits' care. Eleven of the



Ashley Rea with two of the saved Williamsport buns.



Ashley & Jane

rabbits still need to be fixed. Sadly, two of the girls died during their spays. Currently three of the boys, Chip,

Dutch, and Thomas, are available for adoption and all have sweet, gentle personalities. Keep checking our website as more of these rabbits become available for adoption (or fostering)! Maybe you have room for one or two in your home?

On behalf of the rabbits saved, a huge **Thank You** goes to the following people: Ashley Rea, the 16 year old who spearheaded the operation, her father Jerry Rea, Jane and Tom Kavcak of Coopersburg, PA, and to local HRN members Suzanne Trayhan, Cheryl Rheinhardt, and Shannon Cail.

The journey isn't over yet!


HRN is still facing several more spays/neuters and other medical costs for these Williamsport rabbits.

Please consider sending a special gift to help defray our costs. Checks may be made to "House Rabbit Network." In the memo section, please write "Williamsport" and mail it to: **House Rabbit Network, PO Box 2602, Woburn, MA 01888.**

Upcoming Rabbit Seminar

Volunteer Alan Moyer will be presenting an informational rabbit care seminar entitled "**Rabbits as Indoor Companions**" on Wednesday, October 20th 7-9 PM at the Chelmsford Community Center, 1A North Road, Chelmsford, MA. Fee is \$8; everyone is welcome. To register, call 978-250-5262. Visit the Chelmsford Recreation Department website for full details. http://www.townofchelmsford.us/Public_Documents/ChelmsfordMA_Recreation/index.

Rabbit Information Booths

 Saturday, October 30th
Worcester Animal Rescue League's Walk for Animals
10 AM – 2 PM.

Come see HRN's info booths!

Volunteers Meeting

The fall get-together is on Sunday, October 24th at 2 PM in Wilmington, MA. Come join us and meet other volunteers — and foster rabbits, of course! For details, email info@rabbitnetwork.org, or call 781-431-1211. Afterwards, we can all hit the Baja Fresh Fundraiser in Stoneham!

Yankee Candles Fundraiser a Hit!



Yet again, selling Yankee Candles was a fabulous fundraiser. We netted \$1,815.45! Thanks to everyone who sold and bought candles — and to Jessica Pearlman for arranging the event.

Tufts Open House & Pet Rock!

HRN was present once again at this year's Tufts Open House, which was held on Sat., Sept. 11th in North Grafton, MA.



Amanda & Shannon Cail, and Suzanne Trayhan at Tufts



Bruce Fuller and Alan Moyer manning the HRN table at Tufts.

On Sun., Sept. 12th the 6th Annual Pet Rock Petfest was held at Quinsigamond Community College in Worcester. HRN was there too!



Kathy King, Andrea Hubbard, Melinda Lawler & Diane Mayer enjoying Pet Rock

HRN Awards 2004

Shannon Cail
Volunteer of the Year

Dawn Nichols
Rookie of the Year

Your efforts and influence are recognized and appreciated!



Featured Buns



Williamsport Buns: "The Bachelors"



Thomas

6 lbs, 6 months, Dutch Mix

Thomas is a sweet, playful bunny.



Chip

6 lbs, 5 months, NZ White

Chip is very curious!



Dutch

6 lbs, 5 months, Dutch

Dutch is very friendly and has beautiful blue eyes. He is mellow and very gentle.

*You can't change the world by adopting one animal,
but you can change the whole world for that one animal. ~ Author unknown*

Memorials

DCI Jane Tennison

From the moment you hopped up the driveway into our lives, to the moment your spirit left your body, you were an inspiration and a treasure. St. Francis



truly knew what a gift you were when he sent you to enlighten us. We had the pleasure of seeing you develop from a lanky, raucous baby into a gorgeous, well-tempered lady. It's befitting that we named you Tenny, as you gave us a decade of joy, laughter, lessons, and a deep, uncon-

ditional love. You shared nearly your entire life's journey with us, and that is a privilege and a blessing. You were intelligent and crafty, strong and resilient, gentle and loving, and wise beyond words. When I looked into your eyes, I saw a very old soul who had the power to heal with her love. I know you want us to celebrate the everyday smiles and victories, to cherish that rush in our hearts of never-ending love, and to be at peace. And so we kiss the joy as it flies, so that you may live in Eternity's sunrise. Forever grateful for your influence, with love, we say farewell for now.

Christine & David and Prince

Coco 1992 - 2004

You are finally back with your soul mate and partner in crime, but how I miss snuggling in front of the TV

in the evening, seeing you doze off in my arms, and sharing an after-



noon nap. I miss having you and Holbrook for company in the office. You took such good care of Holbrook in his last 2 1/2 years. It was an honor to hold you in your last hour and share your final moments on earth. (Thank you for not pulling a "Holbrook" on me later in the week!) I will miss celebrating Sept 6 & 9 with you this year.

*Much love and snuggles,
Mom, Molly, & even Flip - who misses having somebun to harass on a regular basis ;-)*

Join HRN...or...Give the Gift of Membership

House Rabbit Network does not only foster rabbits, we also foster friendship, encouragement, and community. Please become a member and join our efforts, share your strengths, and be a part of our success. You will gain something personally rewarding while helping house rabbits both within and outside of our organization.

If you are not already a member, please join HRN!

Please consider giving the gift of membership!

The holidays are coming, and what better way to share your love of house rabbits than give a gift membership to someone, who like you, wants to help. Your membership dollars will go a long way towards improving the lives of house rabbits everywhere. We thank you for your support!

Make 2005 a year of change — for you and for house rabbits alike!

Contact HRN at info@rabbitnetwork.org or (781) 431-1211.



House Rabbit Network Membership and Ordering Form

Your membership donation is tax deductible and will be used for medical costs (spays/neuters, vet bills) and education expenses. All members will receive a copy of our newsletter, Rabbit Tracks, when it is published. Currently, we are publishing three issues per year.

Memberships run from April 1 to March 31 (donations received in Jan.–March will be credited for the following year). To join, fill out this page and mail it with your check (payable to the House Rabbit Network) to:

**House Rabbit Network
P.O. Box 2602
Woburn, MA 01888-1102**

Choose your membership level:

- Dwarf \$ 15.00
- Mini Lop \$ 25.00
- New Zealand \$ 50.00
- Flemish Giant \$ 100.00
- Mix (other) \$ _____

Choose your newsletter delivery preference:

- PDF format via email
(significant savings for HRN)
- Hard copy via U.S. Mail

Please send me _____ copies of *Rabbit Health in the 21st Century* at \$20.00 each \$ _____

Membership: \$ _____

Book(s): \$ _____

Other Contribution: \$ _____

Name _____

Street _____ Apt. _____

City _____ State _____ Zip _____

Phone _____ Email _____

Total: \$ _____