Heat and Hare Conditioning

by Kristi Cole

Although many humans look forward to summer, when we can enjoy warm temperatures again and not have to wear long sleeves and coats, we have to remember that our rabbits cannot take off their coats. We must take special precautions to keep them comfortable when the temperatures rise. Rabbits don't tolerate heat very well, so as the mercury goes up, heat stress becomes a real concern. High temperatures can be fatal to rabbits. Rabbits do not sweat and can only get rid of excess heat through their ears.

Even if your home is air conditioned, some upper floors may still be quite warm, as is the case at my house. Here are some ideas to help your rabbit keep his cool when the weather turns hot.

- Put a 12" square ceramic tile in your bunny's favorite napping spot. The tile holds the cooler temperatures and can provide a nice spot to stretch out on. (This is probably why my rabbits like to lie behind the toilet during the summer.)
- Make sure your rabbit has a shady place to lie during the day. Keep a cage or pen out of direct sunlight.
- You can put a damp towel over the edge of a cage or pen and have an oscillating fan on low setting blow across the towel to lower the air temperature a bit.

Fred's ears are cooled with a damp washcloth when he gets too warm.

However, keep the rabbit's area out of the direct draft of a fan or air conditioning unit. The constant cold air blowing on him isn't good either.

- Change drinking water more frequently during hot weather. Bacteria and other germs tend to multiply faster in warm, damp areas. If your rabbit uses a water dish, you can also put some ice cubes in the water to keep the water temperature cooler longer. Make sure there is adequate vegetable intake as well to meet increased hydration needs. If your bunny is ill or has mobility problems, make sure to offer water more frequently, especially if he isn't able to get to the water source easily.

- If you have a longhaired breed, give your rabbit a hare cut for the summer. Keep all rabbits well groomed, removing shedding hair frequently.

Harrison cools off next to his frozen bottle.

- Freeze water in plastic milk jugs or pop bottles and put these in bunny's space for him to prop up against. Keep extra bottles in the freezer to replace the melted ones, so that you always have frozen ones ready to go.
- Don't forget about heat concerns when traveling in the car, either. If your car is not air conditioned, you can put a frozen bottle wrapped in a towel in the carrier with the bunny. Remember, even if your car is air conditioned, temperatures can rise very quickly once the engine is turned off, so don't leave any animal in the car in the hot months for even a few minutes.

Continued on page 3
Special Thanks to:

Miriam Palevsky, for generously donating proceeds from the sale of her bunny screen saver.

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Gary and Sue Embree, for their most generous gifts to our ongoing programs, as well as for their emergency contribution to help spay/neuter the Wood County bunnies.

Dr. Mandel, for his interest in and attention to the Wood County HS rabbits, especially for saving the life of one very sick bunny. And to him and his staff for their continuing support and care of many of our foster bunnies.

Jane Winik, for her kind donation in honor of Dr. Palomar and the excellent treatment she has given Jane’s bunny.

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Kathleen Quinn and David Kime, for their thoughtful donation in honor of Mitzi, who passed away on Aug. 15, 2000.

The Pasternacks, for their generous contribution in memory of beloved Coco.

Linda Collins, for her kind donation in celebration of Rodney and Rosebud.

Kim Tutewiler, for her gift in honor of Rascal Rabbit.

W. W. Grainger, Inc., whose 3-for-1 matching gift program tripled the Zipf’s generosity.

The Petbunny listserv, who awarded the Buckeye HRS their “Rescuer of the Month” award for January and whose accompanying “Bucks for Buns” donation reflected the thoughtful spirit of their members.

The following members, whose generous contributions have helped us help more rabbits: Paula Brill, Amy Dillon, Jean Holt, Adrian and Doris Mastroguiseppe, Stefanie Adams, Irma Laszlo, Henry Pintz and Susan Porter, Bob Piekarczyk, Lin Beam, Barbara Bernard, Scott Edwards. Your kindness is most appreciated!
Heat and Hare Conditioning, Cont’d.

If your bunny seems lethargic at all during the hot weather, you can wet his ears with cool water and then go to your veterinarian right away. Do not immerse your rabbit in cool water, only mist the ears. This cools the blood as it circulates through the ears – the body part that acts as a rabbit’s air conditioner – and returns the cooler blood back to the rest of the body.

Even though rabbits most likely don’t look forward to the summer months as much as we do, we can make it a smooth transition and a comfortable period for them with some careful observation and a few helpful tips.

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Special Dates

Congratulations and best wishes to these cherished bunnies and their devoted human companions!

Celebrating in May:

Dante with Kathy; Siggy, 2 years with Amy; Rascal, 1 year with Kim; Jillie with Suzanne and Dan; Beatrice and Benjamin with Judy; Roger and Knickers, 2 years with Keith; Lily, 3 years with Mary; “M”, 3 years with Carla and Patrick; Flopsy and Penelope with Karen; Petie, 3 years with Gina; Houdini, 2 years with Holly; Gwyn, 3 years with Ann and Ray; Weezy, 8 years with Angela; Puppy Bunny, 5 years with Robert; Vincent and Snow, 3 years with Brenda; Beau and Millie with Eileen; Banana, 3 years with Karen; Christine with Biscuit.

Celebrating in June:

Merry, 9 years with Kathleen and David; Murray with Kathy; Blossom, 2 years with Loretta; Sneaker, 3 years with Carol and Joe; Arthur, 4 years with Stacie; Mocha with Paul; Ginger with Clay and Nancy; Superbunny, 4 years with Victoria; Boo, 7 years with Joyce; Zelda, 3 years with Leslie; Kirby, 2 years with Gail; J.J., 3 years with Lynn; Rocky, Christina, and Matilda, 3 years with Brenda; Lily, 3 years with Lori; Misty, 5 years with Deanna; Cocoa Bunny and Banana Jack, 3 years with Kitty; Angel, 3 years with Pat; Sassi Frassi and Misti Lou, 4 years with Debbie.

Celebrating in July:

Teddy, 1 year with Liz; Prize with Amy; Mushy with Angela; Caramel, 9 years with Lisa; Rocky and McQuirk, 9 years with Carla and Patrick; Melbourne and Brisbane, 1 year with Julie; Elliott with Karen; Shelby, 2 years with John and Mary Jo; Quincy and Flopsy with Terri and Jeremy; Fuzzy with Clay and Nancy; Astro with Victoria; Tucker, 2 years with the Piccianos; Coco, 3 years with Charles; Junie, 3 years with Karen.

Celebrating in August:

Mochie, 2 years with Suzanne and Dan; Casey, 2 years with Susan; Thomas and Talbot, 3 years with Michele; Piglet, 4 years with Lisa; Brussels, 2 years with Carla and Patrick; Mister, 4 years with John and Mary Jo; Nibbles, 3 years with Kurt and Holly; Cinnamon, 2 years with Cheryl; Rosebud, 4 years with Linda; Ophelia, 2 years with Gary and Sue; Tickles and Sneakers, 2 years with Patty; Bailey, 3 years with Kimberly; Orion, 4 years with Julie; Kisses, 4 years with Andrea.

Omission: We regret that we omitted Buddy Delgreco’s name from our Fall 2000 issue of Harelines. He and Allie celebrate in November and his picture can be viewed on www.ohare.org.
Make Love, Not Warble

by Dr. William Mandel, DVM

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Wickliffe, OH 44092
440-516-1000

The small bunny was looking pathetic. In her four short months of life she was raised in a small pen with ten other bunnies and spent her days dodging the pennies that young boys and girls threw towards her. Around her were goldfish bowls and ceramic plates, targets for the fair-goers. She was a prize to be won, destined to a home where her new owners would have not the slightest clue how to care for her. She was born amid stress and lived amid stress. Her future seemed bleak and her life brief. Predictably, her new owners soon tired of the "pet" and gave her up to rescue when they noticed she was not eating her pellets anymore. Certainly she was not worth the price of a veterinary office call; she was a "free" rabbit after all. That's when I met her. We named her "Dee" because that was the shape of her head, like the letter "D".

Dee had a temperature of 105.3 degrees (normal is about 101-102), and had not eaten for several days. She seemed to be breathing a bit heavily, was lethargic, and mentally depressed. She also had two very large swellings on her head, one near her eye and the other on her lower jaw, below her ear. The lower swelling was the larger of the two and appeared to have recently broken open. Out of the mass oozed a white, cheesy fluid surrounded by red swollen tissue. Both swellings seemed very painful. The smaller mass looked like a round swelling, with the notable exception that atop the mass I observed a tiny hole. We cleansed both areas, shaving away the matted hair, then looked more closely at the hole. Sure enough, there appeared to be something moving beneath the hole. Whatever it was, it had become quite irritated at our having disturbed it. We then sedated Dee with gas anesthesia and began to explore both masses. The hole in the smaller swelling was widened and the head of a parasite could be seen to dart out of view. Carefully, we grasped the parasite with a thumb forceps and very slowly extracted it, taking great care not to injure or "break" it. A very large and now helpless warble squirmed and grimaced on the surgery tray. It looked like a fattened maggot, about one-inch long, with a hard, caramel-colored head and pincers resting on a thick white body reminiscent of a wadded up marshmallow. It was a fly larva called Cuterebra. The lower swelling on Dee was another warble hole, but the occupant had since fallen out on its own, leaving behind a deep, yawning hole that had become severely infected and was now abscessed and filled to the brim with caseous, white material, a cheese-like pus which we patiently removed and flushed out. After a couple of days of supportive care (fluid supplementation, antibiotics, and nutritional support), Dee was beginning to eat fresh greens and timothy hay, and to drink on her own. She was subsequently sent home on oral antibiotics based on a culture of the abscess. She returned in one month for a spay, and examination of the areas showed no evidence of the infection – not even scar tissue remained. Dee healed completely and went on to be placed in a great home. Unfortunately we later discovered that several bunnies who were pen-mates of Dee's had died from their infections. Furthermore, those who underwent post-mortem examinations showed numerous warble sites as well as secondary infection.

Dee's story is one of classic warble infestation. Adult flies are plentiful in late summer and fall, and the Cuterebra flies will cause disease in rabbits, rodents, cats, and occasionally humans. Rabbits housed outdoors are the most commonly infected. The fly bites its victim and deposits a small egg under the victim's skin. This egg will slowly mature into a larval form and in time will pupate under the skin, usually around the head, groin, or back areas. The swellings which form around the larva will have an air hole, very helpful in
differentiating this from a simple abscess resulting from a traumatic injury. Many times these areas become infected either while the parasite is residing under the skin, or just as the larva breaks out of the swelling to fall to the ground and finish its maturation into an adult fly. Much of the swelling is the result of the body mounting an immune response to the foreigner (think of a splinter under your skin that moves—ouch!) The rabbit will then begin to show signs of disease, i.e., fever, poor appetite, weight loss, or lameness. If the warble dies in the rabbit host, it may even cause a toxic shock reaction in the rabbit as a result of exposure to the enzymes and toxins in the larval body. These acute anaphylactic shock crises usually result in death for the rabbit, which is why it is dangerous for the warble’s body to break during removal. Serious signs can also develop if the larva migrates into vital organs such as nasal passages, the brain, ear, or eye— an unusual occurrence referred to as aberrant parasite migration, or visceral larval migrans.

Prevention is best provided by minimizing the opportunity for your bunny to come in contact with the adult flies. Dense, protective screening for rabbits who are outdoors, or better yet, housing your rabbit indoors is the most practical and easiest solution to the problem of fly infestation. Rabbits are exquisitely sensitive to most pesticides and, therefore, topical administration of repellents is NOT recommended. Ivermectin, an effective oral (or injectable) medication used to treat most parasite infestations, including warbles, is similarly advised against but for a different reason. Although not generally toxic to rabbits, ivermectin will quite effectively kill any migrating or developing larva and the presence of the dead larva can, as previously stated, cause toxic and deadly reactions in the rabbit host.

As with most other rabbit health issues, prevention is the key. Proper diet, indoor housing, reduction of stress, spaying and neutering, and providing an appropriate environment have been and always will be the cornerstones of ensuring good health and longevity for your pet bunny.

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**Wood County Overload**

The Wood County Humane Society has 42 bunnies who need homes ASAP. There are many different breeds but please, no rabbits will be adopted for breeding purposes. They must be adopted as indoor pets.

The Wood County Humane Society is located at 801 Van Camp Road in Bowling Green, OH. Their phone number is 419-352-7339. Ask for Renee.
You Asked Us!

by Kristen Doherty

Q: My wife and I were thinking about getting another rabbit as a friend for Mocha. We think she is lonely when we can't spend time with her. Is this a good idea, and how do we go about it? Can they become unbonded once we bond them?

A: “Bonding” two rabbits so they will not be lonely is an excellent idea. Most rabbits would like a friend. There are many things to learn about bonding two rabbits, however, and it takes on average one to four months to completely bond them (that is, to leave them alone together unsupervised). In the meantime, they must live in separate areas (can be side-by-side) so they are not able to fight with each other. Do you have a separate area and a second pen or large cage to house the other bunny until they are bonded?

If you decide to adopt from the Buckeye HRS, the adoption would be conditional on the two bunnies bonding. If they don’t bond for some reason (rare, but it happens), we give you back your adoption fee and you decide if you want to try another male or not. Each bonding experience is different and depends mainly on the personalities of the bunnies involved, but there are many things you can do to make the bonding process go more smoothly. The best matches are usually male/female. Bunny introductions must be done on neutral territory, and all rabbits must be spayed or neutered for this to be successful. Neither breed nor size matters; it’s more of a personality match you’re after when trying to bond two rabbits. When you’re ready, we schedule a time for you and Mocha to meet our eligible males, one at a time. Whomever she gets along with best in the dating session would be the bunny you’d want to try bonding.

Bonding is also a big time commitment. You must take at least 20-30 minutes each day to get them together in a neutral space, such as a car, a bathroom, etc.

It is rare for a pair to become unbonded. We have seen it happen only when something unusual occurs, for example, one rabbit becomes ill. Once they’re bonded, you cannot separate them (unless an illness requires separation) or they may become depressed. They can also experience physical symptoms of illness when separated.

Since there is much to prepare for before actually doing the bonding, here is a list of helpful articles to read:

- http://www.rabbit.org/faq/sections/introductions.html
- http://www.ohare.org/vol1_2.html#furred
- http://www.rabbit.org/chapters/san-diego/behavior/bonding.html
- http://www.rabbit.org/chapters/san-diego/behavior/bonding-tips.html
- http://www.rabbit.org/chapters/san-diego/behavior/expect.html
A: This is all normal and part of the process! Poop and urine "wars" may be common for the first few weeks. Rodney is marking territory, which usually always happens at first when you have more than one rabbit. When they become more bonded, the wars usually cease and both will resume good litterbox habits. You might try filling their litterboxes with 1/2 litter and 1/2 hay. This way they will sit in the litterbox and eat and go potty at the same time. In my experience, the bigger the litterbox, the better. For giant litterboxes, I use mortar trays from a large do-it-yourself home store, which are less expensive than those sold at pet supply stores.

Car rides and/or neutral territory sessions are typically 20 minutes each day. Try to end on a positive note (eg. petting and stroking both while they're sitting together) after each session. You can eventually increase the length of the sessions, as long as they are getting along well.

You may begin pen-switching when the first week or so of car rides is over. Then swap them every 12-24 hrs. Put Rodney in Muffin's cage and vice versa. Leave food, water, and litterboxes intact so they get used to each other's smells.

Muffin has been the center of attention for many months and now there's another rabbit around. She may act a little differently from what you're used to, but that's normal. She'll be fine as long as she is eating and eliminating normally, so don't worry too much. It's hard to see now, but in time she will come to like her new friend.

Welcome to the world of bonding - STICK WITH IT! The rewards will be great once they are bonded. 

Some Tips:

- Don't let them mount during the first few sessions.
- During a session, when someone is in the litterbox, don't let the other one go in. That may start a fight.
- For later sessions in the house, put some food down, like carrots (not in the car, they probably won't be interested), so they can share a snack together.
- For later sessions in the house, if the bathroom isn't working, try another room or blocked-off area. Sometimes there is just one room where fights occur. Don't use that room!
- At least once during each session, push their bodies together so they are side by side next to each other. Press their faces close together and pet/stroke both heads at the same time for several minutes.
Somebunny Needs YOU!

Little Licorice was rescued from the Wood County Humane Society and now enjoys space to run and hop around in. She is an adorable 4.4 lb jet black lop who is great with her litterbox and begs for more hay. **Please contact Kristen Doherty (kristen@ohare.org) 440-543-4959.**

Dreyfus is an active and healthy 5.2 lb grey lop who likes to eat his hay and run through his cardboard tunnel. He was rescued from the Wood County Humane Society. Did I mention his perfect litterbox habits? **Please contact Kristen Doherty (kristen@ohare.org) 440-543-4959.**

This sweet 5.8 lb all-black lop was also rescued from the Wood County Humane Society. **Venus** loves to be petted, knows how to use her litterbox, and enjoys handfuls of fresh hay. **Please contact Kristen Doherty (kristen@ohare.org) 440-543-4959.**

This friendly and curious 7 lb boy would make a great family pet. **Otis** loves human companionship as well as hay and lots of chew toys. **Please contact Kristen Doherty (kristen@ohare.org) 440-543-4959.**

Jasmine is a black and white beauty who is playful and very mischievous. She likes to explore and loves to climb. She also likes to sit on my lap and get pets for up to a half hour at a time. Jasmine is 1-2 years old and weighs 5 lbs. **Please contact Eileen Matias (eileen@ohare.org) 330-865-9924.**

Juno should be called White Lightning. He is less than a year old and in motion most of the time when he is out of his cage. He has a friendly personality and enjoys ripping up cardboard boxes. His weight is 5 lbs. **Please contact Eileen Matias (eileen@ohare.org) 330-865-9924.**
Adopted!

Babs was adopted by Barbara Armstrong of Pepper Pike, where she’s getting acquainted with her friend, Sparky. 🎉 The dynamic duo Moxie & Winky now enjoy a spacious playroom with Laura Inscoc and family of Alliance. 🎉 Carrie Goglin of Willoughby adopted Bailey, who is now inseparable from Wilbur, another former foster. 🎉 Madison has a new home with the Wright family and friend Munny in Cincinnati. 🎉 Bobo (formerly Boris) is getting to know his new home with Tony and Vicki Ricci of Youngstown. 🎉 Newton is enjoying his new family and spacious custom-made home with Emily Delehanty. 🎉 Smokey Joe went off to a new home in Pittsburgh with another Emily, an art student. 🎉 Seymour has found that Kentucky bluegrass is greener, thanks to Holly Evans. 🎉 Sidney has found a new home with Renee in Chardon. 🎉 Tyler found a great home with Norma and Dennis in Akron. 🎉 His ankle is now fully healed and Noah has bonded with his new pal, Tabby. 🎉 Chloe is now happily living with Pam and Ron and enjoying her deluxe condo. 🎉 Bruno was adopted by Debbie Dieglio and her family in Maple Hts. He and his new girlfriend, Cinder, are living in domestic bliss after a lightning-fast bonding. 🎉 Lucky (now Dexter) was adopted by Sharita and Geoff Jones of Bridgeville, PA. 🎉 Coco was adopted by Peggy and Wes of Xenia. 🎉 Freddy, Mindy, and Pippi were all adopted by Gail Peckham of North Olmsted and live together as a trio. 🎉 Molly was adopted by Maria Barron of Pittsburgh, PA, where she bolts around the house with friend Lightning. 🎉 Hopscotch now lives side-by-side with friend Tucker, at the Raphael home in Pittsburgh, PA. 🎉 Pearl (now Mackie) lives with friends Piglet, Hektor, Travis, and Dante at the home of Heidi Metzger in South Euclid. 🎉 Adopted by Paula Brill and Ken of Gahanna, Violet and Chester have become close pals. 🎉 Omar is the new social director for Pepper, Ginger, and Fluffy at the Pasternack home in Rocky River. 🎉 Truffles now enjoys many hours of free roam at the home of Jean Holt of Parma Heights. 🎉 Lewis & Clark (now Stomper & Chopper) are exploring new territory at Jeanine Huncharek’s of Medina. 🎉 Skittles was adopted to entertain bunny friend Cita at the home of Kai Horsley in Cleveland Heights. 🎉 Spotty has found a home with Karen Harshbarger of Mt. Pleasant, PA. 🎉 Marlee was adopted by Michele Norman. 🎉 Angel is now part of the Vaughn household in Parma. 🎉 Robin is now living happily in Karen’s Warren and has a new pal in Elliott.
What Peter Cottontail Won't Tell You

by Herta Rodina

'Tis the season for baby cottontails! The Buckeye HRS deals with domestic rabbits only, but nevertheless we get many panicked calls and emails when someone (or his dog or cat or lawnmower) accidentally disturbs a wild rabbit nest. If you ever find yourself in this unfortunate position, here are a few tips to keep in mind.

If the baby rabbits are not injured and the nest is intact, do not intervene. Because rabbit milk is so rich, mother cottontails nurse their young for only a few minutes a day, usually at dawn or dusk. It is perfectly normal not to see mom around, since she does not sit on the nest to protect her babies or keep them warm. Even though they look tiny and helpless, letting nature take its course ensures their best chances for survival.

If the nest has been disturbed, replace as much of the original material as possible in a shallow depression in the ground. Add dried grass and leaves to make a soft bed and return uninjured babies to the nest. Keep any domestic animals away from the area until the babies have left.

If the babies have been injured, contact a wildlife rehabilitator immediately. For a list of local rehabbers, visit the Wildlife Rehabilitation Information Directory – www.tc.umn.edu/~devo0028/ – or call your local Ohio Department of Natural Resources office. After hours, contact your local emergency vet clinic; they may be able to help until you can contact an experienced rehabber.

As with most aspects of life, an ounce of prevention is worth a pound of cure. Take a walk through your lawn before you mow, so that you can cut around a rabbit nest. Keep domestic cats indoors, where they can't pose a threat to outdoor wildlife. Refrain from using chemicals and pesticides on your yard, for these can be fatal to baby rabbits. Finally, provide protective cover for growing babies by building a brush pile in a corner of your property and by planting low-lying bushes and shrubs. These natural shelters may mean the difference between life and death when a baby rabbit is trying to escape from the talons of a hawk or the jaws of a fox or raccoon.

It's a sad fact of nature that most baby cottontails will not see a second spring, but by knowing when and where to get assistance and how to prevent accidents, you can help stack the odds in their favor.

For more information about wild baby rabbits, visit the following websites:

www.rabbit.org/faq/sections/orphan.html
www.vin.com/Petcare/Articles/VetHospital/M01083.htm
The Easter Bunny
by Tonya J. Mitchell

BUNNIES “Just in time for Easter” read the words on the display.
“I want this one!” “No, I want that one,”
I heard a small child say,
To his exasperated father who said,
“OK but only one.”
A small fortune he charged on his account,
Before the salesman was done.
They headed home and for a while his son had laughed and played.
For his son’s happiness, this father felt,
It was a small price to pay.
This adorable bunny so very small,
Grew bigger every day,
And soon a full-grown rabbit had filled his tiny cage.
His son soon lost interest and no longer did he play with this bunny, once so loved
Who now sits alone, day after day.
So they take him to the shelter, another rabbit on death row.
“He’ll be fine”, his father chimed, “c’mon, it’s time to go.”
Another life abandoned,
Tears fall from my eyes,
With every passing Easter,
The sign reads, BUNNIES, “Just in time…”

Buckeye HRS Bulletin Board

updates@ohare.org
Would you like to be kept informed about Buckeye HRS events and activities between issues of Harelines? We always post these on our website- www.ohare.org- but now you can receive notification of what’s new via email. Just send your email address to updates@ohare.org and periodically we’ll send you a short summary of the latest Buckeye HRS news.

More Bang for your Buck
Make your tax-deductible donation to the Buckeye HRS go even further by taking advantage of your employer’s matching charitable gift program. Thanks to members who have used these programs, we’ve received 1-for-1, 2-for-1, and even 3-for-1 donations. There’s no extra cost to you, it’s good for your company, and above all, it’s good for rabbits.

Donations Needed!
The Buckeye HRS has been helping the Wood Country Humane Society deal with a recent influx of 42 neglected rabbits. We’re fostering as many of these bunnies as we can, but we really need your help to cover the costs of spay/neuter and other medical procedures for these bunnies. Any amount you can spare will be greatly appreciated!