Clark County Government Center
Tortoise Habitat Opens
The newly developed desert tortoise habitat next to the pyramid at the Clark County Government Center will soon be occupied by a large female whose name will soon be chosen. Camera images and temperature from inside the burrow will be displayed on a monitor located inside the building where the glass walls provide an option for viewing the habitat as you approach the cafeteria. Tortoise Group chairman, Betty Burge, worked closely as a consultant with county staff and contractors to develop the project. The County has contracted with two Tortoise Group members as caretakers to apply their expertise and keep the tortoise healthy.

The Horror File
Every day we receive calls from frantic owners who have lost their tortoises. Please don’t let one of the following stories be yours.

File #1. “The tortoise is gone. One of the kids left the gate unlatched and the barrier off the gate opening.” If a bicycle must go out that particular gate and your child is too young to handle the gate barrier or just forgetful, talk to your child. You may peak your child’s concern with a reminder about losing the tortoise and possibly having it hit by a car. Remind your child to close the gate or ask for help when taking out the bike. Sometimes a barrier is merely a piece of plywood pressed against the gate opening with two rocks or cinder blocks. This arrangement is not very stable, and a young child might not take care or be able to push it tightly against the opening.

The Answer: See our recommended design for a gate barrier, Information Sheet #22. It is almost foolproof if the child can lift the plywood. If the child still needs your help, take few minutes and work out your team plan. The gate continues to be the weak link in security.

File #2. “I left the tortoise in the front yard for just a minute!” You are thinking about moving your tortoise from where it lives in the back yard to graze for a while in the front yard. Unlike you, it appears that change is not a refreshing experience for a tortoise. Quite a few tortoises have been lost that way when the indoor phone rings, the gate is open, or you are doing yard work in the front yard. Sometimes it’s a dog attack; sometimes the tortoise just wanders off or is stolen. Such tortoises have been recovered from the mouth of a dog or from the freeway.

The Answer: Keep your tortoise where it is secure and familiar with the surroundings. Transplant those yummy front-yard plants to the back yard. Tortoises are very sensitive to their surroundings. When in a new place, they tend to explore widely. Part of their programming for survival is to know where food, water, and shelter are in a new area. A tortoise in a new place may be more interested in exploring than in eating.

Photo Contest This September
Are you snapping those darling, comical, colorful, unusual pictures of your tortoises? If not, start now to literally cash in on the 3rd Annual Photo Contest to be held at the September meeting. Categories are Tortoises Alone, Tortoises with Other Animals, Tortoises with People, Tortoises Gone Crazy (embellished photos) and a new category for Non-Native Tortoises. Captions are encouraged. Collect your best entry for each category and have them ready to submit after September 1 or at the meeting. Complete rules are posted on the website in the August 2005 issue, page 5 at www.tortoisegroup.org. Look for the rules again in the September newsletter.
Marvelous MegaDiet

Imagine My Surprise
Sarah and Emilio had been eating my vegetable mixture happily for years. I had heard about MegaDiet but thought they would never accept anything but my special salad. However, wanting to be the best mom possible, I broke down and got some MegaDiet. I decided to soften it with two tablespoons of organic baby fruit juice to make it a little more attractive. Imagine my surprise when they loved it right away! These days they eat up all the plain MegaDiet I offer them and happily browse on flowers and plants around the yard.

By Joyce Nolasco

Creative Tips on Introducing MegaDiet
- Soften with unsweetened apple sauce or liquefied lettuce
- Soften and roll up in a grape leaf, rose petal or other favorite leaf (not lettuce)
- Hollow out half a cherry tomato and fill with softened MegaDiet
- Soften to cookie dough consistency. Stud the surface thickly with rose petals or desert willow flowers.
- Go cold turkey. No muss, no fuss.
- Have tips to share? Email them to Kathy at kutiger@earthlink.net

MegaDiet Satellite Sellers
Please call sellers for appointment

Nellis & Owens  Georgi – 459-1274
I-215 & Lone Mtn  Lynn – 655-5698
Summerlin, I-215 & Far Hills  Kathy – 804-0472, 9am – 7pm
Rainbow & Alta  Sherri – 255-1357
Charleston & Rancho  Seeking volunteer
Tropicana & Maryland  Betty – 739-8043
Industrial & Blue Diamond  Carolyn – 876-0668, ext. 874
Green Valley, Eastern & Windmill  Ed & Pat – 269-7108
Henderson, Lake Mead & Warm Springs  Laurie – 558-6985 (after 11:00 am)
Henderson, Boulder Hwy & Equestrian  Gail – 564-0031
Boulder City, NV Hwy & Adams  Patty – 293–7263
Pahrump  Sheri –775-727-5557
Kingman, AZ  Toni – 928-757-8317
Out-of-town orders  Betty – 702-739-8043

A 1½ lb bag costing $8.00 lasts a large desert tortoise about one month. MegaDiet is also sold at Tortoise Group meetings.

10% discount to TG members who show their cards

New satellite seller in Kingman!
Seasonal Backyard Happenings

**Staying in burrow.** Expect a seasonal change in behavior. If your tortoises have eaten well so far this season, you may not see your tortoise as often unless we have rain. Then, expect a keen interest in puddles and the water dish. Some tortoises will stay in their burrows for up to a week at a time.

**Sleeping outside.** Soon you might find your tortoise sleeping out of its burrow at night. Burrows have gradually been heating up and sleeping on the “porch” gives an advantage in the morning. The tortoise’s temperature is cooler than the interior of the burrow, and the tortoise will have more time to be active above ground before its body temperature stimulates the urge to seek underground shelter for the hot part of the day. Tortoises are masters of moving to the temperature situation they need. Provide the options and let them “do their thing.”

**Egg laying.** Some time in July, the laying season ends for Desert Tortoises. Behavior associated with imminent egg laying and nesting includes loss of appetite, digging with her hind legs, your finding several “practice holes” in the yard that are hardly more than depressions, and restlessness. Actual egg laying is often at the burrow opening. If you are lucky enough to actually witness the laying, you might see her facing out of the opening with her rear end low and periodically pulling her head far under her shell as she expels each egg. All this may happen without the presence of a male and the tortoise may lay infertile eggs. If the loss of appetite and restlessness continue for several weeks, you might take her to a vet. She may be unable to lay the eggs and will need help. An x-ray will disclose if eggs are still present. We have the names of 14 vets in the area who we know take care of tortoises. Look for Information Sheet #24 on our website www.tortoisegroup.org.

**Male restlessness.** In late summer and early fall, the male’s testosterone level is at its peak. Searching for females will definitely be on his agenda. A single male may become restless during this time. He may spend much of his time pacing along a wall or another chosen area. Don’t be alarmed. This is normal behavior.

**Sexual harassment.** Keep in mind that tortoises are loners for the most part and females will do much better not being continually harassed by sexually aggressive males. We hear about this harassment repeatedly. Please think about giving up one tortoise, or more if you have several, if you cannot separate them permanently. If you cannot find a good home for your adult tortoise, call the Desert Tortoise Conservation Center pick-up service 593-9027. They will **not** take your excess babies if you still have a mating pair.

**Tortoise Moves to Local Resort**

Tortoise Group members Marcia and Richard Knapp have donated their large male to the Hyatt Regency Lake Las Vegas Resort. Tortoise Group Adoption Committee member, Jerry Shupe, supervised the development of the beautiful tortoise habitat and introduced the tortoise to his new home amid considerable media coverage.

**A Fourth Newsletter This Year**

Were you surprised to receive a newsletter in July? Tortoise Group has decided to expand the number of newsletters so that timely information can reach tortoise owners at the peak of tortoise season. Watch for another newsletter in September.

**Annual Meeting and Election of Officers**

At the Annual Meeting in September, members will have an opportunity to bring forth ideas and issues. A proposed addition to the bylaws concerns the new Honorary Advisory Board. The Nomination Committee selected the present officers to run again in the bi-annual election. Check Page 8 for the names. Further nominations will be accepted from the floor. The Photo Contest and Ice Cream Social will follow the brief meeting. Betty has copies of the proposed amendment, 739-8043.

**Urgent Plea**

Send us your new email address
July – September Meeting Schedule
1:00 – 3:00 pm
Nevada State Museum and Historical Society
(in Lorenzi Park – see map below)

July 15, Saturday
Tortoise Workshop for Kids – Creatures and Crafts
By Jerry Shupe
Break the summer doldrums with Jerry’s highly entertaining and informative interactive workshop. Parents and kids of all ages will learn about tortoises as Jerry delights and informs us with her tortoise antics. Tortoise craft projects will give each child a lasting memory of this special occasion. Come early to get a seat for you and your children!

August 19, Saturday
How a Tortoise Works – Hatchlings to Hibernation
By Betty Burge, M.S.
Part II of Betty’s “can’t miss” two-part series on tortoise care describes preparation for hatchlings and their care. Mid-summer tortoise behavior and preparations for hibernation will round out the talk. Expect to learn a lot.

September 16, Saturday
Photo Contest, Ice Cream Social, and Annual Meeting
Bring those terrific tortoise pictures by 1:15, because right after the annual meeting we’ll have fun as the judges announce the winners. All this will be accompanied by ice cream sundaes!

Chin Glands by Mark Massar
Both male and female tortoises have subdentary glands, more commonly known as chin glands, which are paired glands located below the mandibles. Several factors indicate that these glands play important roles in courtship and social status. They are inactive until sexual maturity is reached, and they become especially enlarged in males during the breeding season in late summer and early fall. Because of larger chin glands, dominant males may produce chemical signals that last longer and transmit further than subdominant males.

It has been suggested that one function of the frequent head bobbing male tortoises do when they encounter each other is to aid in the dispersion of chemical signals from their chin glands. During courtship, males will sometimes wipe the chin gland over an enlarged scale on the forelimb and present this to the female. Chin gland secretions may be used by tortoises to identify the sex and individual identity of other tortoises in their social group. For example, females can remain inside their burrows until they have determined the identity of visiting suitors. Enlarged chin glands may also function as a visual signal. Interacting male tortoises characteristically hold their heads upward, making the glands more prominently exposed.

Excerpted from Tortoise Tracks
Dr. K’s Kolumn
By Christine Kolmstetter, DVM
Cheyenne West Animal Hospital

Hello again! Since LuLu the desert tortoise was not feeling well and since her physical examination indicated multiple problems, she was hospitalized for supportive care and diagnostic testing. In a healthy adult desert tortoise, obtaining a blood sample can sometimes be a challenge due to their strength and ability to retract their head and all four limbs as well as their tails into their shells. LuLu, however, because of her weakened condition, allowed us to gently restrain her head in order to obtain a blood sample from the jugular vein in her neck. We can also obtain blood samples from other locations on a tortoise: the tail vein, certain leg veins, or from a vein directly on the underside of the carapace (upper shell) where the skin of the upper neck is attached to the shell.

We also took an x-ray of LuLu that shows significant problems. She has nine large eggs and one very abnormally tiny egg. In the center of the x-ray is a very large, dense structure. This unfortunately is a very large bladder stone. The results of LuLu’s blood work reveal significant abnormalities; her kidney values are elevated. In her case, this could indicate kidney disease; however, we suspect that these values are probably due to her dehydrated condition. Several other values are also abnormal, all of which we attribute to the presence of eggs and the bladder stone.

LuLu’s history, her debilitated condition, and her diagnostic tests suggest that she is eggbound. LuLu’s large bladder stone has probably been forming over several months or longer. Its size is likely causing significant irritation to her bladder and is also obstructing the passage of eggs, thus causing her egg-binding. The exact cause of bladder stone formation in tortoises is uncertain; however, it is suspected that lack of access to water and subsequent dehydration and/or improper diet can be significant contributing factors. The presence of other health problems can also result in dehydration and stone formation. In LuLu's case, it is possible that she has had retained eggs for a long period of time and therefore became dehydrated, which then led to the formation of the bladder stone. Regardless of which incident occurred first, she is now in very critical condition.

Because of LuLu’s retained eggs and bladder stone, she will require surgery. Unfortunately, due to her weakened and dehydrated condition, LuLu is currently not a very good candidate for anesthesia and surgery. She is being hospitalized for several days in an effort to re-hydrate her and improve her overall health status before surgery. We have placed an intravenous catheter into her jugular vein in order to provide intravenous fluids. Since LuLu most likely has an infection due to the irritation of the large stone to her bladder as well as possibly from the retained eggs in her uterus, she is also receiving antibiotics. If she appears uncomfortable or in pain, she will receive medication for pain management. Additional medications as well as support feeding will also be performed as needed.

LuLu’s hospital cage contains a large dish of water for drinking or self-soaking. MegaDiet and greens are offered daily although it is unlikely that she will eat on her own at this point. Each day she will be placed her in a tub with a few inches of warm water to encourage drinking. A UVB light with a 12-hour day/night cycle is attached to her cage and her cage temperature is regulated. She is taken outdoors during the early morning hours to encourage activity and grazing.

We’ll re-evaluate LuLu daily to assess her progress, and hopefully we can improve her overall status. We’ll see you next time as we prepare for surgery!
Caring for Russian Tortoises
By Laurey Rey

Many of us who share our hearts and homes with desert tortoises also have enough space left over for a Russian tortoise or two. These reclusive, small tortoises are endearing and maddening, and their escape capabilities often rival those of Houdini’s. However, they burrow their way into our lives nonetheless, and as conscientious owners we need to know how best to care for them.

It goes without saying that any new arrivals should be vet checked and quarantined. It's really not as bad as it sounds. While you're waiting for the quarantine period to expire, you can be developing the best living quarters for your new little Russian.

The native habitat of a Russian tortoise includes southeastern Russia, Iran, Pakistan and Afghanistan. They are most often found in dry, rocky areas but will actively seek out streams, water sources, and vegetation. Here in Southern Nevada, these small tortoises are best kept outside year round in a dry area with access to a burrow. They will aestivate in the summer during the hottest months and hibernate in the winter. For this reason, it's not at all uncommon for a Russian tortoise owner to call a close friend and excitedly exclaim, "I saw my Russian tortoise today!"

Providing hills and a varied landscape in your tortoise enclosure will be most appreciated by your Russian. It will take advantage of any escape routes, so plan to "tunnel-proof" the walls of their enclosures. Planting shrubs and ground cover is also advisable as long as their burrow doesn't become damp from watering. Russian tortoises need dry homes.

In captivity, Russian tortoises need a high fiber, low protein diet. The MegaDiet sold by Tortoise Group is excellent and can be mixed with greens while the tortoise is becoming accustomed to it. Russian tortoises also enjoy flowers, fleshy leaves, dandelions, fruit (offered sparingly), and grasses. Be sure all plants offered are pesticide free. Also, make sure shaded water is available at all times.

Housing Russian tortoises with differing species is not advisable. It is best to maintain animals of differing continents separately, and even though the habitat requirements of the Russian tortoise are similar to those of our native desert tortoise, it would be best for the animals and their good health if they were maintained separately. Additionally male Russians may become extremely aggressive to the females Russians in their habitat. Be sure to give ample space to pairs of animals. If they are confined too closely, you may find your female suffering from nips to her limbs which can lead to infections. All in all, these pleasant little tortoises do very well in southern Nevada and, if cared for in the right way, can live very long lives.

For more information on Russians and other non-native tortoises (exotics), call Laurey at 566-0082.
Yard Renovation Hazards
When construction or landscaping is taking place or irrigation lines are being installed where your tortoise normally has access, you need to think of how to prevent escape through the gate. Talk very seriously to the lead contractor and those who speak English and see that the information is relayed to others who do not speak English. Tell them that keeping the gate closed or barrier in place is vital. This may be totally impractical and it is not practical for you to be at home at all times when work is being done. It takes only a very few minutes for a tortoise to escape. Therefore, in the long run the following arrangement will be worth the effort.

Set aside an area with adequate moving-around room that includes the tortoise’s burrow and a place for the water dish as far as possible from the burrow. The barrier must be at least 18 inches high of material the tortoise cannot climb or see through. Remember, a tortoise can climb Windsor blocks.

Use concrete blocks stacked in two or three horizontal rows. Mortar should not be needed if blocks are set tightly and stable. In this way, the tortoise does not have access to piles of construction items, ditches, holes, or the gate that will undoubtedly be left open while the workers are present. Please don’t let your wonderful renovation project become a letter in our horror file.

Hot Off the Press
Tortoise Group volunteers are busy distributing the newly revised edition of the pamphlet Desert Tortoises: Adoption and Care to all your favorite locations throughout the Las Vegas valley and beyond. While my handsome tortoise Tad still dominates the cover, the desert green surrounding the picture easily identifies this new edition. Pick up a copy for current information on the laws regarding tortoises and for updated feeding guidelines.

Tortoise Group Membership Form
All or part of memberships and contributions should be tax deductible

Name ___________________________ Phone ___________________________

Address ___________________________________________________________

City ___________________________ State ___________ Zip Code ___________

Check one newsletter option
☐ Send my newsletter by email
☐ Send my newsletter in hard copy,
  and send meeting notices and other news by e-mail
☐ Send my newsletter in hard copy

☐ Renewing member ☐ New member

Total Amount Enclosed __________________________

Make check payable to Tortoise Group. Mail with form to:
Tortoise Group 1201 S. Casino Center Las Vegas, NV 89104

Life Membership increases to $500 in 2007
Calendar for 2006

July 15  
*Tortoise Workshop for Kids – Creatures & Crafts*

July 27  
**Last time to be offered**
*Environmentally Friendly Pest Control* by Robert Stauffer
7-9 pm, Desert Demonstration Gardens, 3701 W. Alta

August 19  
*How a Tortoise Works – Hatchlings to Hibernation*

September 16  
Photo Contest, Annual Meeting, and Ice Cream Social

Please refer to page 4 for program details

Material submitted to the Tortoise Group
Newsletter becomes the property of Tortoise Group and may be edited before printing.