If you call your vet and they say they can't see you for several days, take your hedgehog to the office. Explain that it's an emergency and that you have to see the vet that day. A good vet will make the time for all emergencies. Be sure to keep your hedge warm and comfortable on the way to the vet's office.

Be sure your vet knows everything that you give your hedge, especially if you are giving any herbs or holistic type of supplements. Some of these can be as lethal as medications when used in the wrong way or in conjunction with other things.

Most vet visits with a sick hedgehog will require a thorough examination. Unless your hedge is extremely laid back or very sick, he or she will probably need a little gas to relax. Gas can be a scary thing but if it's needed, you have to use it. The most likely thing that will be done is blood work. Depending on what's wrong with your little one, the vet may want to do x-rays. If you can, it's always a good idea to bring a fresh fecal sample in with you.

Once the vet has made a diagnosis, it's very important to follow the instructions **exactly**. Don't ever stop giving a medication or change the dosage without checking with your vet first. Don't add anything that the vet doesn't know about because it could have an adverse reaction with the medication being given.

If you don't have a good exotics vet available or have to go to an emergency vet who may or may not be familiar with hedgehogs, be prepared to take the list of the normal lab values for hedgehogs provided at the end of this article. It would not be a bad idea to have this available in case they need it.

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**Hedgehog Lab Values**

From the *Merck Vet Manual*.

http://www.merckvetmanual.com/mvm/index.jsp

**MEASUREMENT... REFERENCE RANGE**

**HEMATOLOGY**

- PCV (%) ... 36 ±7 (22-64)
- RBC (10^6/microliter) ... 6 ±2 (3-16)
- Hb (g/dl) ... 12.0 ±2.8 (7.0-21.1)
- MCV (fl) ... 67 ±9 (41-94)
- MCH (pg) ... 22 ±4 (11-31)
- MCHC (g/dl) ... 34 ±5 (17-48)
- Platelets (10^3/microliter) ... 226 ±108 (60-347)
- WBC (10^3/microliter) ... 11 ±6 (3-43)
- Neutrophils (10^3/microliter) ... 5.1 ±5.2 (0.6-37.4)
- Lymphocytes (10^3/microliter) ... 4.0 ±2.2 (0.9-13.1)
- Monocytes (10^3/microliter) ... 0.3 ±0.3 (0.0-1.6)
- Eosinophils (10^3/microliter) ... 1.2 ±0.9 (0.0-5.1)
- Basophils (10^3/microliter) ... 0.4 ±0.3 (0.0-1.5)

**CHEMISTRIES**

- Alkaline phosphatase (IU/L) ... 51 ±21 (8-92)
- ALT (IU/L) ... 53 ±24 (16-134)
- Amylase (IU/L) ... 510 ±170 (244-858)
- AST (IU/L) ... 34 ±22 (8-137)
- Bilirubin, total (mg/dl) ... 0.3 ±0.3 (0.0-1.3)
- BUN (mg/dl) ... 27 ±9 (13-54)
- Calcium (mg/dl) ... 8.8 ±1.4 (5.2-11.3)
- Chloride (mEq/L) ... 109 ±10 (92-128)
- Cholesterol (mg/dl) ... 131 ±25 (86-189)
- Creatinine kinase (IU/L) ... 863 ±413 (333-1964)
- Creatinine (mg/dl) ... 0.4 ±0.2 (0.0-0.8)
- GGT (IU/L) ... 4 ±1 (0-12)
- Glucose (mg/dl) ... 89 ±30
- LDH (IU/L) ... 441 ±258 (57-820)
- Phosphorous (mg/dl) ... 5.3 ±1.9 (2.4-12.0)
- Potassium (mEq/L) ... 4.9 ±1.0 (3.2-7.2)
- Protein, total (g/dl) ... 5.8 ±0.7 (4.0-7.7)
- Albumin (part of Protein, above, g/dl) ... 2.9 ±0.4 (1.8-4.2)
- Globulin (part of Protein, above, g/dl) ... 2.7 ±0.5 (1.6-3.9)
- Sodium (mEq/L) ... 141 ±9 (120-165)
- Triglycerides (mg/dl) ... 38 ±22 (10-96)

Just remember that it's always better to err on the side of caution.

*(Special thanks to Nancy Denny for supplying some of the information for this article)*
Albert Schweitzer (1875-1965), was trained as a theologian and minister, a musician, and a medical doctor. He was awarded the 1952 Nobel Peace Prize for his philosophy of “Reverence of Life” which states that a “will to live” is inherent in every living thing. This belief led Schweitzer to advocate for the welfare of animals as well as people. One of his most well-known statements is: “We need a boundless ethics which will include the animals also.”

The Man Who Loved All Living Things is a beautiful little book published by the Animal Welfare Institute (http://www.awionline.org/) from whom copies may be purchased. Part of its beauty, aside from the lovely story, lies in the heavy, cream-colored paper, charming illustrations, and tapestry-printed end papers.

The book presents an imaginary journal of Schweitzer’s childhood and the development of his love and respect for animals. Most realistically, while complaining of incidents of animal cruelty he witnessed, he mentions that he himself had done similar things to animals out of ignorance, pride, an attempt to feel big or powerful, or to fit in with his friends. It is in recognizing these reasons for the poor reasons that they are, that he develops an ethical system that rejects harm to animals. As he says, in a joyful illustration of a boy hugging farm animals, “I know deep inside who I am. I am a boy who loves all living things. And I have many friends!”

The final page of the story presents a brief history of Dr. Schweitzer’s humanitarian works and his conversion to vegetarianism. This is a perfect book for children puzzling over “how to be” and how to incorporate a love for animals into their lives. It describes how a child might come to an ethical life by simply living and observing all life. It doesn’t look “weird” to love and want to help animals and it doesn’t seem “weird” to become a vegetarian since Dr. Schweitzer was clearly a normal, well-adjusted, and deeply respected human being. There are no hedgehogs in the illustrations, but I don’t doubt that he met a few; either in Alsace where he grew up, or in Gabon, Africa where he founded a clinic to help Africans who had no access to medical care. And I don’t doubt that he was as charmed by the hedgehogs he met as we are by those we meet.

I would recommend this book as a gift to any child, or for any adult for that matter, because of its story and beauty.
Milwaukee Rendezvous Hedgehog Show

Milwaukee, Wisconsin will be the place to be this coming October 10th, 11th, and 12th.

Have you sent in your registration for the 2nd Milwaukee Rendezvous Hedgehog Show yet?

If not, why not?

Here’s a quick peak at what will take place over the weekend:

Friday night: we will have a casual dinner at 6:00 PM followed by a speaker. The Pog Chit Chat Band will then have a party to kick off their first CD release. As part of this party, we have planned a costume competition. The vendor and silent auction tables will also be open.

Saturday is a full day. Bryan Smith will give a color seminar at 8:30 AM for everyone. The vendor and silent auction tables will be open all day. The conformation show kicks off at 10:00 AM sharp. There will be a catered box lunch at 1:00 PM followed by a full afternoon of sporting events and three speakers. We will give everyone a short break to change out of peed upon shirts and such, then gather for a Saturday evening banquet, rainbow bridge ceremony, live auction for hedgehog charities, and a talk by Z.G. Standing Bear.

On Sunday morning another conformation show is scheduled from 9:00 AM until noon. We will try to gather everyone who is staying over until Monday together for dinner at a casual restaurant on Sunday evening.

There is never a shortage of things to do in Milwaukee. Four activities that might be most interesting to everyone are: The newly opened Harley Davidson Motorcycle Museum, the newly renovated horticultural gardens (i.e, The Domes), the Milwaukee Public Museum’s visiting exhibit of items from the Titanic, and our award winning Milwaukee County Zoo.

Registration forms, a detailed show schedule, and hotel information are available for download at www.hedgehogwelfare.org

We look forward to seeing everyone here in Milwaukee!!

Deb Weaver
Show Secretary
Skin Issues in Hedgehogs
Cyndy Bennett

Skin issues can develop in hedgehogs due to a wide variety of reasons. Some of the causes might be mites, allergies to food or something in the hedgehog's environment, cancerous lesions, or urine burns. This article does not contain all the answers for every skin issue and is not a replacement for good veterinary care. This information is based on our experience with our hedgehogs and the suggestions made by our veterinarian.

Mites can cause dry flakey skin, quill and hair loss and lesions on the skin if the case is severe enough. The first step is to take the hedgehog to a vet who specializes in exotics especially hedgehogs. A simple skin scraping can be done to reveal what type of mite is involved and what type of treatment is best.

Pfizer's *Revolution* (selamectin) applied topically is a very commonly used medication and works well. You may have to repeat the treatment. Your vet will give you the details of the treatment plan. A follow-up skin scraping is a good idea to make sure the treatment was successful. Ivermectin (brand names *Ivomec, Heartgard, Iverhard Plus, Tri-Heart Plus* and *Acarexx*) is an injectable treatment for mites and may be what your vet recommends. One of our hedgehogs had to have these injections and did just fine.

It is important to disinfect the living and play areas your hedgehog uses. Wash all toys, blankets, sacks, wheels and everything that your hedgehog comes in contact with. Repeat the disinfecting weekly to insure the removal of all mites. I bathe the hedgehog about 3 to 4 days after each treatment to wash off any dead mites and to relieve itching.

Food and environmental allergies can also cause skin issues in hedgehogs. Once you and your vet rule out mites as the possible cause for the skin issue, you may look into allergies. This process of ruling out what your hedgehog is reacting to will take time and a lot of patience. The best way to figure out the possible source is to slowly change the food and/or things in the hedgehog's environment and watch for improvement. I will cover the different topical ointments we used at the end of this topic.

If your vet recommends a low allergen food, it needs to be mixed into the present food at first. Slowly decrease the regular food and increase the low allergen food until just the low allergen food is available to the hedgehog. Wait about two weeks after the hedgehog begins eating the new food and check the skin to see if there is improvement. You may have to try a few different brands or flavors to see what your hedgehog will eat. If the skin is clearing up you may not have to rule out something in the environment.

Environmental allergies can be caused by a wide variety of sources.

The first thing we changed was the brand of laundry detergent we used. We also added an extra rinse cycle. We use the same laundry detergent and extra rinse cycle on our laundry as well. After two weeks we saw some improvement in our hedgehog's skin but she still had lesions and dry flakey skin. We began changing her blankets, hedgie hat and sleep mat daily.

She was started on *Hill's ZD* which is for food allergies. She did fine on the old formula but once *Hill's* changed the formula she did not tolerate the food. Cuddles, who has irritable bowel disease, was also on *Hill's ZD* and did fine until the formula was changed. They both tolerate *Hill's DD* Duck and Green Pea kibble and canned food. Princess did not develop more lesions but her existing lesions were not clearing up.

We also changed her bath shampoo. We used *Aveeno Oatmeal Bath* and changed to a prescription shampoo to rule out a fungal skin infection. Princess had a severe reaction to the shampoo. The treatment was stopped and we changed to *Allergroom* shampoo (available through your vet). The *Allergroom* relieved her itching and there was a little more improvement in her skin.

We tried applying vitamin E oil to her skin to help clear up the dry flakey areas. We had to be very careful not to get the oil on the lesions because this could seal in bacteria and cause infections. Again there was improvement in her skin but we noticed a yellowish build up around the base of her quills.

*Humilac Spray* for dry skin (available through your vet) is helping and at this time we do not notice the build up around the base of the quills. We used the spray daily for 14 days and then as needed. *Humilac* can also be added to the bath water. It is very important to avoid the face, especially the eyes, when spraying *Humilac*.

*Nolvasan Dilute* is used to clean any lesions that appear on her skin. Our vets prefer using *Nolvasan Dilute* for cleansing minor scraps, scratches or lesions on animal

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Continues on page 15...
skin because it dries quickly and cleans better than just water.

*Tritop* ointment was also used to prevent infections on the open lesions. Our vets said it was safe for animals and if she licked the ointment it should not cause any problems. She never did lick the ointment that we know.

At one point during her many treatments *Tresaderm* solution was applied on the lesions every 12 hours. The solution had to be massaged into the lesions and we had to make sure it was absorbed without being licked off.

After all the above treatments were tried over several months, we decided to do a skin biopsy. This decision came after Princess ripped out a piece of her skin with fur attached, leaving about a 1 cm open area. The vet who did the biopsy decided her rear end would be the best site. Her quills and fur line were missing from this area (and still are). The biopsy ruled out skin cancer and pointed towards an allergic reaction to something. Princess was started on *Prednisolone* twice a day for seven days. Her taper plan for the *Prednisolone* after the first seven days was once a day for seven days than once every other day for seven days. After the initial treatment there was a huge difference in her skin, she was like a totally different hedgehog. She does have an “as needed” order for the *Prednisolone*. The biopsy site took months to heal and was very tender if touched even slightly.

Even though I have not covered all skin issues or treatments, I can not stress enough the importance of good veterinary care and home care for your pets. By sharing this kind of information we can all learn for each other

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*Every month, Maisey travels the world to find the latest and greatest in fashions for hedgies and is showcasing her finds here in Maisey's Costume Corner.*

Send your pictures to hedgiemom@comcast.net

Want to see your Hedgie in the newsletter?

Send your photos in now so that they can be used in future issues.
The North American Hedgehog Military - A History

Fighting Animal Abuse Since 1998

By ZUG G. Standing Bear

In August of 1998, when a new rescue hedgehog took off after another in a full fledged attack, an observer noted, "Why, he's just like a grumpy little old Marine general!" The words were not lost on author Z. G. Standing Bear, a retired Army officer who began the fledgling Flash and Thelma Memorial Hedgehog Rescue earlier that year. The hedgehog on the attack, only the second male hedgehog to join the Rescue, had recently arrived from Dallas, Texas, and was named Spikers. He quickly had his name adjusted to Major General Spikers, United Hedgehog Marine Corps. And so began the saga of the hedgehog military in North America.

One cannot have a Marine general hanging around with nothing to do. In Standing Bear's mind, the General had to have (1) an outfit, and (2) a legitimate mission. So was born the Second Hedgehog Marine Division (Mechanized). The "Mechanized" part started out as a joke until the "details" became known some years later, with the employment of hand-made biodegradable "weapons." The Second Hedgehog Marine Division was modeled after the current human Second Marine Division, with three Infantry Regiments, one Artillery Regiment, and numerous smaller units, including an Engineer Battalion. Now a combat division consists of between 10,000 and over 20,000 troops, and there are not that many identifiable hedgehogs around North America to recruit. So, it was rationalized that since hedgehogs are the oldest live-bearing mammals on Earth, that given that great amount of accumulated wisdom, it was only fitting that they should occupy the senior leadership (officer) positions and other recruited mammals would serve as the troops and the noncommissioned officers (junior leadership positions). As it finally worked out, each subordinate unit of the Division would have a different sort of mammal serving under the hedgehog leaders. When the dust settled, the Division consisted primarily of the 2d Hedgehog Marine Regiment (INFANTRY)(PRAIRIE DOG), the 6th Hedgehog Marine regiment (INFANTRY)(MUSKRAT), the 8th Hedgehog Marine Regiment (INFANTRY)(FIELD MOUSE), the 10th Hedgehog Marine Regiment (ARTILLERY)(MARMOT), and the 2d Hedgehog Marine Combat Engineer Battalion, which consisted of (what else other than...) beavers, among other units.

The mission was not hard to come up with: "Combat animal abuse." Operations were not hard to envision, such as calling in artillery strikes consisting upon unannounced USDA inspections on suspected abusive and neglectful pet stores.

When the above notions of a hedgehog military was announced to the hedgehog email list-servers, it was surprising to note that folks all over Canada and the USA wanted to sign up their hedgehogs to do their patriotic duty. Since most of the senior leadership positions had been filled at the 2d Marines at hedgehogs at our facility, The Flash and Thelma Memorial Hedgehog Rescue, we had to come up with a decentralized organization to accommodate hedgehogs around the continent who wanted to join up. The second large hedgehog military organization to be born was the Fourth Hedgehog Armored Division, which made sense as hedge-
hogs sort of look like little tanks, anyway. The Fourth Armored was organized along the lines of the famous U.S. Fourth Armored of World War II days, with three Combat Commands. Combat commands were located in the south (Combat Command A (SOUTH) - in Florida), north (Combat Command B (NORTH) - in New York) and west (Combat Command C (WEST) - in Washington state), with the "Hedgequarters" back here in Colorado. The first commander of the Fourth Hedgehog Armored Division was Major General Grouchy, United Hedgehog Army (UHA), a woman not to be reckoned with.

Now that there were two combat hedgehog divisions in service, it only followed that what was needed was a Corps Commander to manage the whole array. That came in the form of a very feisty old fellow by the name of Lieutenant General Cactus Jack, UHA, personally transported to the Colorado Hedgequarters by Donnasue Graesser, who was on her way to California from Connecticut in September of 2000. Cactus Jack was a piece of work, but he had a levelheadedness about him that provided good leadership to the two divisions.

It finally dawned on folks that this expansion of the hedgehog military needed some civilian leadership. After all, a military dictatorship was not wanted by anyone, including the senior hedgehog military commanders. So, folks looked around for a "secretary of defense," so to speak. At that time, nowhere could be found a hedgehog of such stature, authority, and dignity, to pull off the role of Secretary of Defense. Finally, an authoritative figure emerged, but the only problem was that he lived in CANADA, where they don't even have secretaries of defense. So the die was cast, the Honourable Renfield at the House of Holmes, was named as Le Ministre du Defense.

The Canadian turn of events certainly changed the hedgehog leadership orientation as folks looked further up the ladder. What about a head of state? Ministers and military leaders must function under a supreme political leader. And so it came into being that a hedgehog monarchy was created. It seemed reasonable that the Monarch should be the senior ranking Permanent Grand Champion of the International Hedgehog Association. After all, it was a long and strenuous road to gain Permanent Grand Champion (PGC) status. It stood to reason that PGC's would make good monarchs. As it turned out the very first PGC was Waylon, who was a member of our Rescue. He was the most adorable, friendly, and diplomatic albino who lived in complete harmony with two other male hedgehogs. He served as a wonderful King until his unfortunate death on March 27, 2001, at three years of age.

The dilemma emerged as to who would assume the Monarchy if no IHA Permanent Grand Champions would accept the responsibility or if there were no living Permanent Grand Champions at the time. So it was decided that the Crown would pass to the senior Minister upon the death, disability, or resignation of the reigning Monarch, a position to be held for 30 days in order to give a Permanent Grand Champion the opportunity to claim the Throne. If unclaimed after 30 days, the Crown would become permanent with the ministerial appointee. Over the years, there have been more Monarchs that have been appointed from the Ministries than from the ranks of the Permanent Grand Champions due to the relative rarity of Permanent Grand Champions.
Not having a PGC successor when King Waylon I traveled on, and according to the rules established by the North American Hedgehog Government, the senior minister ascended to the Throne - which meant that Ministre du Defense Renfield became the King, being the only minister at the time.

Since those early days a lot of water has passed under the bridge. The Throne has remained intact. The Monarch, among other responsibilities, appointed the Ministers, which evolved to five positions, as follows:

- Ministrare Temporalis (The Minister of Time and Tradition), advisor to the Crown (the hedgehog version of a Prime Minister)
- Le Ministre du Defence (The Minister of Defense)
- The Minister of Health
- The Minister of Justice
- The Minister of Foreign Affairs

One of the roles of the Monarchy is the appointment of Ministers to fill vacancies. This is a serious responsibility because that minister may someday become the Monarch. The Crown also appoints Military General Officers, where Le Ministre du Defense promotes officers to field grade positions (majors and colonels) and Chief Warrant Officers. Military major commanders (Service, corps, divisions, and separate commands) appoint and promote company grade officers (lieutenants and captains) and Warrant Officers, as well as enlisted troops (privates to sergeants major) which consist of all loyal troops that are not hedgehogs (humans included, as well as dogs, cats, prairie dogs, muskrats, beavers, marmots, mice, etc.).

The Monarchy has so far been led by:

King Waylon I (Colorado)(Ca. Sep 2000 to Mar 2001)(6 months)
King Renfield I (Ontario)(Mar 2001 to April, 2001)(16 days)(Note: HRH King Renfield was best known as the original Ministre du Defence, a post in which he served during 2000 and 2001).
Queen Cleo I (Ontario)(April, 2001 to June, 2002)(14 months)(Ministerial appointment)
King Pyewacket I (Ontario)(June, 2002 to June, 2004)(two years)(Ministerial appointment)
Queen Stella (Ontario)(June, 2004 to Dec 2004)(6 months)(Ministerial appointment)
King Quilliam I (Ontario, formerly of Florida)(Dec 2004 to April 2005)(4 months)(Permanent Grand Champion)

(...Continued from page 17)
As the hedgehog government of North America has grown, so has the hedgehog military, as new missions and requirements have developed. From time to time in emergencies, higher hedgehog military headquarters have been established, such as the Continental Hedgehog Command, commanded by General Pogert E. Lee and the Third Hedgehog Army, headed up by General Patton of Michigan. Also, specialized units have been formed, such as the 173d Hedgehog Airborne Brigade and the Hedgehog Training and Materiel Testing Command (MILPOGTMATCOM), which was formed to train the troops and test critical equipment such as hedgiebags, hedgiehuts, and exercise wheels. The famed original commander of MILPOGTMATCOM was Colonel Stix, a tireless destroyer of equipment. If a piece of equipment held up under Colonel Stix, it HAD to be good!

The exploits of the hedgehog military in North America are reported in a series of hedgehog adventure books by Z. G. Standing Bear, the first of which is titled "The Gathering - Secretly Saving the World." It is published by Xlibris under ISBN number 978-1-4257-8119-4 (paperback) and 978-1-4257-8136-1 (hardcover) and is available from the author, the publisher, and the major Internet bookstores (amazon.com, Barnes and Noble, etc.). The second book in the series, "General Spikers's War - Watership Down Meets Animal Farm in The Military - Industrial Complex" is in press and will be available this fall. The books have a strange genre. Based upon the factual adventures of the individual hedgehogs, fictional elements are interwoven to bring the adventures together, and it is difficult to determine where fact and fiction depart. Perhaps these stories should pioneer a new genre; something called "faction."

The current commanders of the hedgehog military in North America are Lieutenant General El Diablo (IHR 15191)(six years old) of the III Hedgehog Corps, Major General Angelina (IHR 16895)(five years old) commanding the 2d Hedgehog Marine Division (Mechanized)(Spikers's Own), Major General Fred (IHR 14027)(five years old) commanding the 4th Hedgehog Armored Division, and Brigadier General Patsy (IHR 16799)(four years old) commanding MILPOGTMATCOM.

Hedgehogs may sign up for hedgehog military service by applying online to mgspikers@aol.com. Applications should include name, IHR number, location, date of birth, color, and weight, as well as any assignment preferences and special job skills.

**COMBAT ANIMAL ABUSE!** **SUPPORT THE TROOPS!** **OOOO-RAH!**
Coming soon!

More of the great adventures of Phileas Hogg II!