



The Hedgehog Welfare Society

Mission Statement: The Hedgehog Welfare Society exists to protect the well-being of pet hedgehogs through rescue, research and education of the people who care for them.

Hedgehog Welfare Society Newsletter #4, December 2002

The Hedgehog Welfare Society

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A SCIENTIFIC APPROACH TO HEDGEHOGS:

A never-ending source of information

The Hedgehog Welfare Society welcomes insight to these precious animals – insight gained from both the scientific and non-scientific aspects of our lives. In the following article, Valerie Latchford – an American vet student currently studying in London – graciously shares some of her findings from recent research, studies and surveys.

VALERIE LATCHFORD

Introduction

As a new pet in the United States, African hedgehogs (*Atelerix albiventris*) can be difficult to treat as there is little information on their pathology. What little that is known is often extrapolated from European hedgehogs (*Erinaceus europaeus*) or from studies done in small zoo populations. Many veterinarians are reluctant to treat hedgehogs due to their unfamiliarity with the species. Owners may also be unwilling to seek treatment, either because of the frustration of finding a veterinarian or because hedgehogs, like most prey species, show few signs of illness until disease is advanced. The most common reported sign of illness is weight loss, but a hedgehog can lose up to 50% of its body weight in a short period of time (Smith, 1992).

The inbred population of hedgehogs in the United States is highly susceptible to certain diseases. In one study (Garner, 2000), 38% of hedgehogs showed signs of cardiomyopathy at necropsy. A study of 66 hedgehogs (Garner, 2001) showed that 53% had some type of tumor, 85% of which were malignant. Smith (1992) cites a study that showed 69% of hedgehogs over the age of three years had neoplasia. A study of animals submitted for diagnosis at a laboratory (White, 1999) showed the most common diagnosis were splenic extramedullary hematopoiesis (91%), hepatic lipidosis (50%), renal disease (50%) and neoplastic disease (29%), with less common findings of myocarditis (21%), colitis (14%), bacterial septicemia (14%) and pneumonia (14%).

Hedgehogs are highly susceptible to mites (Hofer, 1994). The same study also emphasizes the high levels of neoplasia in the gastrointestinal tract of African hedgehogs.

Because most studies on African hedgehogs are from zoos, they do not include the significant number of privately owned hedgehogs, which may not be subject to the same level of care as zoo kept specimens. This study was intended to quantify commonly diagnosed diseases of African hedgehogs, and compare the differing levels of veterinary involvement in treating hedgehogs that are privately owned, those owned by breeders, and those residing in hedgehog rescues.

Results & Conclusions

Data on the sex of hedgehogs was collected for informative purposes, showing that overall females accounted for 59.1% of the hedgehogs surveyed, and in each group females outnumbered males.

(Continues on page 6...)

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Strength of the Spirit

(There are moments where doubts threaten to overpower the commitment made to rescued hedgegies. A recent email on the HWS group list told of these doubts – and of their ensuing answers. It is with extreme gratitude that we are, with permission, reprinting Yolanda's original message.)

YOLANDA MCLEAN

PLYMOUTH, MA – This list has changed so much in a year – so many new people. I'm not sure how many remember her story... but today is the 1 year anniversary of the crossing of my Tawni-girl. I hope no one minds too much if I share her story again....

She was my first rescue; and she came to me a little more than a month after i got my beloved little boy Switch. I had just become a member of this group and learned many, many things... one of which was that Switch really needed a wheel. So I went back to the pet store where we met. I was searching on the lowest shelf when I noticed a small 5-gallon tank pushed way back. Me, being the curious type, pulled it out. I was shocked beyond words. The tank was filthy... there must have been at least 5 inches of feces matted with what used to be pine shavings. And in the corner – a small, brown, silent ball of quills.

I walked to the cashier and asked if I could see the hedgehog and was told I would have to take 'it' out of the tank myself because they don't handle them. So I did. And instantly I saw the most beautiful face ever. I knew she was in trouble... I honestly didn't think she'd make it the night.

I asked if she had been seen by a vet. When told she had just been dropped off by a woman who didn't want her anymore, I asked when she would see a vet. The boy told me it would either be that Tuesday or



Tawni's best impression of a sea urchin.

the following Tuesday – it was Thursday. That was unacceptable. I asked how much she was and the boy said the woman who dropped her off hadn't given them the price she wanted for the hedgehog and they were waiting for her to call them the next day. So I stood up there and told him she needed a vet. He just shrugged his shoulders.

I stood there and every time a customer came to the cash register asked, "When is this hedgehog going to a vet? She won't last the night." I honestly didn't believe she would. People started asking questions about the animal I was holding, and I told them flat out that this was an example of how *not* to care for an animal. I pointed out the grossly long nails, the matted quills, her swollen face, missing teeth. And all the while, the little girl sat in my hand, quiet as can be.

Eventually a woman came out of the back room and asked if something was wrong. I told her yes – I was horrified by the condition of the hedgehog I was holding. She looked at her, without taking her from me, and said 'it' had just been dropped off the day before. I told her there was no reason

One of the wonderful aspects of HWS is the incredible diversity of people brought together solely by our very special quilled responsibilities. Each one of us comes to the group with different backgrounds and beliefs, making such an awesome, indescribable package.

The holiday season can be more sorrowful than joyful, especially in light of having one less loved one in our presence to celebrate. The following, from an unknown author, was posted in a hedgegie-related email last year, and while there are many different beliefs represented in our organization, I hope the sentiment contained within will bring comfort to those who, like I, will be experiencing this time of year minus a Very Special Someone...

Tawni, Angel Norma, Tommy, Bolla, and all the other Very Special Someones no longer physically with us at this time – you are loved and missed very much.

My first Christmas in Heaven

*I see the countless Christmas trees around the world below
With tiny lights like Heaven's stairs, reflecting on the snow.*

*The sight is so spectacular, please wipe away the tear
For I am spending Christmas with Jesus Christ this year.*

*I hear the many Christmas songs that people hold so dear
But the sounds of music can't compare with the Christmas choir up here.*

*I have no words to tell you, the joy their voices bring,
For it is beyond description, to hear the angels sing.*

*I know how much you miss me, I see the pain inside your heart.
But I am not so far away, We really aren't apart.*

*So be happy for me, dear ones, You know I hold you dear.
And be glad I'm spending Christmas with Jesus Christ this year.*

*I sent you each a special gift, from my heavenly home above,
I sent you each a memory of my undying love.*

*After all love is a gift more precious than pure gold.
It was always most important in the stories Jesus told.*

*Please love and keep each other, as my Father said to do.
For I can't count the blessing or love He has for each of you.*

*So have a Merry Christmas and wipe away that tear.
Remember, I am spending Christmas with Jesus Christ this year.*



Where's the treats, Mom?!?!

the animal shouldn't have been cleaned up, given a clean house with clean food and water, and most importantly, been taken immediately to the vet. I asked again what the price was, receiving the same answer. The woman hadn't told them what she wanted for 'it'. I told them I wouldn't leave unless the hedgehog came with me. The woman said "well, we don't know the price". I told them I'd leave a check and they could write in the amount but I wasn't leaving. Finally, after an hour and a half, they told me to take her if I really wanted to. So I did.

I asked if they had something I could wrap her in or a bag I could buy and they told me they didn't. Finally the grooming person gave me a towel and a small cardboard box. It was 20 degrees outside. I left the pet store trembling wondering if i could really help this little girl. I had very little

SPIRIT...

(...Continued from page 2)

experience, and she wasn't doing well. But I couldn't leave her there. I rushed her to an emergency vet but she didn't see exotics but... out of the kindness of her heart gave me 6 large cans of Hills A/D, a sterilite container they had for kittens, a handwarmer and feeding syringes. She explained what to do until I could get her to an appropriate vet. While there, the little brown hedge-girl ate half a can of food. (Continues on pg 3)

I got home and dug out the "cleaning supplies". I lit some lavender candles and spoke softly. I told her I wanted to help... that I wanted to clean her up, cut her nails, keep her warm, and treat her how she deserved. Two hours later, I was shocked... my little brown girl was almost snow white. I named her Tawni – meaning Little One. I knew she was ill... I knew that no matter what I did, it would never be enough to reverse years of neglect and abuse. But I hoped I could show her unconditional love so that she understood.

A month passed and she seemed to be okay. She had antibiotics and cocoa butter rubbed on her everyday – she would suck on her feet and they were always raw. Her quills started to grow back in the areas where they were gone and her ears were healing beautifully. And then a month and a day after I brought her home... I knew she was leaving me.

I walked into her room and noticed she was not on the heating disk... I told my Little One, through tears, that she was being silly... that it was cold and she needed to stay warm. I put her back on it and left to take out clothes for work. I came back 5 minutes later and she had fallen off again... I ran to the living room with her in my arms... a fleece blanket and the heat disk. I grabbed my phone, called in sick to work, and called my vet at home. It was 5:30 am.

I sat and rocked with her for an hour waiting to meet the vet. I told her I loved her so much and that she had taught me so many things in the month I knew her. I told her that I hoped she knew and understood... I told her not to be scared and that I was so happy she would be better soon, even though in reality I was devastated. My Tawni-girl passed away in my arms, at home, at 6:45...

I still can't talk about her without crying... and I appreciate you all reading this. I learned so many things from the month and a day with Tawni... I learned I *couldn't* turn away, I *could* make a difference and I *do* have the strength even when I'm not sure

The Literary Hedgehog

NAOMI WIKANE

SCHOHARIE, NY – In this column, which I hope will live through several issues of our newsletter, I plan to bring you some material from my ever-growing collection of hedge books. Some of it will be educational and some just for fun.

Pat Morris, in his book *Hedgehogs*, published in England, talks about what's in a name. He says the name hedgehog came into use about the year 1450. My *Random House Unabridged Dictionary of the English Language* (1966) gives the origin of hedgehog from the Middle English word *heyghoge*. Going back to Pat, he says English country folk often call the hedgehog 'urchin', a word that seems to be derived from Norman French. I myself have seen sea urchins along the Maine coast and can see where this name could have originated.

Pat also quotes other country names such as 'hedgepig' and 'furzepig'. English children's book author Alison Utly wrote a story published in 1932 about a hedge she named Fuzzypeg. In the Bible the Hebrew word 'kippod' is translated as 'hedgehog' in some versions and as 'bittern' (a bird) in others.

Then of course 'hedgehog' is used in other meanings besides our dear prickly animal friend. We see hedgehog shrubbery clippers and hedgehog tobacco pipe reamers for sale on eBay. And the herb *Echi-*

do. I learned that I could and would wake up every hour to feed and clean and check on a hedge and be fine the next day for work. I learned unconditional love – and more importantly, unconditional trust.

I learned that you could love an animal to every last depth and breath of your soul.

I learned devastation like no other.

I am thankful for the experience, and as much as I miss my Little One every day, I know that she is on the other side welcoming every animal and giving each one of them a piece of the love that she was given in her last days of life. I was blessed to have her in my life – and they are blessed to have her now...

Tawni-girl... I love you, tomorrow, and tomorrow, and tomorrow... not one day passes that you are not in my mind and heart... I miss you more than words can express but rejoice in knowing that you are safe, warm, healthy...

*Until we meet again, my love,
Yolanda*



Little Ian eagerly awaits Naomi Wikane's Literary Hedgehog column.

nacea purpurea, which has many medicinal uses, has common names such as Purple Coneflower (the color of its flower petals) and Hedgehog Coneflower for the bristly dried center when the petals fall.

'Hedgehog' also has military meanings. Les Stocker in his book *The Complete Hedgehog* explains that "during WWII Royal Navy ships carried a Hedgehog Projector' which fired a pattern of anti-submarine mortars more effectively than the traditional depth charges. The Germans, traditionally fond of their hedgehogs, used a system known as Hedgehog Defense, wherein a central town was protected by outlying strong points. Its easy to see how the system got its name." There was a British war ship named *HMS Urchin* with a badge including a 'hedgehog proper'.

In closing, here is a little poem titled *Prickly Friend* by Isaac Stewart in the book *Little Book of Hedgehogs* published in England by Weidenfeld & Nicolson...

Prickly Friend

I do like hedges, that is true,
But I am not a pig, so why do you
Call me a hog, which is a bit of a boar,
And I'd prefer if you didn't anymore.
Prickly friend would be more correct,
For punctured skin you can expect.
Come too close and I'll roll in a ball
And you won't be able to touch me at all.
Yes, prickly friend is a better word,
But to call me a hog is just absurd.

–Isaac Stewart

Farmer swears by happy hogs

A Norwegian pig farmer has hit upon an unorthodox method of keeping his hogs happy and improving their lives and his business. He gains their trust and speaks their language.

OSLO, NORWAY – Arne Braut considers the NOK 100 he spent on a rubber pig mask on a trip to Prague to be one of the best investments he ever made. That, combined with a personal charm offensive, is keeping his pigs healthy and happy for the course of their lives.

“It was a bit of fun at the beginning, but then I discovered how much calmer the pigs got when I took the time to chat with them for a few minutes in the pen,” Braut said.

When feeding time comes, three times a day, Braut has decided that unlike many other farmers, he will spend more time with his pigs.

“Before the pigs used to squeal and run away when we came in. Now they are calm and come right up to me right away. The



Arne Braut tries to turn up for a bit of company and conversation every time his pigs have a meal.

Photo: Håkon Vold

change is incredible to see,” Braut explains.

Braut has learned that he can break the ice by putting on his rubber mask and grunting to his pigs. Each year 1750 make the trip to the slaughterhouse and Braut is curious to see if their more relaxed lifestyle will show up in their final weight.

Braut also believes that it is far easier to spot illnesses early now that he has established a closer working relationship with his swine.

Studies in the Netherlands and Australia indicate that reducing stress by treating pigs well can result in them reaching sexual maturity four weeks earlier.

Professor Bjarne O. Braastad at Norway’s College of Agriculture in Ås emphasizes that humane treatment of farm animals is more than just physical. They need more than just a larger space, it is more important to recognize and respond to an animal’s behavior, Braastad said.

(This article was found in a recent issue of Aftenposten, with appropriate credits to Trond Bø, Aftenposten’s Norwegian reporter; Jonathan Tisdall, Aftenposten English Web Desk)



Arne Braut’s personal touch looks to be very well appreciated by one of his pigs.

Photo: Håkon Vold

**Put your
hedgehog’s
wheeling
to work...
raising
dollars
for the
Hedgehog
Welfare
Society!**

Become a participant in the Second Annual Hedgehog Welfare Society Wheel-A-Thon and support hedgehog rescue and education efforts across North America.

Why?

On the night of February 2, your hedgehog’s wheeling (or even lack thereof) will be raising money for the Hedgehog Welfare Society’s good causes, including care packages for rescues, health research and education, rescue assistance, and other welfare issues. And ... there are terrific prizes, too!

Participants collecting \$10.00 or more will receive a commemorative certificate. Participants collecting \$50.00 or more will receive an official Wheel-A-Thon t-shirt. The top participants will receive other exciting hedgehog-related prizes from a variety of vendors. (Exact number and type of prizes to be determined later; please check the HWS website for details)

What now?

Use the pledge form printed on page 9 to collect pledges from friends, family, and co-workers. Once you have collected your pledges, follow the instructions to turn them in and qualify for your prizes. It’s that easy!

(Continues on page 5)

WHEEL-A-THON...

(...Continued from page 4)



*Jewel in training! She is the epitome of
"Practice makes Perfect"*

Rules and Tips for Participation:

* The official date of the Wheel-a-Thon is Sunday, February 2, 2003. Before then, ask your friends, family, co-workers, and everyone else to sponsor you and your hedgehog(s) in the Wheel-a-Thon.

* Please collect pledges in specific amounts, not 'per mile,' e.g. \$0.50, \$1.00, \$20.00, etc. and if possible, make life easier on yourself by collecting the pledge when it is given.

* Sponsors may make checks payable to the *Hedgehog Welfare Society*, or to you, if you wish to consolidate pledges before turning them in. Donations are not tax deductible.

* E-mail your total dollar amount pledged and the total dollar amount collected to carolina@hedgies.com on or before February 2, if possible. Your hedgehog does not actually have to run on his or her wheel that night to qualify for pledges!

* If possible, please use a credit, debit, or paypal account to send the total amount of your pledges on or before February 21 to:

donations@hedgehogwelfare.org
through www.paypal.com.

If you cannot do this, please mail the completed pledge form, along with checks payable to the HWS (please, no cash) to

Hedgehog Welfare Society
PO Box 206603

New Haven, CT 06520-6603.

If you collect more than \$50.00, please indicate your preferred t-shirt size.

* If you do not submit your pledge information and funds to the HWS by February 28, you will be ineligible for prizes.

* A full list of prizewinners and details on the success of the Wheel-a-Thon will be announced in the next issue of the HWS Newsletter and the Hedgehog Herald.

Pogs – to your wheels!

A hedgie named Megan...

(I would hazard a guess that we humans will never know everything there is to know about our quilled friends. It is therefore always exciting to hear about the knowledge and understanding gathered from any sort of 'session' between a hedgie and their human caretaker. Read on and enjoy...)

NAOMI WIKANE

SCHOHARIE, NY – I have a hedgie named Megan. I got her at about 8 weeks old this summer and soon discovered she had sight problems and also right from the time I got her she had definite issues about being touched and held. She is making progress in trusting me and is an active happy girl.

After *Go Hog Wild 2002*, some of our hedgie people who had met Animal Communicator Carol Schultz there contacted me suggesting I get in touch with her for Meggie. I did and feel so glad about doing so. At the time Meggie was almost five months old and had found a very special place in my heart and life.

I contacted Carol via email and she was prompt and helpful in answering my questions and setting up a time slot. I emailed her a picture of Meggie and brief info about her and questions I wanted Carol to ask her. At the appointed time I phoned Carol. Meggie, per her suggestion, was left all comfortable and secure in her hedgie bag in her cage and did not emerge during or after the session. Carol had told me most animals have a *lot* to say as soon as she gets through to them and Meggie actually answered most of my questions before Carol asked her anything.

The first thing Meggie told her was that she was blind. This had been confirmed at the vet that very day. She has fears that she knows she needs to overcome but feels she isn't ready to release them yet. She is "just learning the ropes" and needs to get more stabilized. She feels overwhelmed at times and sort of loses herself and her identity.

She doesn't feel totally settled yet. She has a fear of being pushed and dropped. This has not happened since she has been with me. And she fears being skinned alive. Carol wondered what that could be about and I explained that in England hedgie skins used to be drier and used as wool carders in the days when wool was processed by hand.



Little Meggie

She likes living with me a lot and is very contented. She wanted me to know she loves me a lot and wants me to be her forever Mom. She knows I love her. She likes being stroked. It means love to her and that I care for her deeply. Emotionally she is quite sensitive. She likes some ways of being handled better than others and said if I observed carefully I would know which is best. She's right – I have. She said her huffs and puffs and quills up were a reaction to her general fears and not of me. She said she is very sweet inside but feels she still has a lot to learn to show it. She said she needs my help.

She loves going places with me. And she likes having explained to her what is going on. She said she pays diligent attention to what I say to her. Because she can't see, she is often confused about what is happening. She says she gets all she wants and needs. My humble little apartment is a palace to her!

This was a very positive uplifting experience for me and Meggie said being able to communicate through Carol made her feel better about herself. Carol asked if I was familiar with the Bach Flower Essences – I was giving Meggie the Rescue Remedy. She asked Meggie about this and Meggie feels it helps her. Carol suggested I also give her *Mimulus* (for fears from known reasons) and I'm doing that.

I plan to have Carol communicate again with Meggie sometime during the winter as well as Tiggy and Pinny.

Carol's website is
www.carolschultz.com
and she can be contacted via email at
carol@carolschultz.com

SCIENCE...

(...Continued from page 1)

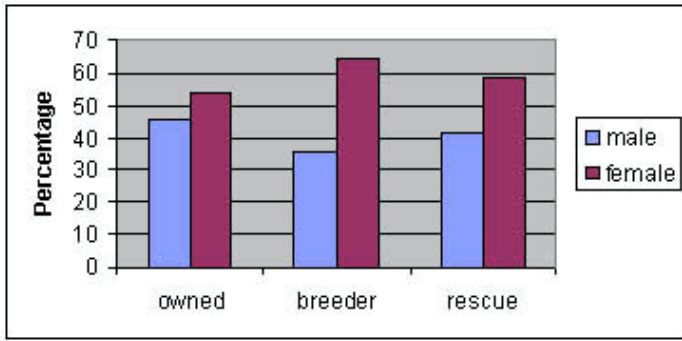


Figure 1. Percentage of male and female hedgehogs divided into groups comprising owned, breeder, and rescue hedgehogs.

Data was collected on a variety of diseases. This showed that mite infestation was the most common disease in both owned and breeder hedgehogs, while neoplasia was most common in rescues. Diarrhea was one of the top three most common conditions in all groups.

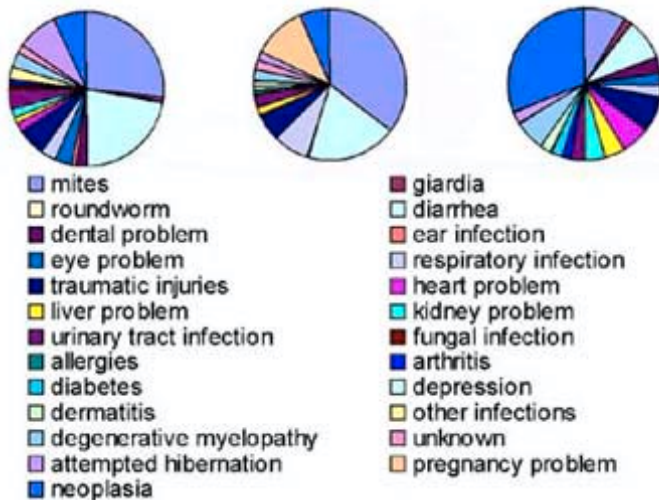


Figure 2. Distribution of diseases in the three groups, showing that there was some variation between groups in the importance of most of the diseases included in this study.

These pie charts show the percentage of each disease in that group out of the total number of diseases from that group. Owned are on the left, breeder in the middle, rescue on the right.

The highest percentage of hedgehogs that have been to see the veterinarian for any reason was the rescue group, which also had the highest percentage of hedgehogs that have gone for a health check (without any previous report of disease). The lowest percentage was the owned group.

Raw Data

	OWNER	BREEDER	RESCUE
number of people	71	5	4
number of hedgehogs	129	101	118
males	59 (45.7%)	36 (35.6%)	49 (41.5%)
females	70 (54.3%)	65 (64.4%)	69 (58.5%)
been to veterinarian	91 (70.5%)	87 (86.1%)	116 (98.3%)

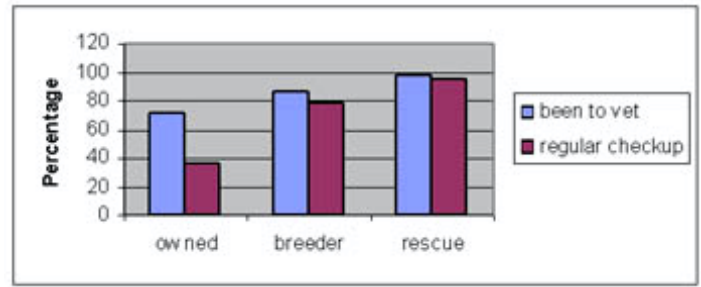


Figure 3. Percentage of each group that has been to the veterinarian for any reason, and percentage that have been taken for an exam without previous history of disease.

Not all of the reported problems were seen by a veterinarian. Some were treated at home, most commonly in the owned group and least commonly in the rescue group. Diarrhea was the main problem treated at home, with 97.9% of cases in owned hedgehogs, 81.09% breeders and 100% of rescue cases. Injuries were the other medical problem that might rarely be treated at home.

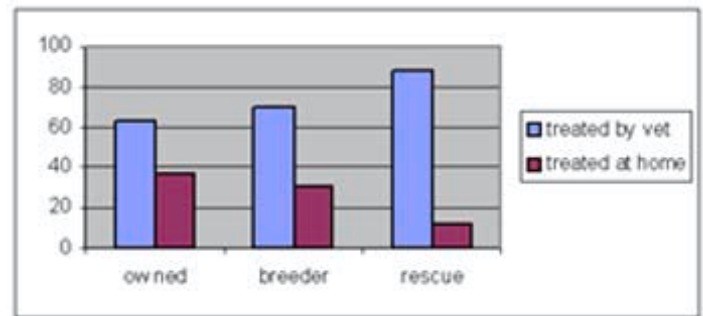


Figure 4. Percentage of problems that were seen by a veterinarian or treated at home.

63.2% of problems in the owned group were treated by a veterinarian, 69.6% in the breeder group, and 88.5% in the rescue group. (Continues on page 7)

regular checkup	47 (36.4%)	79 (78.2%)	112 (94.9%)
diagnosed mites	59 (45.7%)	39 (38.6%)	11 (9.3%)
via skin scrapings	38	18	10
via clinical signs	21	21	1
treat with ivermectin	53	34	5
treat with revolution (selamectin)	5	5	0
treat with other	1	0	0
treat with olive oil bath & ivermectin	0	0	6
giardia	2 (1.6%)	0	2 (1.7%)
roundworms	1 (0.8%)	0	0
diarrhea	47 (36.4%)	21 (20.8%)	11 (9.3%)
number taken to veterinarian	1	4	0
number treated at home	46	17	11
dental problems	5 (3.9%)	0	4 (3.4%)
surgery for teeth removal	2	0	3
ear infection	2 (1.6%)	0	0
eye problem	8 (6.2%)	0	3 (2.5%)
eye removal	2	0	1
relocation	1	0	0
cataracts	0	0	2
respiratory infection	7 (5.4%)	8 (8.0%)	3 (2.5%)
diagnosis by radiology	1	2	0
traumatic injuries	13 (10.1%)	7 (6.9%)	9 (7.6%)
by another animal	6	7	4
self inflicted	0	0	1

(Continues on page 5)

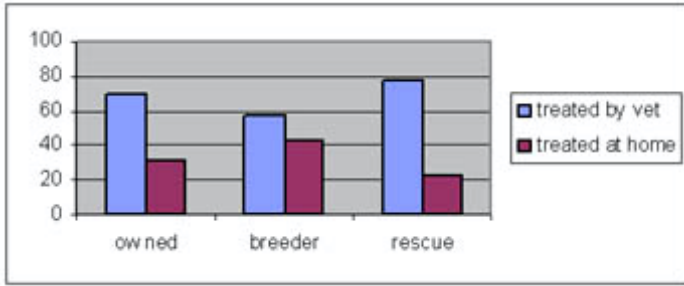


Figure 5. Percentage of injuries among the three groups that were seen by a veterinarian or were treated at home.

Data was collected on diagnostic tests to assess the number of hedgehogs included in the study that have undergone these procedures. Skin scraping was the most common procedure in the owned and breeder groups, while biopsies were most common in the rescue group. Ultrasound and cultures were the least common procedures in all three groups.

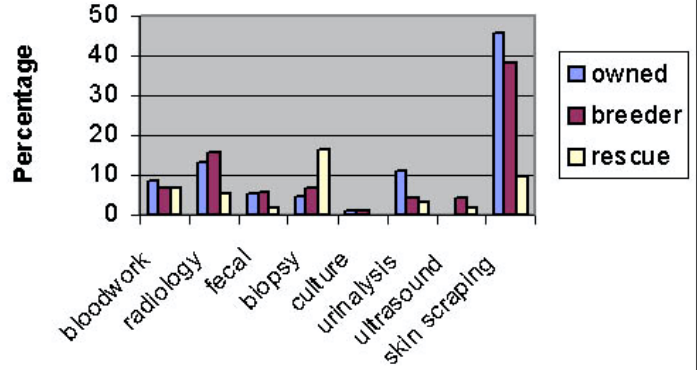


Figure 6. Data showing the percentage of hedgehogs in each group that have undergone various diagnostic tests.

Definitive diagnosis of mites is made by skin scraping. Of the owned hedgehogs diagnosed with mites, 64.4% were diagnosed by skin scraping, the rest by clinical signs. In breeder hedgehogs, 46.2% used skin scrapings, while in rescues this number is 90.9%.

Injuries were most commonly inflicted by another animal in all three groups; lacerations were another common cause of trauma, as were hairs or fibers wrapped around the feet of the animals, causing necrosis.

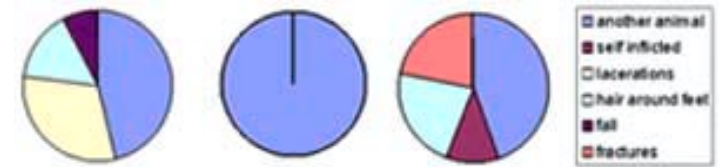


Figure 7. Proportion of injuries of different types among the three groups. Owned is on the left, breeder in the middle, rescue on the right.

Neoplasia is a significant concern among hedgehogs. However biopsies are not always sent for histological study. 46.6% of owned hedgehogs, 14.3% of breeders and 52.6% of rescues had neoplasia but did not pursue definitive diagnosis. (Continues on page 8)

lacerations	4	0	0
hairs wrapped around feet	2	0	2
fall from height	1	0	0
fractured leg	0	0	2
injuries seen by veterinarian	9	4	7
injuries treated at home	4	3	2
heart problems	4 (3.1%)	0	7 (5.9%)
congenital	0	0	2
failure	4	0	5
liver problem	3 (2.3%)	2 (2.0%)	5 (4.2%)
fatty liver disease	3	2	3
hepatic lipidosis	0	0	1
biliary hyperplasia	0	0	1
kidney problems (not uti)	4 (3.1%)	0	5 (4.2%)
failure	4	0	3
fibrosis	0	0	2
urinary tract infection	9 (7.0%)	3 (3.0%)	4 (3.4%)
fungal infections	2 (1.6%)	0	0
allergies	1 (0.8%)	1 (1.0%)	0
arthritis	2 (1.6%)	0	2 (1.7%)
diabetes	0	0	3 (2.5%)
depression	0	1 (1.0%)	0
dermatitis	0	1 (1.0%)	3 (2.5%)
other infection (skin, etc)	6 (4.7%)	0	0
attempted hibernation	19 (14.7%)	2 (2.0%)	3 (2.5%)
degenerative myelopathy (WHS)	7 (5.4%)	3 (3.0%)	8 (6.8%)
unknown	4 (3.1%)	2 (2.0%)	0
pregnancy/delivery problems	0	13 (12.9%)	0
diagnosed with radiology	0	11	0
diagnosed with ultrasound	0	3	0
treated with caesarian section	0	12	0
retained placenta	0	3	0
ripped placenta, hemorrhage	0	1	0
babies that died of infection from mother	0	2	0
blood sample taken for diagnosis	11 (8.5%)	7 (6.9%)	8 (6.8%)
radiology	17 (13.2%)	16 (15.8%)	6 (5.1%)
fecal	7 (5.4%)	6 (5.9%)	2 (1.7%)
biopsy	6 (4.6%)	7 (6.9%)	19 (16.1%)
culture	1 (0.8%)	1 (1.0%)	0
urinalysis	14 (10.9%)	4 (4.0%)	4 (3.4%)
ultrasound	0	4 (4.0%)	2 (1.7%)
deceased	44	17	41
necropsy	7 (16%)	4 (23.5%)	34 (82.9%)
underwent anesthesia	30 (23.3%)	20 (20%)	27 (22.9%)
ovariohysterectomy	9	0	0

replace prolapsed eye	1	0	0
enucleation	2	0	1
remove teeth	2	0	3
tumor removal	9	6	18
foot amputations	3	0	2
remove hair from around feet	1	0	0
lacerations	3	2	1
caesarian	0	12	0
put cast on fractured leg	0	0	2
tumors	15 (19%)	7 (6.9%)	38 (32.2%)
undiagnosed	7	1	20
trabecular trichoblastomas	1	0	0
osteosarcoma	5	2	3
fibrosarcoma	1	0	4
hemangiosarcoma	1	1	0
lymphosarcoma	0	2	1
overactive salivary gland	0	1	0
nonmalignant cysts/polyps	0	0	5
adenocarcinoma	0	0	2
squamous cell carcinoma	0	0	2
leukemia	0	0	1
number of problems	174	69	96
number seen by veterinarian	110 (63.2%)	48 (69.6%)	85 (88.5%)
number not seen by veterinarian	64 (36.8%)	21 (30.4%)	11 (11.5%)

SCIENCE...

(...Continued from page 7)

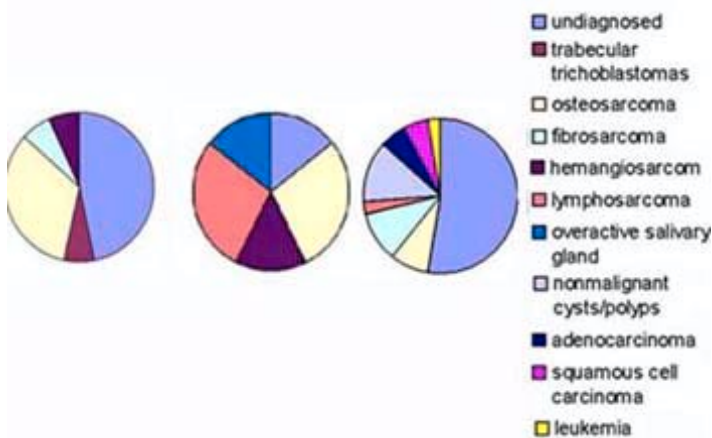


Figure 8. Diagnosis of neoplasia among the groups.

A significant proportion was not sent for histopathology; these are called “undiagnosed” in this figure.

23.3% of owned hedgehogs underwent anesthesia for some reason, compared to 20% of breeder and 22.9% of rescue hedgehogs. The procedures varied, with caesarians being most common in breeder hedgehogs but unknown in the other groups. Tumor removal figured significantly in all three groups.

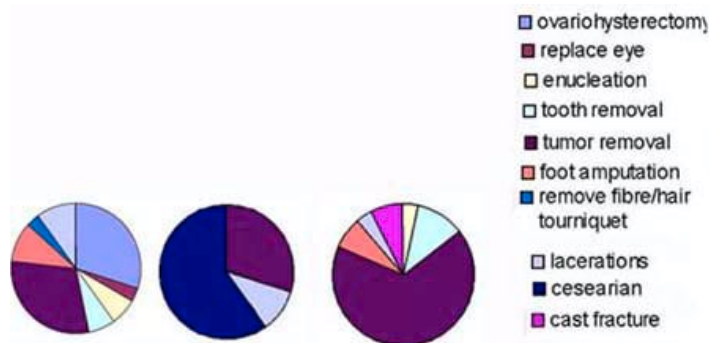


Figure 9. Proportion of surgeries among the three groups.

Necropsies were performed on 16% of deceased owned hedgehogs, compared to 23.5% of breeder and 82.9% of rescue hedgehogs.

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A QUESTION FOR THE POGS?

Do you have a question you would like to ask the poggs?

FAVORITE RESCUE STORY

Do you have a favorite rescue story you would like to share?

FAVORITE PHOTO(S)

Do you have a favorite photo of your quilly master(s)?

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