

Hobby Notes

Rhys A. Brigida

Tarantula Longevity

Syracuse, New York USA brigida@a-znet.com

A recurring thought reminds me that there are so many things that fascinate us about our pet tarantulas. Our mysterious fear of misunderstood creatures draws us in. The spider's enormous size impresses us. Their variety in size, shape and coloration makes us obsess on owning every available species. No matter how many times they molt, eat, mate or react to external stimuli, we watch in amazement as if it was our first time seeing it.

For an exotic pet, they cost nearly nothing to feed and maintain. Tarantulas don't demand your attention or time; in fact they would probably rather be neglected and left alone. For such a scary looking beast, they are benign and shy. When presented in a responsible fashion, nearly everything about tarantulas turns into a big, pleasant surprise for the uninitiated. Owning one tarantula or many spiders can be the most unusual and satisfying pastime anyone can dream up. Young enthusiasts and old timers become equals when they meet and talk about their experiences.

One outstanding quality about tarantulas that always gets the bold print headline is their long lifespan. Some tarantulas reach adulthood quickly within a couple of years, and others mature slowly, potentially over decades. Nevertheless, you can't help but admit that a spider outliving your other pets by a decade or more is something to marvel at.

We, as keepers of tarantulas have entered another plateau in our hobby. Many of us have realized that our involvement with tarantulas has exceeded twenty years or more. What have we

witnessed recently about our pets that, say, fifteen years ago we could only speculate or guess?

I, for one, have been paying closer attention to some of my adult tarantulas that have apparently died of old age during the past several years. Today was an especially sad day.

The first tarantula I ever owned died today. I kept her for 19 years. This pretty *Brachypelma smithi* lured me into the hobby in 1984. I bought her at a local independent pet store for \$25.

Looking back on the history of our hobby, it's safe to assume that my adult *B. smithi* was one of the last wildcaught Mexican redknee tarantulas legally imported into the US. With CITES and other laws in full effect, it was difficult to obtain an adult spider like this one for quite a few years after 1984. Breeding programs for this species were rare or non-existent back then. One had to really search hard for information. Locating other hobbyists or knowledgeable people without a computer was like searching for a needle in a haystack while blindfolded.

My current knowledge about tarantulas helps me to better understand how fortunate I was to have spent 19 years caring for this wonderful spider. She was the classic, docile tarantula that could be easily taken for granted in many ways if it weren't for a few amazing facts that we've learned. For example, it was thought that it takes a dozen years or more for a female *B. smithi* to mature in the wild (many think this is a conservative guess). Given that my spider was a large adult when I purchased her, she could have been well over 30

years old when she died today.

I considered all my failed attempts at breeding her over the past ten years. Was she too old for breeding? We often wonder at what age the female tarantula would be considered in her prime to produce offspring. Too young, or too old to breed, how can we tell?

The last two years of this spider's life showed some remarkable changes in her behavior. She consumed less food, and moved about at a much slower pace. She no longer reacted much to being touched. All molts were fine except for her last one that occurred a few months ago. The spider had some difficulty during the final stages of the molt. The tips (tarsi) of some of her legs became curled, or slightly deformed when they emerged from the old exoskeleton.

The curled tarsi made walking a bit more difficult for the spider, and catching prey seemed to take longer. Some kills took several attempts to get the job done.

Gradually over a few months, the tarantula became less and less mobile until today I found her with her legs curled under in typical death-pose fashion. This pattern of failing health seemed identical for several of my adult tarantulas, but so far none have lived as long as the *B. smithi*.

A female *Theraphosa blondi* lived approximately 10 years under my care, which would put her total age at about 13 to 14 years at death. During her last six months, this spider could hardly carry her own weight. Walking was next to impossible.

A female *Poecilotheria regalis* (raised from a spiderling) lasted about eight years. Again, this tarantula became quite lethargic during the last six months of life. Following its final successful molt, the tarantula ate very little, and seldom moved about. She showed no other symptoms of

illness, nor did she have an impending molt. One day I just found her at the bottom of her cage underneath her favorite perch. The cause of death remains a mystery.

A female *Psalmopoeus cambridgei* (hatched in July 1998) died in April 2003, making her nearly five years old. She was a huge spider with a leg span of seven inches. During the last month of her life I expected her to molt because she had not eaten for several weeks. With this species there are no obvious visual signs of an approaching molt, so you just have to wait until the spider spins her molting hammock. This girl never got that far. She expired in a vertical position on her wooden branch. I removed her from the cage, and carefully examined her lifeless body. There were no signs of mites, discharge, or other parasites. She looked to be in excellent condition. This dead specimen was a good candidate for dry mounting so I carefully made a small incision in her lower abdomen to remove her body fluids and internal organs. To my surprise, I located a second layer of exoskeleton below the first, so it's probably safe to assume that the spider was nearly ready to molt when one or more of her vital systems failed, causing her to die.

Other adult females in my collection have perished due to unknown causes, often prior to or following an apparent successful molt. So, I've seen plenty of unexpected deaths as well as the expected ones. The most common time of these events was at or near the tarantula's molt.

I can't draw any conclusions, but I'd like to point out some signs of deterioration to look for in any tarantula that you've kept for many years. Behavioral and physiological changes are important. Become attentive, and then be more concerned if the signs are not good.

Aside from the usual periods of

fasting and inactivity, pay closer attention to the critical days before and after a molt. If the tarantula appears to be ready to molt yet remains inactive and lethargic for an extended number of weeks, trouble may be brewing. The life process and biochemicals that trigger a successful molt may be delayed or inhibited and the unfortunate tarantula may be stuck or suspended at a critical time, causing certain death. The molt may never begin, or it may only partially complete. Both situations will kill the spider. I'm uncertain what would cause molting problems, but some guesses may include bacterial infections, nutritional deficiencies or digestive system failure. Parasites or respiratory complications also come to mind as possible causes.

After an apparently successful molt, notice the length of time it takes for your pet to fully recover. Complete recovery will show you a tarantula with a sturdy coat of armor that can stand up, support its own weight effortlessly, walk, run, climb over objects, and, of course, kill prey and eat. Having expended a large amount of energy molting, most tarantulas will soon take the opportunity to eat a good meal. Usually, all of these good things happen within a period of days, seldom longer than a couple of weeks for a large adult female. If the recovery period extends into several weeks or months you can expect that something is not right.

Pay attention to deformed limbs following a molt. This phenomenon has a significant (bad) impact on the spider's abilities to walk, dig, hunt, and manipulate silk. Post molt deformities can be a one-time event, corrected at the next molt or they could be another sign of an aged, weakened spider unable to cope with the ordeal.

As I said above, the longer we remain active in the hobby, the more we can expect to reach higher plateaus of

knowledge. In just the past year, many ATS enthusiasts have taken a closer look at mysterious tarantula deaths and discovered those deaths may have been associated with the presence of nematodes. Some adventurous people here and abroad are now conducting formal research in tarantula pathology. It's a long road ahead, but let's give these researchers all the elbow room and help we can. The Forum Magazine and ATS enthusiast list server both welcome your participation. Feel free to gather here, publish, discuss, and discover new things. Encourage all of your friends to join in. You are truly on the cutting edge.

Observe your tarantulas. Note their behaviors, problems, and physiological activities. This is one of the few situations in or near science, where a significant percentage of the facts are potentially gathered and shared by the layperson.