Tarantula

Tarantulas are easily the most popular pet bug (arthropod) group in the US live pet bug hobby. The vast array of species that are available, combined with their behaviors and ease of care contribute to their popularity. Many people just want a pet they can impress visitors to their home with, but tarantulas are a marvel of evolution. They exhibit sexual dimorphism, and are the largest spiders on the planet, exhibiting a truly amazing diversity of habits, habitats and appearance. Goliath birdeaters tip the scale as the largest species, while bright, metallic hairs cover the bodies of an amazing number of others. Symmetrically banded in reds, yellows or oranges appear on many species, like the popular Mexican Red Knee Brachypelma smithi. Various patterns of lines provide species like the ornamental Poecilotheria, or the tiger rump Cyclosternum fasciatum, a distinct appeal.

- **Common Name:** Tarantula, Spider
- **Scientific Name:** *Theraphosidae*
- **Distribution:** United States, Central America, South America, Europe, Africa, Asia, and Australia
- **Size:** 4.5 - 11"
- **Life Span:** Males 3-6 years

Females Up to 40 years

Habitat

Tarantulas can be divided in to two major categories--terrestrial and arboreal. There are a number of species that sort of fall in between, but the distinction is still helpful in discussing most species. Simply, terrestrial tanks will be horizontally oriented, while arboreal species will have cages that are taller than they are long or wide. The latter facilitates the natural tendency of these spiders to climb and lay down thick layers of web.

Tank size is important. If the cage is too large, the tarantula may have difficult coming in to contact with its prey. If the cage is too small, it may have trouble molting properly. Terrestrial tarantulas should have a floor as three times as wide and long as their legspan. Arboreals should have this minimum in the vertical direction.

Plants and various other decorations can be added to the cage, but it is important to remember that the more time your hand is in the cage moving items around while cleaning or maintaining the cage, the more likely your pet may misinterpret your intentions. While there is much truth to the tendencies toward aggression in the various species, the individual temperment of a single tarantula can deviate drastically from the species' norm.

Heating & Humitity

One very important thing to keep in mind when working with tarantulas; they are very adaptive animals. You don't survive millions of years of evolution and climate change without being able to tolerate a dip in temperature or a bit less humidity. It's true that some species have evolved over the centuries to adapt to different ends of the climate spectrum.

Now, I'm not saying that we want to keep our pets in less than comfortable conditions just to make it easier for the keepers. It's still important to acknowledge the difference between "comfortable" and "tolerable." It's just very important to keep in mind that the high and low temps present in a tarantula's natural habitat may not represent the ideal temps for the tarantula.

For example, consider the M. balfouri. On the island of Socotra, high temps can be in the high 90s with low temps around the low 60s. That's a huge range, about 30º, and neither the high nor low temperatures there would make for a particularly comfortable spider. Therefore, a keeper trying to keep these exact highs and lows would be seriously missing the mark. Yet, some keepers will still obsess over keeping these highs and lows in their home setups.

Burrows = The "X" factor.

We also tend to forget that many tarantula species live in burrows and some dig them deep into the earth. This allows the spiders to escape hostile environments and to seek more humidity (or less) when needed. Temperature and humidity measurements from within tarantula burrows in the wild reveal the climates inside are much different than the outside climates. Considering that many species spend the majority of their time inside their burrows, this would mean that we actually have NO idea what the ideal humidity and temperature levels are for many of these species, this means that the temperature and humidity "requirements" included on many care sheets are next to useless and that the stress you get from not

matching these numbers in your setup is also unnecessary.

"Normal “room temperature” is okay for most species."

I hear this all of the time, and it is a good, if slightly too vague, rule of thumb. For most folks, their normal room temperatures will be sufficient for the majority of species of tarantulas. Generally, if you’re comfortable, then your tarantula will be comfortable, too.

That being said, this rule causes confusion as normal “room temperatures” may vary from home to home. For example, in my house, we like it a bit cooler than most, so my living room at the moment is about 64º. My grandmother, on the other hand, likes it toasty, and her home is around 88º this time of year. Both of these temperatures represent extremes, and some species of tarantulas kept for long at either end could experience distress.

Therefore, a modicum of common sense is needed when applying this rule. If you’re cuddled up in several sweatshirts and a blanket to watch TV, then this is not a comfortable room temperature for your animals. Conversely, if it’s summer and the 89º heat in your home has your sweaty clothes sticking your body like blistered layers of skin, your tarantula is not going to be happy.

The majority of the species will do well in a temperature range between high 60s and mid 80s, and will tolerate temps slightly higher and lower than these for shorter durations. If your home is 67-70ºF throughout the winter, you don’t have to worry about procuring some sort of alternative heat source or else risk your tarantulas dying. They may not eat as much or grow as fast (warmer temps lead to faster metabolisms) but they will be just fine.

If you should decide that you need supplementary heat…

I know people who live in drafty houses where the temps consistently get lower than would be appropriate. Or, there are folks like myself who have a room dedicated to raising these animals, and they purposely want to keep temperatures higher to promote growth or breeding. In these instances, it is always best to control the overall temperature of the room and not the individual enclosures.

The best heating option for situations like these is a space heater. There are many types available on the market, including oscillating heating fans and oil-filled electric space heaters. Most also come with built in digital thermostats and timers, allowing for you to create an optimal day/night

cycle. If you do go this route, be sure to do your research and look up reviews to get the best, safest heater for your money.

And if you do decide to go with supplementary heating, please remember the following: No heat mats! No heat pads! No heat rocks! And Absolutely NO heat lamps!

Most UTH (under tank heater) mats and heat rocks are not appropriate heating sources for tarantulas. Heat lamps are very dangerous and can dry out and kill a tarantula very quickly. All three can create hot spots that can injure, dehydrate, and kill your tarantula.

That said, there are some folks that use heat mats combined with rheostats to heat their terrarium, but doing so takes some experimentation and finesse. If you absolutely can't use a space heater and feel that heat mats might be a better fit, do some research and speak to keepers who have experience with these setups. Most who use them heat larger areas, like tanks or cabinets, then put the tarantula enclosures into these. Heating individual tanks is much more tricky and risky.

Humidity … Stop Worrying!

The anxiety created by the dreaded "H" word is likely a leading cause of stress-induced hypertension in new tarantula owners. All joking aside, the humidity "requirements" listed in many care sheets have created a massive issue where none should exist. Too many times, a new hobbyist will read some arbitrary humidity level on a care sheet, then panic when they can't hit that magic moisture number. This is a waste of time, energy, and stress that can better be spent.

Humidity requirements listed on care sheets often don't take into account that humidity levels differ from region to region. If you live in an area with high-humidity naturally, like Florida, and you are misting down your terrarium, you are likely doing much more harm than good. Always take into account local climate conditions when setting up your enclosures.

Most species are able to thrive at many different humidity levels. Even genera like Avicularia, Poecilotheria, and Lasiodora, once thought to need much higher humidity levels, have demonstrated the ability to do very well at lower humidity levels when supplied with water dishes. In fact, some keepers now attribute many Avicularia deaths to overly-humid, stuffy enclosures.

Humidity levels in properly vented enclosures are often much different from

those in the homes they are in. The humidity gauge in your home may read 45% humidity, but the moisture level in your enclosure may be much higher. If you spray the cage down, you might be raising the humidity to dangerous levels. Overly moist enclosures are a death trap.

The fact is, most species do very well in a cage that allows for proper cross ventilation (holes in the sides, not the top) and a water dish. That's it. For asian species, using deep, moist substrate and supplying a water dish is all that they need. They will construct burrows beneath the subrate which will provide the correct humidity level for them.

Now, are there situations where you should keep an eye on moisture and humidity? Certainly, we are located in Missouri where the winters can be cold and my home's furnace may be running for weeks at a time. This dries the air in my home, often resulting in humidity levels in the teens. In these instances, it makes sense to run a humidifier to keep levels at a safer level (I usually opt for about 40-50%).

Spiderlings are also more susceptible to dehydration, so many folks choose to keep all spiderlings on moist substrate with good ventilation. Spiderlings around .75″ can also be given water bowls, which also aids in preventing them from drying out.

With proper enclosures and husbandry, humidity level should never be a factor, even if outside conditions seem less than optimal.

Here are some husbandry tips that will keep you from every having to fret about humidity.

1. Keep a water dish filled with fresh water at all times.

The easiest way to keep the humidity up in an enclosure is to add a water dish. A large, open dish will allow water to slowly evaporate, raising the humidity inside the enclosure as long as it isn't overly vented. It will also serve as a drinking source for a parched tarantua.

2. Restrict ventilation.

Are you using a screen top on your aquarium, or is your tarantua housed in a critter keeper-type enclosure? Both of these cages will allow for too much airflow and rapid evaporation, which will inhibit you from creating a "micro climate" inside the cage. A good enclosure should offer cross ventilation (holes/vents should be on the sides) and airflow, but should also prevent conditions inside the cage from becoming too dry. You must be careful not

to restrict airflow too much, though, as not enough ventilation will create a stuffy, dangerous environment.

3. Use moist soil for tropical or Asian species.

For species that appreciate a little extra moisture, I use moist, not wet, substrate. My go-to mixture for these enclosures is soil combined with a bit of peat moss with some vermiculite mixed in for moisture retention. It's moist enough that it will stay together when squeezed without water wringing out of it.

4. Provide enough substrate depth for burrowing.

Many keepers opt to keep their tarantuas on shallow substrate so that they can see them out more. Although this is obviously up to the keeper's discretion, and most species will easily adapt, it will prevent some animals from burrowing to find more suitable conditions. When in doubt, it doesn't hurt to give the tarantua extra depth in which to dig. Even for species that don't dig, the extra depth will allow the bottom levels to remain moist while the top remains dry. As this trapped moisture slowly evaporates, it will elevate the humidity in the enclosure.

5. Don't spray … make it rain.

Many hobbyists talk about spraying water into their enclosures to increase humidity. This technique only raises levels for a short period as the surface liquid quickly evaporates. When I want to add moisture to an enclosure, I like to "make it rain." I put several holes in the top of a large juice bottle and turned it into a handy watering pot. Instead of spraying water into the enclosure, I simulate a downpour and soak down one side. The moisture eventually sinks in, keeping the sub moist as the top dries up.

6. Use a humidifier.

If you live in a region with cold winters, necessitating that you use a furnace, chimney, or wood stove to heat your home, chances are that the humidity levels will get dangerously low. In these instances, even properly set up cages can dry out quickly. The best solution to this is to purchase a humidifier. You don't need to overdo it if you go this route; a humidity level between 40 and 50% will suffice.

Substrates

Substrate is an important element of proper cage setup. A few inches in an arboreal tank acts as a buffer against desiccation (drying out) if it is wet

down from time to time. Many terrestrial species prefer at least 3 inches of substrate, but will gladly burrow down a foot or more if given the room to do so. Of course, the deeper the substrate, the less likely you are to see your pet. Thinner substrate levels are often used by hobbyists to increase visibility of their pets. Coconut shell or cork bark or bark rounds are placed in the cage in sturdy fashion to provide hides. Whatever combination of elements you provide your pet, make sure that they are not prone to collapsing within the cage, accidently pinning your pet.

Nutrition

Tarantulas need to be fed on live insects. There are a number of insects you can feed your Tarantula like crickets, dubia roaches to mealworms. Some species of Tarantulas will accept defrosted mouse pinkies when adults. (You will have to make the pinkie look alive by moving this in front of the Tarantula using some long tweezers, please do not use your fingers!)

As a general rule, most Tarantulas should be fed 3-6 crickets per week of appropriate sized food, some species can and will eat less amounts. If any live food are not eaten, they should be removed as crickets will attack Tarantulas when moulting their skin! Young spiderlings start on fruit flies or the very small pinhead crickets. The size of the crickets or roaches or other feeder insects grows as the tarantula grows. The goal is a nice, plump abdomen. A tarantula will usually indicate interest in its food fairly quickly upon introduction of the feeder. If the tarantula shows no interest in the food after several hours, or especially days, it is a clear indicator that it is not interested in eating. Some individual tarantulas are prone to stress. A lacking feeding response can also indicate that the tarantula is preparing to molt. Feeder insects can actually prevent or interrupt a tarantula from molting by stressing it out or, worse yet, nibble on the soft, freshly molted exoskeleton of the tarantula, resulting in death.

Molting

While arboreal tarantulas will often molt in a tube of webbing, well above the substrate in their cage, terrestrials will often be observed laying down a mat of webbing before they molt. This isn't always noticed, however. A terrestrial tarantula will molt on its back. This is a critically sensitive time for a tarantula and care must be taken not to disturb it whatsoever. Hopefully, the cage will not be so dry that the tarantula gets stuck in its molt. A freshly molted tarantula should be given a few days to allow its new exoskeleton to

harden before food is offered.

Tips

- **What happens if a Tarantula bites me?**
- If a Tarantula does bite you, it is best to go to your local Doctor or Hospital for advice as everyone reacts differently to a bite. If bitten on the hand, some may experience swelling and pain on and around the area, this can also travel up the arm. Some people may have a worse reaction, which can lead to blood poisoning.
- **What happens if a Tarantula flicks hairs at me?**
- If you have a species of Tarantula that flicks hairs, caution should be taken not to let any get in or around your eyes. Most people will experience the hairs on their hands and arms. If you have sensitive skin, this can cause an itchy rash that may last up to several days. If hairs do go into your eyes or you are experiencing skin problems, seek medical attention.

This is only a basic care sheet,

Please continue to educate yourself on your new family member.