THE ULTIMATE GUIDE TO TARANTULAS

By Patricia Colli / TarantulaHeaven.com

Everything you ever wanted to know about tarantulas and how to care for them.

Insider tips and tricks from the experts to prevent you from making beginner mistakes.

Easy to follow and understand for beginners and experts alike.

A HUMBLE DEDICATION

There have been thousands of people who have helped and supported my journey in tarantula keeping, and I can only hope that this guide does all of them justice and makes them proud.

This guide is dedicated to all of the wonderful people who have supported my tarantula Tumblr blog, Spidey's blog, the Tarantula Heaven website, Facebook page, and Facebook group. To anyone who supported my work in tarantula activism and justice for these creatures. It is dedicated to every person who made suggestions to this guide so I could include the most helpful information. To every person who has shown me kindness and patience as I found my way. To every tarantula keeper whose work and passion for the hobby assisted and inspired me in making this guide. And of course, to every single person who is willing to have an open mind about these creatures and give them the respect they deserve.

This is dedicated to you. Thank you so much for encouraging my work. You deserve much more, but this is a start :) And of course, a gentle thank you to Spidey, the sweet little Chilean rose hair who started it all!

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TABLE OF CONTENTS

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WHY I MADE THIS GUIDE

When I first decided I wanted a pet tarantula, I honestly didn't even know where to start. There was so much information, but no clear way to sift through it for a complete beginner. I didn't know anyone personally who had a tarantula. I had no one to ask. All I could think was, "It should NOT be this difficult to learn how to care for a spider!" This is the case for so many of us when we're starting out.

While the internet, with its vast amount of information, can be the most amazing thing in these situations, sometimes it can be really intimidating and confusing. I wished that I'd had a way to condense all the information I was seeking, and a way to weed out the insane amount of inaccurate and misguided information there was. Or, at the very least, find it all in one place!

That's why this guide exists now. It is born from the pain of a tarantula lover who had a pretty tough time finding her way, but eventually found all the info she needed - and then some. But no matter how good your information is, there are some things you just have to learn along the way, through your mistakes. As a result, several parts of this guide are based on my own experiences and what I've learned, to help new tarantula owners fast-track their way to becoming more experienced. Or, maybe just save them some money and headaches in the process.

Is this the guide for you? Yes, if you:

- Don't have tons of time to weed through research
- Want to get all your information in one place
- Just want someone to explain things in plain, human terms (no fancy scientific language here!)
- Are looking to go from novice to expert in a short amount of time
- Want an extensive list of resources to get you started

This is the guide for you, whether you're a beginner or not. I hope you enjoy it as much as I loved creating it for you!

With great big spider bugs,

Patricia Colli (and Spidey)
Owner, TarantulaHeaven.com

Did you like this guide? Have comments or suggestions? Let me know at patti@beUtifulmagazine.com!

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TARANTULA ANATOMY + SYSTEMS

In this chapter, you will learn about:

- The critical parts of tarantula anatomy
- The nervous, circulatory, respiratory, digestive, excretory + reproductive systems
- Tarantula hair + bristles
- Tarantula heart beats + new findings
- Tarantula webs + how they're made

INTRO: LEARNING YOUR TARANTULA'S BODY

Tarantulas have tons of different body parts, and it's important to know each of them so that you get the most out of the explanations in this guide and other tarantula websites and forums.

The anatomy of a tarantula is simply fascinating and is best described visually, but here's a short explanation of the diagrams you'll see in this section.

The tarantula body

Tarantulas have an exoskeleton, which holds their body parts together and protects them from dehydration, injury, and infections. Tarantulas also shed (molt) this outer layer, which is a process I explain more about here. In addition to the exoskeleton, tarantulas have an endoskeleton as well, which aides in muscle attachments in their bodies.

Tarantulas have two main body parts, and then a set of appendages. The first main part, which is considered the head and chest of the spider, are called the prosoma or cephalothorax. The abdomen is the second main body part and it is known as the opisthosoma.

Most of the tarantula's legs are attached to the prosoma. The opisthosoma contains the tarantula's lungs (called "book lungs") and heart. The spider's spinnerets are attached to the opisthosoma, which the spider uses to make webs.

The prosoma or cephalothorax is connected to the opisthosoma (abdomen) by the thin flexible pedicel. This allows a spider to move its abdomen in all directions.

Legs for days

Tarantulas have 8 legs, located behind the chelicerae and pedipalps. The legs of tarantulas are made up of 7 segments, as

The underside and head of a female spider

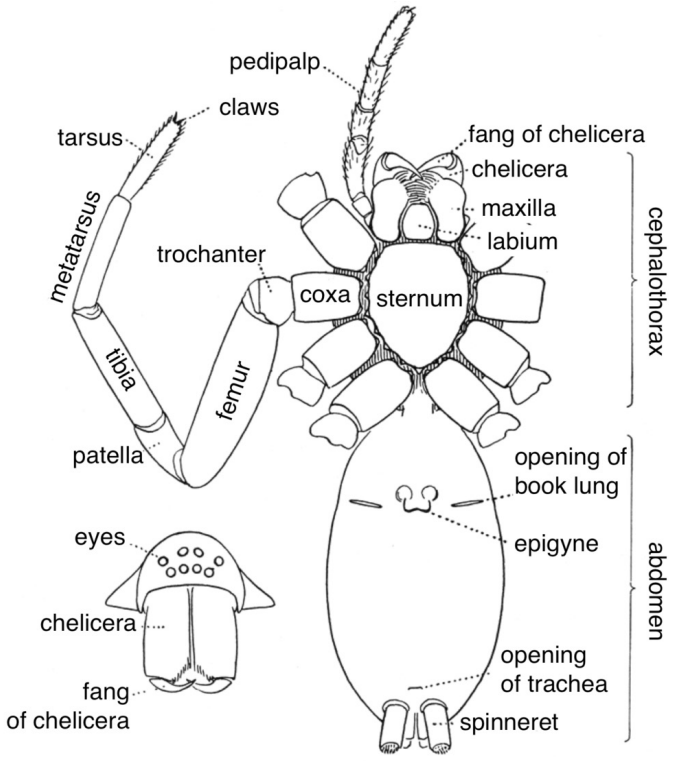


Photo Credit: Wikimedia Commons

illustrated on the diagram above. Tarantula legs also come with retractable claws and paws (much like a cat) which helps the tarantula climb.

Photo Credit: Jason Scragz

Photo Credit: Wikimedia Commons

Since falls can be so dangerous for tarantulas, it's important for them to get a good grip when climbing. Though many tarantulas tend to stay on the ground, some species are arboreal and climb. By extending these special claws at the end of each leg, a tarantula can get a better grasp of the surface it is attempting to scale.

The smaller set of "legs" tarantulas have toward their mouth are called pedipalps. The pedipalps are located to the front of the tarantula, before the first set of legs. These appendages assist with moving and eating, and their sole purpose is to serve as feelers.

Fangs

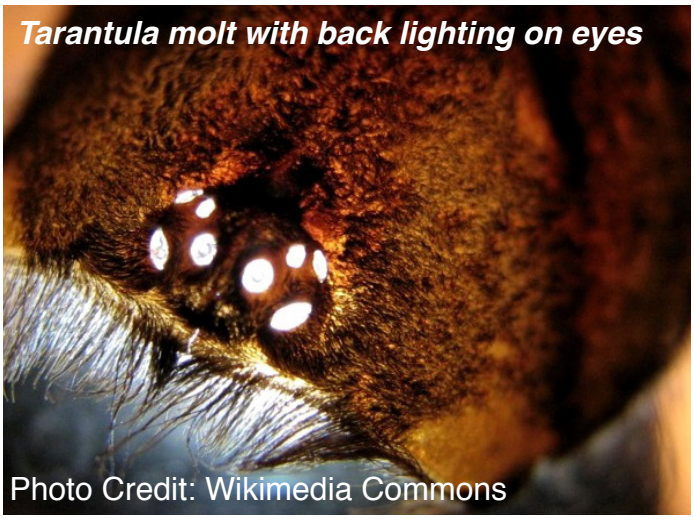
Between each pedipalp are two chelicera (chelicerae, plural), which have fangs on each end. The main purpose of the chelicerae is to help the tarantula eat and manipulate its food. All tarantulas have venom, which come out of little holes in their fangs - this aids them in catching their prey and kicking off the digestion process:

Photo Credit: Matt Reinbold / Flickr

Eyes

Like all spiders, tarantulas have 8 eyes at the top of their bodies, however they are not very useful and their eyesight is not so sharp (they only see motion and shadows).

Photo Credit: Nikk / Flickr



Tarantula molt with back lighting on eyes

Photo Credit: Wikimedia Commons

To "see" and find their way around, tarantulas typically use their other senses and body parts such as their legs and bristles to make up for their poor eyesight.

Bristles

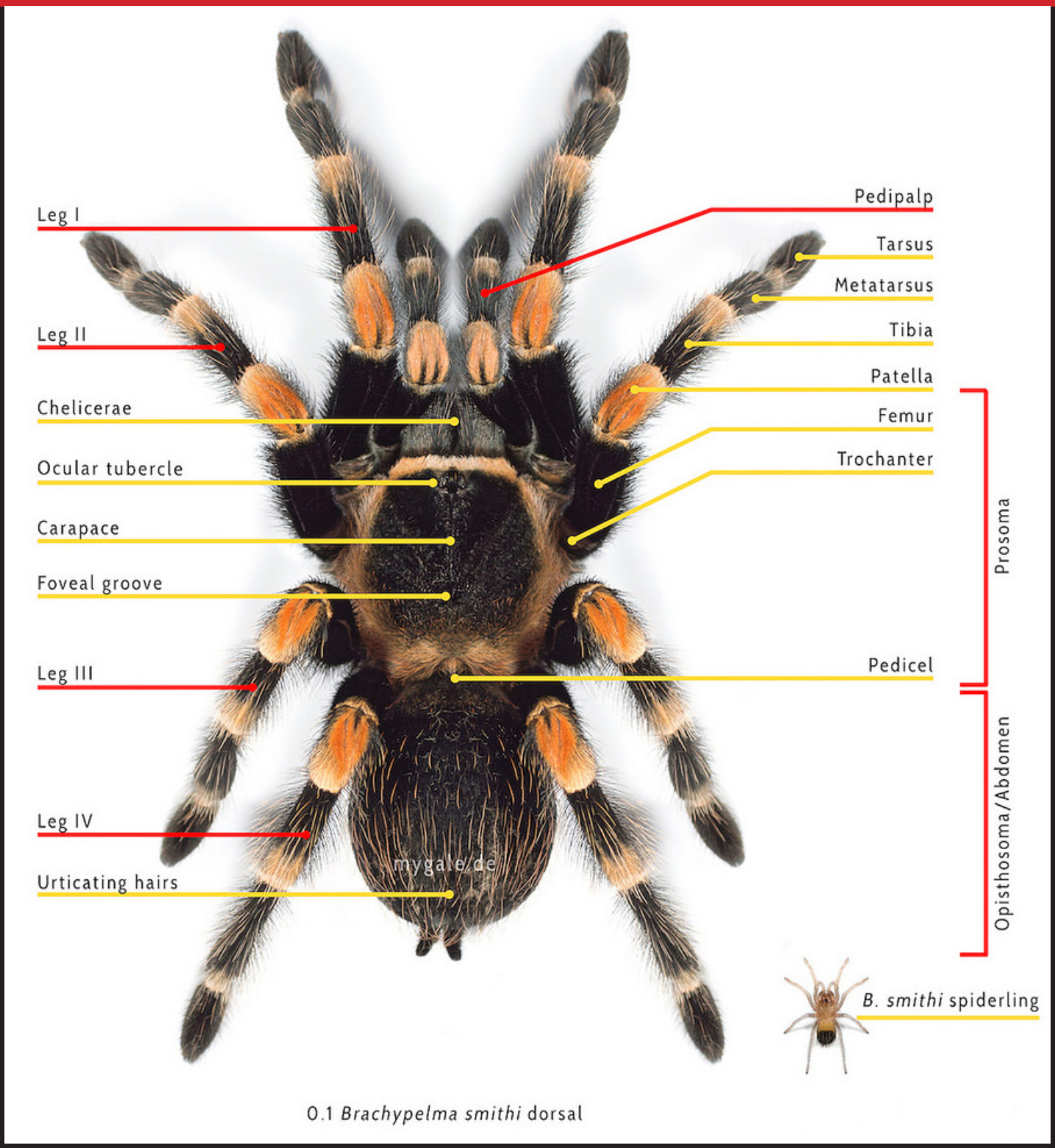
Tarantulas' bristles are considered their "hairs", although they are not the same material as hair. Setae is one type of bristle all tarantulas have, which resemble hairs. They serve as sensory organs, allowing tarantulas to feel the wind's direction, feel vibrations, and detect chemicals in the air. The other type of bristles tarantulas have are called the scopulae, which are the dense bristles at the end of a tarantula's leg that help it stick to surfaces. **Fun fact:** These bristles are strong enough to help a tarantula support over 150 times its own weight!

Photo Credit: John M.P. Knox / Flickr

There is also a type of setae that only belongs to certain species - it's the plumose or stridulating bristle. These bristles can be rubbed together so that the tarantula can make a hissing sound when threatened. Some tarantulas also have urticating setae, which are detachable. These hairs are itchy and are a defense mechanism for when the spider feels threatened. You can read more about tarantula defenses here!

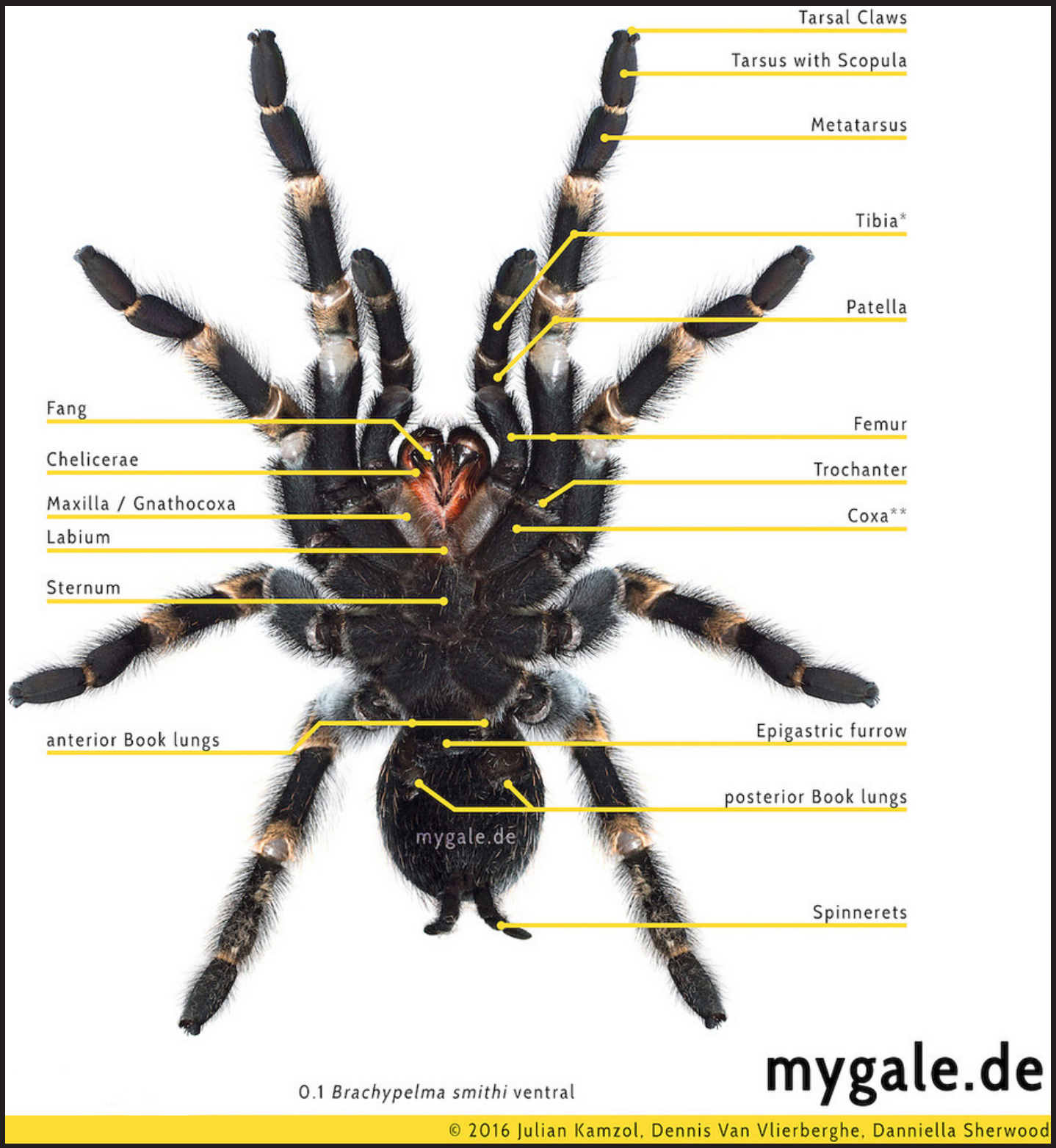

Photo Credit: Wikimedia Commons

TARANTULA ANATOMY



0.1 *Brachypelma smithi* dorsal

These beautiful diagrams were created by the amazingly dedicated folks at Theraphosidae.be, who were wonderful enough to give me permission to use it in this guide!



See more of this team's work at mygale.de!

SYSTEMS: HOW YOUR TARANTULA WORKS

The inner workings of tarantulas are complex, weird, and fascinating all at once. These creatures have been around forever and once you see just how impressive their bodies are, you'll know why they've survived so long!

Nervous system

A tarantula's central nervous system (the brain) is at the bottom of the inner prosoma. A spider's brain is located almost completely in the prosoma, with only a few bundles of nerve cells (ganglia) in the opisthosoma. The brain is often called the supraoesophageal ganglion, and it's the first part of the spider's brain, situated at the dorsal of the esophagus. The tarantula's brain processes sensory information (particularly from the eyes) and gives impulses to the chelicerae and venom glands.

Another part of the tarantula's brain is the suboesophageal ganglion, which is situated below the digestive system and shows connection to the tarantula's legs and pedipalps. This ganglion controls most of the spider's muscles as well as sensory information from the legs.

To connect to the abdominal structures such as the heart, the brain uses the suboesophageal ganglion to go though a thin flexible segment called the pedicel, which connects the abdomen to the tarantula's chest (prosoma).

A tarantula mostly uses its sensory organs - or special hairs called setae - to perceive its surroundings. Tarantulas use their setae to sense chemicals in the air, vibrations, directions of airflow and perhaps sound. Tarantula setae are important because their eyesight is quite poor - they can really only see light, darkness and motion. Tree-dwelling tarantulas usually have better vision than ground-dwelling ones.

Diagram of the internal anatomy of a female two-lunged spider

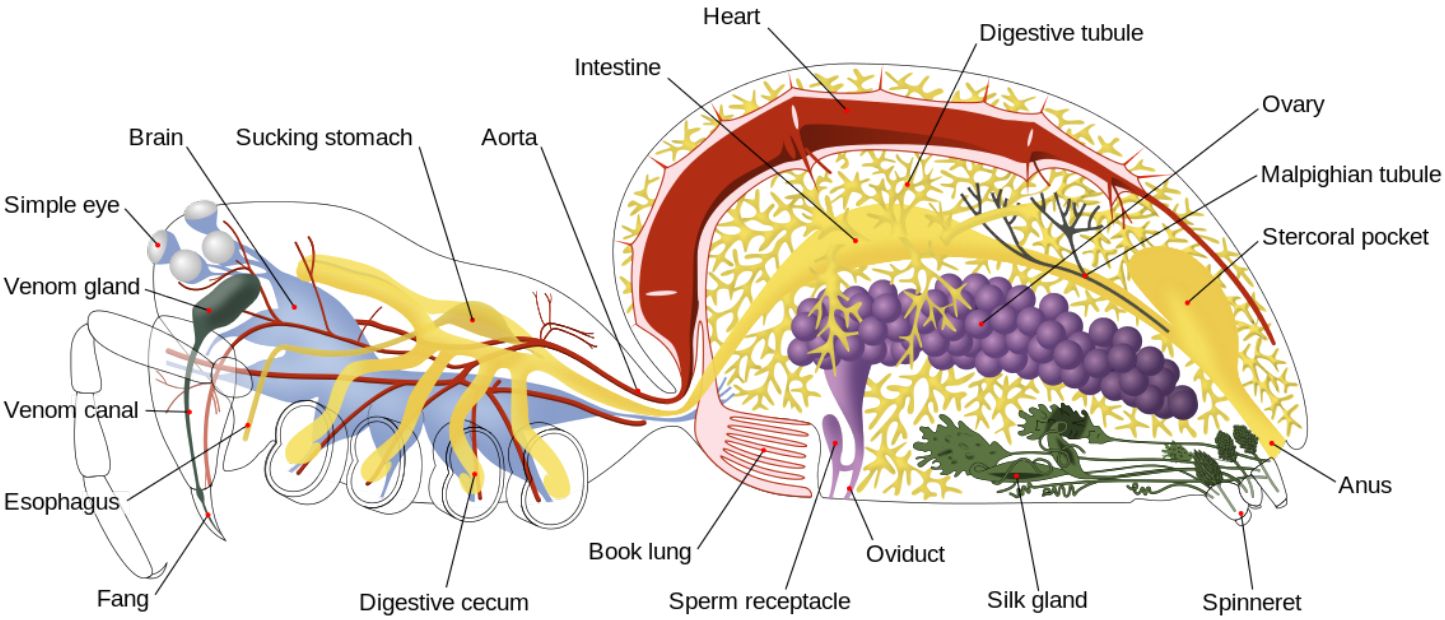


Photo Credit: Wikimedia Commons

Circulatory system

While mammals have a closed circulatory system, spiders have an open circulatory system. In fact, their blood is completely different, too! Tarantula's "blood" is called hemolymph, which contains hemocytes and hemocyanin (a copper-based oxygen transporter molecule). If your tarantula is ever injured, you may notice a blue-green liquid oozing out - that's because hemolymph changes color when it is oxygenated. Deoxygenated, hemolymph is actually gray or clear.

Tarantulas' bodies also operate on a hydraulics pressure system - changes in their blood pressure allow the tarantula to move, extend their legs, and break their skin at molting time. In fact, the reason that tarantulas' legs curl underneath them in the "death curl" when they die is due to this loss of pressure!

A tarantula's heart is located inside the abdomen, which you can see in the diagram above. It is the long, slender tube located at the top of the abdomen.

Because tarantula hearts are neurogenic instead of myogenic, the heart is coordinated by nerve cells as opposed to muscle cells. Hemolymph gets passed through the tarantula's body by open passages called sinuses, instead of blood vessels.

Hemolymph is circulated around a tarantula's body by the filling up of small holes in the tarantula's heart called ostia. This happens when the tarantula's

Photo Credit: Theyouens / Flickr

heart muscle relaxes. After the heart muscle relaxes, it contracts (a process called systole). This contraction pushes hemolymph to the two main arteries - the anterior aorta and the posterior aorta. The anterior aorta sends oxygenated hemolymph to the prosoma (front and chest of the spider) and the posterior aorta brings oxygen toward the opisthosoma (abdomen). The flow of hemolymph is controlled by valves, and tarantulas have a few veins with open ends that also deliver hemolymph to where it needs to go.

Deoxygenated blood gets collected in the lacunae, which is located in the opisthosoma. Then, it travels to the book lungs to be oxygenated right before heading into a cavity (pericardial cavity). After that, the hemolymph enters the heart through the ostia, beginning this cycle all over again.

Respiratory system

A tarantula's respiratory system is located entirely in their abdomen, and is comprised of the book lungs and tiny tubes called trachea, which conduct air to several tissues.

All tarantulas breathe through two sets of book lungs - the first pair is in a cavity inside the lower frontal part of the abdomen, and the second pair are a little farther back. Because a tarantula's book lungs are located on the underside of the spider, it's important not to let these get wet (it's also why tarantulas often raise their bums when drinking)!

The book lungs work by letting air in through a cavity, which has a tiny slit on each side of the abdomen. Each book lung has 15 (or more) thin folded tissue sheets, which resemble a book's pages. These hollow leaves or slits extend into blood sinuses (spider blood vessels). The blood sinuses are responsible for moving oxygen into the bloodstream and they open into chambers called atria. Atria then open to the outside through the spiracles, or multiple slits.

Here's a good picture of where book lungs are located on the outside of a tarantula, from my own Grammostola rosea, Spidey:


Photo Credit: Patricia Colli

Digestive and excretory system

While tarantulas do have fangs, these don't help them chew their food - fangs are simply to help catch and paralyze prey. In fact, tarantulas don't have teeth at all! Since they cannot chew their food, tarantulas digest their food by liquefying their prey and sucking it up like soup!

After a tarantula has injected venom into their prey with their fangs, they use their pedipalps and chelicerae to hold the food in place and guide it into their mouth. A tarantula's mouth is located right under the chelicerae on the lower front part of its prosoma and is shaped like a short straw. Because tarantulas' mouths are only capable of sucking, a tarantula must use digestive juices to liquefy their meal.

Before food can reach the tarantula's stomach, it must first go through the pharynx, which connects the mouth to the esophagus (which is then connected to the stomach). Tarantulas' stomachs run the length of their body. In the prosoma, it is wider and forms the sucking stomach. The sucking stomach works by making powerful muscle contractions, which create a strong sucking action that draws liquefied prey in through the tarantula's mouth and into the intestines. Once in the intestines, the "soup" is broken down into tiny particles so it can pass through the intestinal walls into the tarantula's blood stream. Valves at the entrance control the flow of fluids to make sure everything moves in one direction.

It is quite common for a tarantula not to eat all of its prey, and to leave the outer shell behind. After feeding, a tarantula will sometimes roll their leftovers into a small ball and discard them, often in one particular corner of their tank (tarantulas are neat freaks!).

Once the tarantula's meal has moved through its digestive system, it's time to go to the bathroom. A tarantula's anus is located at the back of the spider, close to the spinnerets. It is connected to the intestines and stercoral pocket. When waste is secreted, it looks similar to a white, smearable blob and may even look like tiny white pebbles. Because tarantulas don't have kidneys, they do not produce urine when they go to the bathroom.

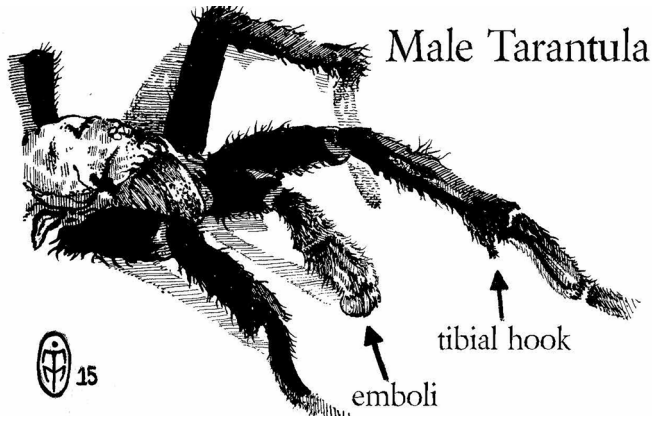
As tarantulas' metabolisms are much slower than ours, they don't need to go to the bathroom that often - but when they do, they love doing it in their water dish or on the walls of their tank! No one knows why, but fortunately it's pretty easy to clean up.

Reproductive system

Tarantulas' reproductive organs are located in the opisthosoma (abdomen). In females it is the ovaries, and in males it is the testes. The genital opening is called the gonopore, which is on the surface of the opisthosoma's underside. This appears right along a groove called the epigastric furrow, located between the most forward set of book lungs. Here's a great pic by Tom's Big Spiders:

In female tarantulas, there are two paired ovaries, which connect to an oviduct, leading to the gonopore. Inside the gonopore are seminal receptacles (spermathecae). When tarantulas mate, the spermathecae is where the male will deposit his sperm. The spermathecae will generally hold the sperm until it is used to fertilize the female's eggs (which can take anywhere from days to months!).

Male tarantulas have paired testes, which are convoluted tubes that merge into a single duct. The duct empties outside of the tarantula through the gonopore, which is also accompanied by epiandrous glands. It is believed that these glands contribute silk when the male is making his sperm web. Male tarantulas do not have penises, although they do have secondary sex organs at the ends of their pedipalps, which are used to introduce sperm to the female. Male tarantulas do not develop this sexual organ until they have reached maturity and are ready to create their sperm web. This secondary sex organ is comprised of two parts - the "bulb" at the end and the "embolus" (emboli for plural), which is the neck. The male uses the embolus and bulb to load and store sperm until he is ready to transfer it to a female. This awesome illustration of emboli is from Tom's Big Spiders:



To learn more about how tarantulas mature and mate, head here. If you'd like to learn more about tarantula anatomy, the website Theraphosidae.be has a beautiful page about anatomy with stunning macro photos and diagrams.

THE SCIENCE OF THE TARANTULA HEART BEAT

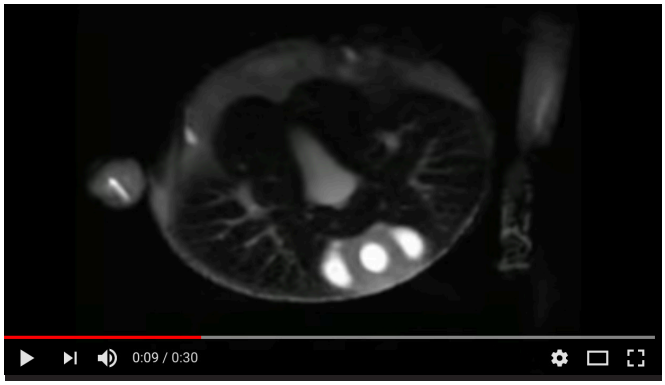
We still have so much to learn about tarantulas and how their bodies work, and a 2011 study on a tarantula's heart reveals that we have quite a long way to go.

In 2011, a study was done by scientists in Scotland that allowed a live tarantula to be scanned in a special MRI (typically built for rodents) for the first time.

The practice of using an MRI is groundbreaking and particularly notable because scientists recognize that it could be a portal to seeing how tarantula brain activity and intelligence (if any) works.

What was found on the scans in regard to the heart was fascinating - scientists observed that tarantulas seem to use a double heart beat to move blood around the body, a distinct contraction that had not been considered before.

Here's a video of the tarantula's MRI, as uploaded by Laboratory Equipment:



The tarantula heart is located in the abdomen, and visible heartbeats have been observed by some tarantula owners after their tarantula finished molting. Here's a great example posted on YouTube by Balamaci Alexandru:

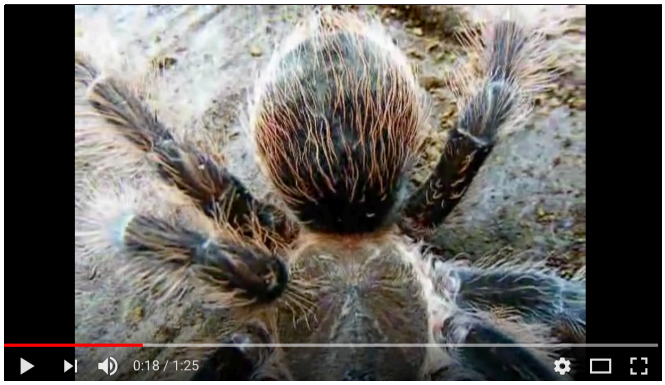


Photo Credit: Viktor Forgacs / Unsplash

TARANTULA SILK: ALL ABOUT SPIDER WEBS

Many people get nervous because they don't see their tarantula making any webs, but it's important to know that tarantulas don't weave webs like regular spiders. In fact, tarantula webs are very unique!

Depending on the species, some tarantulas web more than others, and their webbing habits tend to differ. Some tarantulas make tons of webs, and some make almost none! Terrestrial or ground-dwelling tarantulas will tend to make "carpets" of webs on the substrate floor or use their webs to construct elaborate burrows underground. Arboreals, on the other hand, may weave thick intricate webs all along the sides of their tanks and decor (and unfortunately, sometimes the lid of their tank!). Tarantula silk can also be used for special purposes - for example, females will use their silk to decorate their burrows and wrap their egg sacs. Males weave a special web of silk called their "sperm web" before looking for a mating partner. Tarantulas also use their silk to make "molting mats" for when it's time to shed their exoskeleton.

Tarantula webs don't follow the circular web pattern or serve the same functions that other arachnids use them for - tarantula webs are more like cobwebs. They also don't catch prey in their webs, although sometimes the network of silk helps a tarantula find prey that has wandered into it thanks to the vibrations the web gives off. As tarantulas' eyesight is very poor, they mainly hunt using vibrations from their surroundings. Tarantulas may also use their webs as drag lines, to help them find their way back to their burrow when they have been wandering.

Tarantulas may sometimes eat their webs, although this is usually observed in captivity and during feeding time when they are eating prey. It is not a usual occurrence.

How webs are made

Silk is primarily comprised of proteins and despite its flimsy appearance, it is notably much stronger than it looks. The silk that is used to make webs comes out of the tarantula's spinnerets, located at the back of the tarantula's abdomen and near the anus. The silk is made as a liquid leaves the tarantula's body through the spinnerets, which have valves that the tarantula can turn on or off as it wishes. When the tarantula opens this valve, pressure inside of its body pushes the liquid out through the spinnerets. The silk then becomes solid once it leaves the tarantula's body and the tarantula will move its spinnerets and abdomen to direct the direction of silk. Spider silk is thought to be very strong and can be stretched twice as much as nylon before breaking!

Photo Credit: Wikimedia Commons

Photo Credit: John / Flickr

HOW TO CHOOSE A TARANTULA

In this chapter, you will learn about:

- The one reason you shouldn't get a tarantula
- How tarantulas are identified
- The best species for beginners
- Differences between tarantulas
- Why pet stores are bad for new tarantula owners
- Where to get your first tarantula
- How to safely order tarantulas online

A BIG HAIRY WARNING

The first thing we need to clarify before even getting into what kind of spider you should get, where you should get it, and how to take care of it is this: What do you expect from having a pet tarantula?

You may be rolling your eyes, but this is a serious issue many beginning tarantula owners run into. Many of them get into the hobby because they saw a cool picture of someone holding a tarantula on the internet and they were under the false impression that tarantulas are a high-energy pet that loves being handled. Once they get their tarantula, they either find out the hard way that they were mistaken (and have the bites to prove it), or are irritating their tarantula by forcing it to interact. Even worse, they might abandon their new pet because it didn't meet their unrealistic expectations. This stuff happens all the time.

The truth of the matter is that tarantulas are happiest left alone. While some species are more active than others, none of them really enjoy interacting with their pet owners the way dogs or cats do. Some spiders can tolerate this better than others and have less defensive temperaments, but forcing your tarantula to be handled frequently is risky not only for the spider, but also for you. Too much handling puts the tarantula under a ton of stress and makes them feel like you are a threat.

Photo Credit: Josef Wells / Flickr

As long as you're not looking for a spider that acts like a dog, you will love having a pet tarantula. They are low maintenance pets and beautiful to look at and learn about.

If by chance you realize you cannot take care of your tarantula (either because it was a mistake or because of life circumstances), there is now a great Facebook group called 'T' Time Adoption/Rescue, and the group is full of tarantula keepers who would love to provide a new home for your spider. Join the group and read more about it here!

NAMING + IDENTIFYING DIFFERENT TARANTULAS

It's very easy for a beginner to get confused with all the different types of tarantulas, because many have both common names, acronyms, AND scientific names! No wonder people get intimidated when first starting out!

First of all, don't feel bad. Many of the most experienced tarantula hobbyists don't know all of the scientific names of tarantulas, or how to pronounce them. However, it's good to slowly learn both the scientific and common names, especially if you intend to delve deeper into the hobby.

This is particularly helpful when purchasing more tarantulas, because most breeders list tarantulas alphabetically, using the scientific name first. In fact, many don't even use (or know) the common names - despite the fact that they're easier to remember and say! The truth of the matter is that scientific names are the true identifiers in the hobby, and they're important to know if you ever want to ask a question on forums or from someone more experienced than yourself. You will also be able to search the internet for more valuable information by using the scientific names, as they are more popular amongst experts. Some tarantula species don't even have a common name!

The other advantage to using scientific names is that there are distinct names given to each species. Some common names can be very similar and easily be confused with each other, and you might get the entirely wrong species by accident!

Scientific names are made out of the genus (group of closely related animals) followed by the species name. For example, in the name "Brachypelma smithi", "Brachypelma" is the genus and "smithi" is the species. It's quite important in scientific classification that

the genus name is capitalized and the species name is lowercase. Often times, the scientific name is shortened by only using the initial of the genus name. In this example, “Brachypelma smithi” would be shortened to “B. smithi.” This is how the scientific names help categorize tarantulas of the same genus:

Genus: Brachypelma
Brachypelma species:

- B. emilia
- B. albopilosum
- B. smithi
- B. boehmei

So in short, it’s in your best interest to learn and use the scientific names. Scientific names are also really useful on an international level, as many common names are only known in the United States. As Europe is quite ahead of the U.S. in tarantula keeping, it’s good to know how to communicate with your peers overseas!

Since there are hundreds of different species of tarantulas, I’m unable to list them here - however, I can point you to some amazing websites that list every single one and provided wonderful information.

Bosings-Crawlers has done an amazing job in listing different tarantulas by their scientific name, common name, Old/New World type, arboreal/terrestrial/burrowing type, and their habitats. This would be the most useful to a beginner - so definitely check that out here.

Eight Legs also has an in-depth listing of every genus, species, and common name - and also provides an overview of each tarantula. I definitely recommend this page if you are trying to really expand your knowledge and go deeper.

It’s also good to keep updated on the names as well, as sometimes they change or new species are discovered. I know it’s a lot to think about at first, so you can start off by learning the scientific names of some of the most common tarantulas:

- Avicularia avicularia
- Brachypelma albopilosum
- Brachypelma smithi
- Caribena versicolor (formerly Avicularia versicolor)
- Chromatopelma cyaneopubescens
- Grammostola rosea/porteri

Good luck and don’t be afraid to search forums like Arachnoboards to ask questions!

WHICH TARANTULA IS RIGHT FOR YOU?

This is the big question, isn't it?! Believe it or not, there are a lot of things to consider when picking your first (or second, or third spider!) We'll dive into that here.

Here's the short answer:
There are a few tarantulas that are most recommended for beginners due to their resilience, hardiness, mild temperament, and low maintenance nature. They are:

- Avicularia avicularia (Pink toe)
- Brachypelma smithi (Mexican red knee)
- Brachypelma albopilosum (Honduran curly hair)
- Grammostola rosea or Grammostola porteri (Chilean rose hair)

While these species have reputations of being good starter tarantulas because they are not very irritable, it is important to remember that each spider is different. Grammostola roseas are well known for being calm and mild-tempered, however I have heard of some instances where this spider was quite defensive.

Regardless of the species' reputation, each spider is different and has a unique threshold for stress and threats.

The long answer (recommended):
If you're into being a super-responsible tarantula owner and you want to educate yourself (which I highly recommend), the first thing you need to do is understand the differences between species.

New World vs. Old World tarantulas
If this is your first time owning a tarantula, I highly recommend sticking to New World types. New World tarantulas come from North America, South America, and the Caribbean Islands. These species tend to be safer for beginners due to their less potent venom.

Old World tarantulas are from Asia, Africa, India, and Australia. They pack a far

more excruciating bite and their venom is considered “medically significant” which means it will be pretty painful and potent. Old World tarantulas also tend to be faster and less predictable in temperament. Basically, unless you’re extremely knowledgeable or have some experience under your belt, it’s best not to mess with these babies!

Arboreal vs. Terrestrial vs. Fossorial

Terrestrial tarantulas (recommended for beginners) are tarantulas that mostly stay on the ground (although sometimes they are naughty and do climb). Arboreal tarantulas are tarantulas that are meant to climb up their tanks, up plants, up anything you give them! These species are typically more exotic and require more tank set up and knowledge to start off. They also tend to be fast as lightening, which is why they’re not recommended for beginners. Fossorial tarantulas are the opposite of arboreal - these tarantulas love to burrow and spend most of their time underground. This can be stressful for beginners especially, as you might worry about what your tarantulas is up to all the time.

DID YOU KNOW?

These big, hairy spiders strike fear into the hearts of arachnophobes everywhere, but in reality tarantulas are some of the least aggressive and dangerous spiders around. They are much more scared of you than you are of them!

Photo Credit: Chadica/ Flickr

Photo Credit: Big Rings Berlin / Flickr

Male vs. female

Another thing to consider when getting your first tarantula is what your intentions are for its lifespan. Are you planning to mate your tarantula? If so, it's important to realize that many male tarantulas die shortly after they mate (if they don't get killed in the process of mating first).

Male tarantulas usually only live about 3-5 years, or until they reach sexual maturity. If you are looking for a long-term pet, it is better to look for a female. In some species (like the Grammostola rosea), the females can live several decades! Due to their longer lifespan and higher demand, females tend to be more expensive and harder to purchase than males.

Baby vs. adult

Another thing many beginners are not aware of is that there is a big difference between taking care of a baby tarantula (also known as a sling or spiderling) and an adult spider.

Of course, it's utterly adorable and very rewarding to take care of a baby spider and raise it from being a little teeny spiderling. However, there are significant care differences to take into account. If you are looking for a more low maintenance tarantula, I suggest getting an adult tarantula.

Tarantula babies tend to need more attention and special care requirements. Not only will they need several different sized tanks during their lifetime (they will start off in small vials and progress to bigger tanks as they grow), but they also must be fed more frequently, and have their molts removed.

While adult spiders can be fed once a week or less and may only molt only once or twice a year (or even less for the elderly!), slings need to be fed more often and will shed their exoskeleton far more because they grow much faster as slings. So before deciding to commit to a baby sling, it's important to know that it's much more of an investment in time and money.

QUICK TIP:

If you are getting a sling, try not to go too small - ideally a sling would be at least 1" across. Anything less is very risky and will be hard to keep track of in its tank!

Also, be aware that if you get a baby tarantula, different species have different growth rates. For some species, it could take years before your baby tarantula actually starts looking like a big hairy spider!

CAPTIVE BRED VS. WILD CAUGHT TARANTULAS

As in any hobby, there are ethical concerns about where tarantulas come from in the community. One of these concerns is the illegal selling and importing of tarantulas.

In many cases, buying a wild caught tarantula can often be cheaper than buying captive bred, but it comes with risks that you should be aware of.

For example, there's no telling if this wild tarantula has any diseases or parasites. Due to not knowing its full history, you will also not be able to tell exactly how old it is. Wild caught tarantulas can also have a difficult time adjusting to captivity. Local pet stores often sell wild caught tarantulas, and know very little about the spiders they are selling. The living conditions they keep their tarantulas in are also usually below standard, so you may be getting an unhealthy tarantula.

Buying captive bred is generally considered safer and better, however they are usually only available as slings instead of adults. If you buy a tarantula that was bred and raised in captivity, it is likely that the spider was well cared for and the seller/breeder will be able to give you an accurate, extensive history about its age, sex, species, etc. Captive-bred tarantulas also tend to have a lower mortality rate.

Unfortunately, it's quite hard to tell if a larger tarantula is captive-bred or wild caught. This section is really to encourage an ethics/judgment call on your part. While captive bred is a safer option, some rare species aren't established enough in the hobby and wild caught imports are the only option. Today, only about 25 species out of hundreds are bred on a regular basis.

If you are looking for online breeders and sellers, I mention a few good ones in the resources section.

Photo Credit: Matt Reinbold / Flickr

WHAT'S THE BEST WAY TO GET A TARANTULA?

I, like many beginning tarantula owners, did the most convenient thing I could in my lack of experience and knowledge - I purchased my Grammostola rosea from a local pet store. Now I know better - and you will, too!

If I could do it over again, I would have either gone to a tarantula convention or ordered a tarantula online from a reputable breeder or seller.

The reason for the pet store diss is that while pet stores are convenient and usually have popular starter tarantulas, these tarantulas are being held in very poor living conditions most of the time so you run the risk of not having a healthy tarantula to start with. Even worse - most of the staff at these pet stores know less than you do about tarantulas, even if you're a complete beginner! Most of the employees will not be able to give you any accurate advice about the sex of a tarantula (or even the species in some horrible cases), how old the tarantula is, or where it came from. These are, of course, things that you might be able to find out on your own through a lot of research, but why choose to give yourself a headache when there's a better way?!

Another thing you risk when going to a pet store - especially as a beginner - is that the employees are so misinformed about tarantula care that they will give you horrible advice on how to take care of your tarantula and try to sell you a bunch of products that you don't need. For example, I was talked into buying a sponge for my tarantula's water bowl by an employee during my first tarantula shopping trip - which is actually extremely dangerous and unsanitary for the spider. No tarantula expert would ever tell you to use a sponge!

By going to conventions or buying online

from good breeders, you are buying from knowledgeable people who can give you great advice on how to care for the tarantula you're interested in, and can give you a pretty good background about your particular spider - because they probably raised them! Conventions aren't too common and usually only come around certain areas a few times per year, so you may have more success finding a good breeder online.

How to safely order tarantulas online

The nice thing about going straight to a tarantula breeder is that they can usually tell you anything you want to know about your tarantula - such as age, sex, origin, maybe even temperament! There are plenty of great, reputable breeders online - I'll get to that in a second - but first you need to know all the things to consider when ordering online.

When ordering a tarantula online, the most important thing you want to do is create circumstances to ensure that your spider gets to you alive. While part of this is the responsibility of the person or company shipping your tarantula to you, you also play an important role in the process.

First of all, you must be mindful of the time of year you buy a tarantula. While many experienced tarantula sellers have

Photo Credit: Jason Scragz / Flickr

Photo Credit: Matt Reinbold / Flickr

packaging systems that allow them to ship tarantulas safely all year round, you are always taking more of a chance by ordering tarantulas during seasons where it is really hot or really cold. Many sellers will not even ship if weather is below 40 or above 80°F. Be aware of the differences in weather across the tarantula's journey as well. For example, if you live in California where it's 70°F but the tarantula is coming from New York where it's snowing, you could run into issues you weren't aware of.

Also be aware of your schedule - you don't want to order your tarantula and have it arrive on a Friday while you are away for the weekend. Make sure you will be home to receive your tarantula, because you will want to get your tarantula into a safe enclosure and give them access to water right away.

To ensure that your tarantula arrives in great condition (and alive), FedEx Overnight is the best shipping option although it is the most expensive and could cost up to $50. Generally, you don't want shipping to take any longer than two days. There are cheaper options available, but they might not come with what is known as a LAG (Live Animal Guarantee) in the tarantula hobby.

Any reputable seller will give you this guarantee from anywhere between 24 - 72 hours after your purchase. This means that if any of your tarantulas did not survive the shipping process, the dealer will either replace them or give you some sort of refund or credit. It's a good idea to read a tarantula seller's LAG policy before placing an order.

With all of that being said, here's a list of recommended sellers and breeders with great reputations to help you get started:

USA:
Arachnoboards (classified)
Arachnophiliacs
Jamie's Tarantulas
JRs Inverts
Ken The Bug Guy
Net-Bug
Stamps Tarantulas
Swift Inverts

UNITED KINGDOM:
Exotic Pets
Tarantulas Bristol
The Spider Shop

CANADA:
Tarantula Canada

Photo Credit: Marcelo Campi / Flickr

PREPARING FOR YOUR TARANTULA

In this chapter, you will learn about:

- All the different supplies you will need
- Types of enclosures for different tarantulas
- Why it's better to stay away from pet stores
- Recommended products + supplies
- How to be prepared for first aid emergencies

WHAT SUPPLIES WILL I NEED TO PREPARE?

While you can get your supplies from a pet store, most stores are clueless when it comes to tarantula care and their staff is even less knowledgeable. Before you know it, you will be buying loads of products you have no need for.

I recommend buying your products from Amazon (there is a lot of variety) or other online shops or conventions - so you only buy what you need and are at least in good hands. In this section, I will give you a run-down of the supplies you'll need as well as some examples, and I'll go into more detail about how to set all of this up later. **NOTE:** These recommendations are NOT for baby tarantulas (slings). If you have a sling, jump to this section.

Here's the bare minimum of what you will need for your tarantula's enclosure:

Terrestrial / Fossorial tarantulas:

1. The tank: These spiders will need a landscape-style tank - not too high (size will vary depending on your spider). In general, 3 times the leg span across and 2 times the leg span for the height is good, although some tarantula owners like to give their spiders more space. The main thing with these spiders is that you don't want a tank that is too high, because your spider may climb and fall.

2. A lid or screen for the tank: Most containers or enclosures will come with a lid already. The screen or lid must have

small holes for air. **NOTE:** Common mesh screens must be spider-proofed to prevent injury - here's how.

3. Substrate: Coconut fiber substrate or topsoil is great for these tarantulas. Be sure not to use anything with fertilizer or additives.

4. A shallow water dish: While water dishes like the example below are great and popular, you don't even have to go that far. Many tarantula owners use things like bottle caps or shallow containers for their tarantulas and they work just fine. You do NOT need a sponge - they just breed bacteria.

5. A place to hide: Tarantulas are nervous critters and need a place like a hollow log or similar dark space to feel safe.

DID YOU KNOW?

Tarantulas are usually nocturnal creatures, meaning they do most of their activity while you are sleeping. You might be surprised that your tarantula spends most of its time hiding or sitting still!

Photo Credit: Jjmusgrove/ Flickr

6. Decor: You can decorate further with plants (decorative or live). While live plants are nice, you must be careful when bringing something in from the outdoors, as it could introduce your spider to chemicals from pesticides, or parasites and pests. Decorative may be safest.

7. Back-up containers: I also suggest having two small additional holding tanks or containers that will make transporting your spider (for tank cleanings, rehousing or anything else) easier, as well as storing food like worms or crickets.

Arboreal tarantulas:

1. The tank: Unlike terrestrial tarantulas, these spiders will need a portrait-style tank so they can climb. Their feet and bodies are suited for gripping and climbing, so they will benefit from a tank that has more height. Unlike enclosures for terrestrial spiders, these arboreal tanks commonly feature front-loading doors instead of lids, as these spiders like to web on their ceilings.

Photo Credit: Schristia / Flickr

NOTE: Some spiders may require more cross ventilation, so you may need to look for holes not only on the top, but also on the sides depending on your tarantula's needs. If holes are lacking, you can create your own small holes easily if the tank is made of Plexiglas.

2. Substrate: Coconut fiber substrate and topsoil are great choices. If you have an arboreal that requires a lot of humidity and moisture in its environment, you can put some vermiculite below the substrate. You can also add sphagnum moss to the enclosure, as it holds onto moisture and humidity well. Whatever you use, you want to make sure that it is free of fertilizer and additives.

3. A shallow water dish: Arboreal tarantulas may get their hydration from other ways such as the misted droplets on their enclosures (more on that later), but they still need a water dish or container like the one pictured for terrestrial tarantulas. You do NOT need a sponge - they are breeding grounds for bacteria.

4. A piece of cork bark or branch for climbing: Arboreal tarantulas are tree-dwelling spiders and their bodies are designed to climb. They will need a piece of cork bark or some type of branch for this. It may be tempting to go outside and just get a branch from your backyard, but this is a very bad idea. You could introduce parasites or other harmful insects or pesticides to your tarantula if you do this, so purchasing a fake one is your safest bet.

Other important items you should have: Hopefully your tarantula is never injured, but in the unfortunate event that you have to play doctor and mend an injury, spray dressing, petroleum jelly, liquid bandaid, or super glue are all good things to have in case of an emergency. For more details about tarantula first aid, head here.

Now for you. If you happen to get bitten by a tarantula, there is a possibility you could be allergic to its venom and you don't want to be caught unprepared - having antihistamines on hand is good practice. Epipens have also been recommended for those who have extremely venomous tarantulas, however these require a doctor's prescription, are expensive, and require some training to use.

MY RECOMMENDED PRODUCTS GUIDE

There are many places you can get enclosures and supplies, but I prefer Amazon for a few reasons - there's variety, it's fast and convenient (especially if you have Prime), and it's more affordable than others - so that's what my recommendations are based off of. At the end of this section I will recommend a few other resources if you want to look elsewhere. You can always go to a pet store as well, but you will be more at risk of being overcharged and misled by their usually uneducated staff.

Photo Credit: Thomas Wanhoff / Flickr

TERRESTRIAL/ FOSSORIAL TARANTULAS

Tank/enclosure:

Glass tank (various sizes)

ADD TO CART

Plastic tank
(various sizes)

ADD TO CART

Plastic Kritter Keeper
(various sizes)

ADD TO CART

Substrate:

Premium substrate

ADD TO CART

Coconut fiber substrate

ADD TO CART

Compressed coconut fiber

ADD TO CART

Water dish:

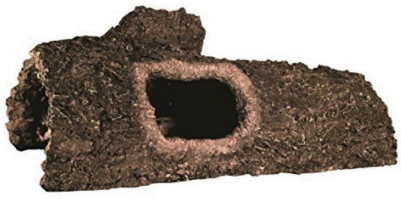
ADD TO CART

ADD TO CART

ADD TO CART

Hide/Decor:

ADD TO CART



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Feeding tongs:

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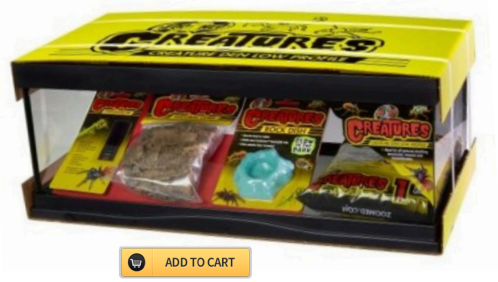
Entire Starter Kit:



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ARBOREAL TARANTULAS

Tank/enclosure:

Glass tank (various sizes)

ADD TO CART

Glass tank (various sizes)

ADD TO CART

Plastic Kritter Keeper (various sizes)

ADD TO CART

Substrate:

Coconut fiber substrate

ADD TO CART

Vermiculite

ADD TO CART

Sphagnum moss

ADD TO CART

Water dish:

ADD TO CART

ADD TO CART

ADD TO CART

Climbing Decor:

ADD TO CART

ADD TO CART

Entire Starter Kit:

ADD TO CART

Feeding tongs:

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OTHER OPTIONS + RESOURCES

Acrylic tanks:

Acrylic tarantula enclosures are a common alternative to glass and plastic tanks. Some good places to get acrylic tanks are:

Jamie's Tarantulas
Tarantula Cages
Backwater Reptiles

Deli containers:

If you have a juvenile or small tarantula, you don't necessarily have to buy a whole tank yet. Many tarantula owners simply get a deli cup and put a bunch of small holes in it for air. This is a good cheap alternative for a growing tarantula. For more info on sling enclosures, head here!

Photo Credit: Tom M. / Flickr

Photo Credit: Big Rings Berlin / Flickr

ENCLOSURE SETUP + CARE TIPS

In this chapter, you will learn about:

- The best place to set up an enclosure
- How to set up + design your enclosure
- Examples of different enclosures
- Heating, humidity, + lighting requirements
- How to clean your tarantula's tank
- How to safely rehouse your tarantula

THE BASICS OF A GOOD ENCLOSURE SETUP

Designing a home for you tarantula can be a lot of fun and you can get super creative - but you also have to be a responsible pet owner. In this section, you'll get a rundown of enclosure needs and see some examples to get the ideas flowing.

Deciding on a location

While figuring out how you're going to set up your tarantula's enclosure is extremely important, knowing where your tarantula's tank will be placed is also critical.

If you have free-roaming pets such as a cat or a dog, you will want to make sure that your tarantula's enclosure is in a place where it will not be knocked over, bumped into, broken into, or otherwise messed with.

Keep in mind that even a short fall could seriously injure your tarantula, so you don't want to put the enclosure anywhere that isn't stable or secure.

Tarantulas do not enjoy direct sunlight (they actually prefer darkness), so it's best to avoid super-sunny areas in your home. They can also become very stressed out by being placed in areas where there's a lot of disturbance. As tarantulas pick up vibrations very well, putting your tarantula where there's a lot of heavy foot traffic and physical/sound vibrations (for example, a nearby blasting stereo) will only stress your spider out.

Another very important thing to be aware of is that nicotine is a powerful insecticide - so if you smoke inside your home, don't do it near your tarantula!

How to set it up

Keep the species of your tarantula in mind when deciding on a layout for its enclosure.

As a guideline, terrestrial (ground-dwelling) and fossorial (burrowing) tarantulas need far more substrate at the bottom of their tank than arboreal (tree-dwelling) tarantulas. These spiders need more substrate to not only provide them with the ability to burrow and dig, but to protect them from falling if they happen to climb the walls of their enclosure. Fossorial tarantulas need the most substrate, as they will likely spend most of their time underground. Generally, a good rule of thumb is to fill about 2/3 of the enclosure's height with substrate. The height from the substrate to the top of the tank should not be more than your tarantula's leg span once you have substrate in there. And in the event that your naughty little terrestrial spider wants to act like an arboreal, spider-proof your lid like this.

Arboreal tarantulas do not need too much substrate on the bottom, although they will need some climbing apparatus like I mentioned in the last section.

As always, all tarantulas should have access to a water dish.

DID YOU KNOW?

Tarantulas are usually nocturnal creatures, meaning they do most of their activity while you are sleeping. You might be surprised that your tarantula spends most of its time hiding!

Photo Credit: Jeff Tidwell/ Flickr

TERRESTRIAL + FOSSORIAL ENCLOSURE EXAMPLES

Photo Credit: Arachnidism

Photo Credit: Arachnophilia

Photo Credit: Dave The Bug Guy

Photo Credit: Monster Reptiles + Exotics

Photo Credit: Reptile Forums UK

Photo Credit: Revolution Reptiles

Photo Credit: Revolution Reptiles

One of Spidey's old tank designs!

ARBOREAL ENCLOSURE EXAMPLES

Photo Credit: Jamie's Tarantulas

Photo Credit: Landed In My Eye

Photo Credit: Pure Exotic

Photo Credit: Reptile Enclosure

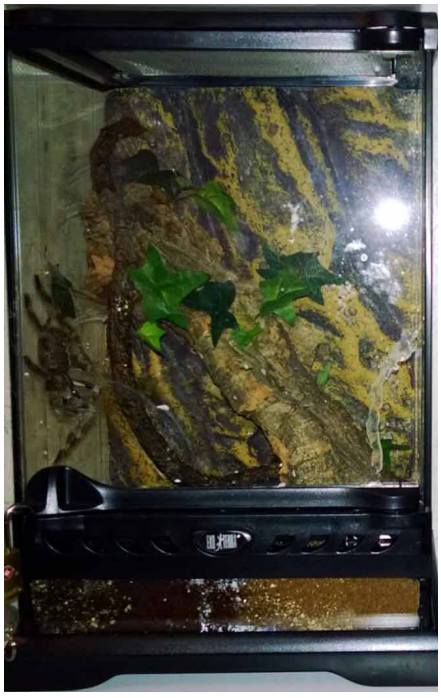


Photo Credit: Tom's Big Spiders

Photo Credit: Tom's Big Spiders

ENCLOSURE HUMIDITY, HEATING + LIGHTING

How to create the perfect environment for a tarantula is one of the most confusing topics, especially for beginners. There's a lot of information about how to create the right humidity, temperature, and lighting and I hope to simplify some of that here.

Humidity

Humidity is one of the most frustrating things to figure out for a new tarantula owner because there is so much conflicting information. But it doesn't have to be so difficult, and we fail to give tarantulas credit for being far more resilient than we think they are.

Humidity requirements really depend on what species of tarantula you have - so be sure to double check for your particular tarantula's needs. But generally, most terrestrial tarantulas do not have major humidity needs - most are fine as long as they have a full water dish in their tank, and that usually provides enough moisture for them. In fact, some terrestrial tarantulas such as the G. rosea (Chilean rose hair) prefer their substrate to be dry and will protest moist substrate by pretending to be an arboreal and climbing their tanks, just so they don't have to touch any wet substrate!

More exotic species (and many arboreals) require a bit more humidity. This can be done by misting the tank slightly or keeping the substrate moist (not wet). Tropical or Asian species of tarantulas require moist soil, which can be managed by using topsoil mixed with a bit of peat moss and some vermiculite for moisture retention.

This may be pretty obvious but it's worth mentioning anyway - if you are misting the tank walls or substrate, do NOT mist

Photo Credit: Big Rings Berlin / Flickr

your tarantula directly. Not only will your tarantula be very unhappy with you, but you could accidentally get water on their book lungs and interfere with their breathing.

Cross-ventilation is also very important for tarantulas that need more humidity. For arboreals or tarantulas that need high humidity, a tank with a screen top or Kritter Keeper-style enclosure allows for way too much airflow, which will mess up the humidity and evaporate all moisture. A good enclosure for humidity allows for cross ventilation (holes or vents are on the side instead of top).

While misting/spraying is a short-term solution to creating humidity, a great and longer-lasting alternative for this is a method used by tarantula expert Tom Moran of Tom's Big Spiders called "make it rain." For this, Tom uses a soldering iron to make holes in the top of a juice bottle so it's like a watering pot - like this:

Photo Credit: Tom's Big Spiders

Then instead of spraying the water into the tank, he simulates a downpour and soaks only one side of the tank. The moisture then spreads. Tarantulas needing more humidity should also be given enough substrate so that they can burrow into the moist bottom substrate as the top layers become dry.

CAUTION: Mold can be an issue for tanks that need misting or moist substrate. Keep an eye out for mold and be mindful that these tanks may need more frequent cleanings.

In some cases, you may need the help of a humidifier - for instance, if you live in a place with cold winters and need to use a furnace, chimney, or wood stove to heat your home. In these conditions, the humidity levels in your home can get very low and dry out your tarantula's tank quickly. This is when a humidifier can be helpful in regulating your tarantula's environment. A humidity level between 40 and 50% is usually a safe bet, and no need to get fancy - you can just leave the humidifier in the same room that you have your tarantula in.

Heating and Temperature

Most tarantulas can be kept at room temperature. Basically, a good rule of thumb is this: if you're comfortable with the temperature in your home, so is your tarantula. A good temperature range for tarantulas is around 70-80°F.

Temperature is usually not much of an issue in the summer (although tarantulas should never be left in sweltering heat or under direct sunlight). However, keeping a comfortable temperature for your tarantula in the winter can be tricky. The best method is the space heater method, in which you put a space heater in the room with your tarantula's enclosure. It's most effective if you can do this in a smaller room with a closed door, but you can also do it in a large room effectively as well, as long as the space heater is somewhat close to your tarantula's tank. You can jump to the "tips and tricks" section for a detailed explanation of how to set this up, as well as some other recommendations.

It is important to note that in the winter season, tarantulas experience seasonal changes - which can also occur when they are kept at lower temperatures. Tarantulas kept in temperatures below a comfortable room temperature may experience a slower metabolism and growth rate in addition to seasonal fasting and a decreased appetite. While these things are usually not life-threatening to your spider, it is important to be aware of them. Usually, normal activity resumes when the warmer seasons begin.

CAUTION: Do NOT use heat mats or heat lamps to keep your tarantula warm. These are extremely harmful and unsafe for your tarantula and could result in them getting injured or cooked to death. This is a very common mistake for beginners, and it is often fatal for the tarantula.

Lighting

Tarantulas do not need lighting - not for heat or to see. Not only do tarantulas prefer the dark, but their eyesight is terrible anyway! Whatever light that is in the room during the day is enough for them, and they do not enjoy direct bright light. In fact, a light can be a hazard to your tarantula because it may either get too hot and burn them, or it could dry out their habitat, which is especially bad for tarantulas who need a moist or humid environment. It could even dry out their water supply more quickly.

HOW TO CLEAN YOUR TARANTULA'S TANK

Cleaning a tarantula's enclosure can be incredibly stressful - especially for the first time! There are a lot of things to think about and prepare for, so make sure you read through this whole tutorial before trying it out.

How often your tarantula's tank needs to be cleaned will depend on how much your tarantula is eating, if there is live prey being left in the tank, and how messy your tarantula's own habits are (many of them LOVE throwing dirt or pooping in their water dish). But all jokes aside, tarantulas are often pretty tidy creatures. They will routinely confine the remains of their meals or excrement to a certain spot in the tank, and even clean up after themselves after a meal. Many times, they will ball up their "trash" with their webs and carry it to a designated spot in their tank!

Often times, you may notice that your tarantula's tank doesn't get dirty enough to warrant a full tank cleaning. So between full cleanings, you can get away with just "spot cleaning" as you see fit. This may include wiping any excrement off the tank walls or removing any old molts or prey items that your spider is finished with.

It is very important to keep an eye on your tarantula's substrate, as sometimes parasites, mold, or other critters can emerge (especially if you allow live prey to wander around in your tarantula's tank - they may even reproduce).

Whenever there are any parasites, mold issues, or other bug issues, you definitely want to remove your tarantula from that environment and do a complete disinfecting and substrate change. Allowing your tarantula to live with parasites or bothersome prey items will not only stress your spider out, but it could leave them open to developing a health

issue or illness (see mites). They may even be susceptible to an attack if they start molting. For these reasons, it is best to offer prey directly to your spider with tongs to avoid prey running around the tank and messing things up. Your spider is a very clean and tidy creature - but its food (crickets, worms, etc.) are not. Preventing these creatures from dirtying up your tarantula's tank will also make your life much easier as far as tank maintenance, and your tarantula will probably thank you (since they are very particular about their homes). If there are no tank issues, you will probably only have to clean your tarantula's enclosure once every few months.

In the meantime, here's a simple explanation of how to do a full tank cleaning job and things you must consider. There are many other ways to do this, of course, but this is just what I personally found to be the cleanest, most hassle-free way and very doable for beginners. The photographic examples are being done on a terrestrial tarantula's tank, but these steps could also work for an arboreal tank.

NOTE: If this is your first time doing this process, set aside at least two hours because you don't want to stop once you start. It probably won't take that long, but you never know if you'll have to chase down a sneaky spider! You might also want to tell any family members/roommates, etc. not to interrupt (unless they want to help, of course!).

1. Preparation

First, make sure you have a plan beforehand for how you're going to remove your spider from the tank and what you're going to keep them in while you clean their tank. You don't want to be figuring this out at the last minute! Also, make sure you have a safe area to work in. If you have pets roaming around, you must either put them or yourself in another closed room because they WILL get curious!

I've found that the easiest and tidiest way to do this is to bring the tank into the bathroom (I have Spidey in a 10 gallon, so this process is much messier and longer for me than for someone with a smaller tank). I place the tank on a towel to protect the floor and already have everything I need (mentioned in next paragraph) in the bathroom with me.


Photo Credit: Patricia Colli

DID YOU KNOW?

Tarantulas are very sensitive to having their tanks cleaned! Any type of change stresses them out, so don't be alarmed if your tarantula acts a little anti-social or anxious for a few days after being placed in its new surroundings.

Photo Credit: The Gut / Flickr

Bathrooms are also great because there are less places for a tarantula to hide if they escape. Make sure you close the door and seal it with towels!

Here's what I use for tank cleanings:

- Garbage bag (for old substrate)
- Kitchen gloves (not necessary but great if you don't want to dig substrate out from under your nails later)
- Scrubby brush and soap (for cleaning the tank)
- Small spare container (with air holes) to hold your tarantula until the clean tank is ready
- Prepared loose substrate

2. Spider extraction

Now you're going to have to remove everything that is in the dirty tank - including your tarantula. If your spider has a tendency to try to climb out of the tank when the lid is off, move them to a secure container with small holes/ ventilation immediately, before you do anything else.

Examine your spider and pay attention to their body language – are they stressed out? Rearing up? Going to make a run for it? Make sure you already have a plan for

how you're going to get your spider out of the tank. Some people use their hands and some people do it with containers – it all depends on what is comfortable and safe for you and your spider.

The temporary container that you put your spider in should have small holes for air and give them a little room to move around.


Photo Credit: Patricia Colli


Photo Credit: Patricia Colli

Also - take out all the decorations, water dishes, etc. from the tank – they will also need to be cleaned.

3. Substrate removal

Substrate removal can be messy, so I put the garbage bag and the tank in the bathtub to cut down on cleanup later.

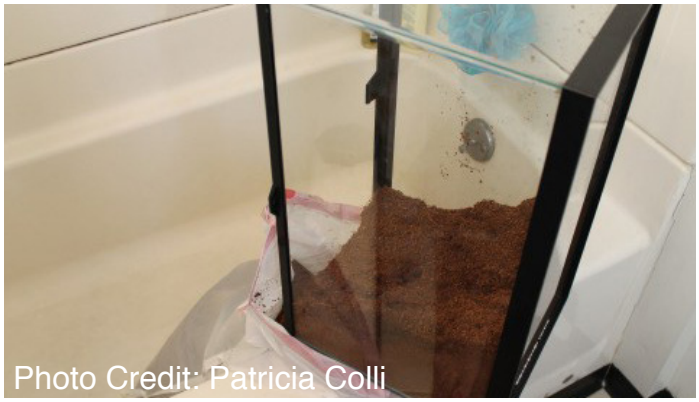


Photo Credit: Patricia Colli

4. Cleaning the tank

I use hot water, a disinfectant soap and a scrubby brush to clean the tank. Again, this is much easier if you have a smaller tank. A detachable shower head will also make this faster/easier.


Photo Credit: Patricia Colli

5. Check on your spider

Halfway through this process you'll want to check on your spider to make sure that they're ok (and still in their container).

Check to see if there is anything causing them stress. They rely on us for a comfortable environment.


Photo Credit: Patricia Colli

6. Add the clean substrate
After the tank is cleaned, dry the bottom and walls before adding in the substrate. If you are adding dry loose substrate, this will be an easy process for you. However, if you have compressed bricks of substrate, you will have to hydrate the bricks with water to make loose substrate.

The important thing with compressed substrate is to make the bricks wet enough to break apart but not soaked - because most tarantulas won't like that. Ideally, you will have already pulled the bricks apart and either let the substrate air out or baked it so that it's dry. However, if you haven't already prepared the substrate you can still continue - just be sure not to let the substrate get too wet, especially the top layer.

If your substrate is a bit damp and you need to put your tarantula back inside its tank, just make sure your tarantula has something dry to stand on, like a log or hide. Remember that terrestrial and fossorial tarantulas need at least 2/3 of the tank filled with substrate to protect them from a climbing injury if they fall.

7. Tank setup
When your substrate is in the tank, you can start setting it up! Every tarantula tank should include a shallow water dish (no sponges, please!) and some sort of hide (logs are popular). Arboreal tarantulas will need a branch or something to climb on.


Photo Credit: Patricia Colli

8. Introduce your spider to its new home
This is pretty easy since your spider is in a container - just make sure they don't make a run for it or display defensive behavior when you open it. Gently nudge them into their tank slowly, or leave the container in the new tank so they can come out on their own. Shut the lid or door and you're done!

Photo Credit: Raul Hernandez Gonzalez / Flickr

HOW TO REHOUSE YOUR TARANTULA

Whether it's because you need to temporarily remove your tarantula so that you can clean the tank or your spider needs a new home because it is outgrowing its old one, you will eventually need to rehouse your tarantula.

You don't need much to rehouse a tarantula - you just need a temporary plastic tank or container with small holes in it for airflow. It's also a smart idea to have all pets locked up, and another human on hand just in case you have a runaway tarantula during the process.

While sometimes it's unavoidable, rehousing alone can be dangerous because your spider might dart up your arm or leg to a part of your body that you cannot reach. A second pair of hands can be really helpful and comforting in the event of an unpredictable tarantula.

A word of comfort

For many tarantula owners - especially first timers - this can be extremely stressful. But if you are prepared and know what to expect, it doesn't have to be.

Prepare, prepare, prepare

The first thing you will want to do is make sure that all equipment is available, clean, and ready to be used so that this process goes as quickly and smoothly as possible. This means that all equipment is already clean and dry, new substrate is ready and in the new tank already, and the tarantula's water bowl, hide, and other tank decorations are set up. This is really important for not only you, but your tarantula.

You may not have realized this, but moving is really stressful for them, too! It takes tarantulas a long time to adjust to their homes, and they don't like change very much! So the more seamless and


Photo Credit: John / Flickr

efficient you can make this process for them, the better it will be for the both of you.

The next important thing to keep in mind is location. Where you rehouse your tarantula is extremely important. You want to make sure that it is a closed-door location where no other problematic pets (like dogs or cats) or children can interrupt or interfere, as distractions could be dangerous to you and your tarantula. Many people prefer to do this in a bathroom, specifically in the tub (with the drain blocked!). This is deemed a safe method because should your tarantula try to pull a fast one, they probably won't get very far. Bathrooms are also preferable because there are less places to hide if they escape.

The height you are rehousing at is also important. You will want to rehouse your tarantula close to the floor so they cannot fall or hurt themselves - so don't do this on a table or desk. It's also useful to do it in a place where there aren't hiding places for your tarantula to hide under or behind.

With that in mind, once you have all your

Photo Credit: Recommend Group / Flickr

tank equipment and your tarantula is in the right location, it's time to start rehousing.

Time to rehouse!
Make sure you are totally focused and will not be interrupted during this time. Don't plan a rehouse if you are in a rush and have to leave the house soon. This is for the safety of you and your spider.

Always read your animal's body language and make sure you do not startle it in any way. If your spider is moody, take the rehousing slowly or just leave it until the next day or a few hours later.

As mentioned before, you will need some sort of small plastic tank or container (with small holes for airflow) to transfer your tarantula from its old home to its new home, or to hold your spider if you're just cleaning the tank. The best way to get your tarantula safely into the container is to first test its temperament with a paintbrush, tongs, or a pencil. If your tarantula is not getting defensive or throwing up a threat pose, it's a good sign that you can proceed.

Gently nudge your tarantula into the container and put the lid on it once the tarantula is in there. If you're doing this in the bathtub with the drain blocked, your chances of an escape happening are relatively low.

Once your spider is out of its tank and into a smaller container, you are free to slowly transfer it to another tank, or place the temporary container with your spider in a safe place if you are cleaning out its tank.

Remember, move slowly and be careful not to drop this container - a fall or drop can easily kill your tarantula. To transfer your tarantula from the container to the tank, slowly and gently take off the lid and tilt the container so your spider is encouraged to come out. This does sometimes require patience, as your tarantula may be scared or stressed out from all the excitement.

You can also nudge your spider gently with a long object to help coax it into its new tank. Or for very shy spiders, sometimes it's best to just leave the open smaller container in the new tank until the spider comes out on its own. Either way, your goal should be to keep your spider safe and to move as gently as possible through this process.

Photo Credit: Eran Finkle / Flickr

TARANTULA BEHAVIOR + DEFENSES

In this chapter, you will learn about:

- Tarantula temperament
- How to decode your tarantula's body language
- How to test your tarantula's temperament
- Common tarantula defenses + warnings
- Stridulation (hissing)
- Other common behaviors you should know about

TEMPERAMENT + BODY LANGUAGE SIGNALS

While whether or not tarantulas have "emotions" or "moods" is still highly debated, they do give off bodily cues that lead to important insight about what they feel.

Learning your tarantula's temperament and body language cues are critical in not only preventing yourself from getting bitten, but to ensure that you are not stressing your tarantula out.

Some species of tarantulas are recommended for beginners due to their more docile temperaments, however there are always exceptions to the rule. Many Old World tarantulas have a reputation for being less tolerant of being bothered and faster to defend themselves.

While every tarantula is different and there are certainly behavioral differences across different species, generally a happy tarantula is calm and not doing too much. There is a reason why people refer to tarantulas as "pet rocks." A tarantula that is pacing back and forth a lot could be a sign that it is uncomfortable or something is making it feel stressed out. As tarantulas are generally anxious creatures who hate change, it's not hard to get these creatures riled up.

One big sign that your tarantula is NOT having a good time and has had enough of you is when they throw up a threat pose (like the tarantula on the right is doing). Another sign of distress is a tarantula who is afraid. Scared tarantulas will pull their legs in and over their heads to try and hide, like the tarantula below:

Photo Credit: Big Rings Berlin / Flickr

Photo Credit: Matt Reinbold / Flickr

TESTING TEMPERAMENT + DEFENSE WARNINGS

Before doing any sort of handling or tank maintenance, a tarantula's temperament should always be tested to ensure that both you and your spider will remain safe.

This is best done by taking the blunt end of a paintbrush, pen, tong, or other long apparatus and placing it in front of your spider. If the tarantula strikes, it is feeling threatened and defensive, and if you proceed to bother it you will be putting both yourself and your spider at risk. You may get bitten, and your spider may get hurt and stressed out in the process.

However, if your spider simply sits there or moves calmly away, it's likely safe to proceed slowly, gently, and carefully. Look for signs of stress from your spider and try not to disturb them if you are working in its home.

If you are handling your tarantula, make sure that the area is safe and that you are well aware of the proper way to handle a tarantula - which I explain more in the handling section.

Tarantula defenses

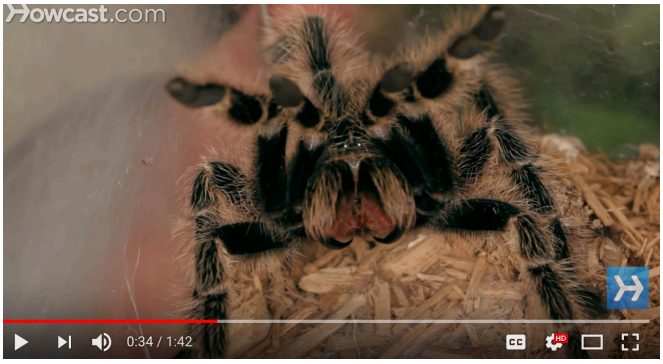
Tarantulas defend themselves in two ways: biting with their fangs or flicking their urticating hairs at the threat. I must note that tarantulas are NOT aggressive - they are defensive. They do not attack unless provoked or threatened, so as long as you respect them and their space, your chances of an attack are very low.

Tarantulas have long, sharp fangs that have venom in them. Every species of tarantula has venom - which enables them to paralyze their food so they can consume it. However, the venom of some species is more powerful than others (Old World, more exotic tarantulas have more potent venom).

The nice thing about tarantulas is that you can usually see a possible bite coming - a tarantula will throw up a "threat pose"

when it feels like it's being attacked - a sure sign that if you don't back off, a bite will follow.

In a classic threat pose, the tarantula will rear up, putting its first set of legs and pedipalps in the air to expose its fangs to you. If your tarantula is doing this, leave it alone or you will regret it. Here's a great video by Howcast that demonstrates a tarantula doing the threat pose. **NOTE**: NEVER purposely provoke your tarantula like this - this is for demonstration only):



A tarantula's other defense is to flick their urticating hairs, which are located on the back of their abdomens. Old World tarantulas do not have these hairs - only New Worlds do.


Photo Credit: Wikimedia Commons

When they're about to do this, you'll notice your tarantula reaching with one of its hind legs to aggressively scratch its "butt." Tarantulas also rub their butts when they are bathing, but flicking happens notably faster and is a more aggressive movement. Here's a good video by Chao Jimmy Wu that shows what this looks like:

It's best to get away from your tarantula as fast as possible if you see your tarantula doing this, because you do NOT want those hairs to get in your eyes or on your face/ hands (these can cause temporary blindness or even a burning/stinging sensation). As urticating hairs fly off of the spider's body and into the air, these hairs will attach onto any object close to it. It is likely that your tarantula will have a bald spot after flicking hairs - don't worry, they will regrow the hair during their next molt.

As with a spider bite, an allergic reaction is always possible with urticating hairs. Read the section on human first aid for treatment options.

STRIDULATION: THAT WEIRD HISSING SOUND

Tarantulas are completely silent critters, with one exception: every now and then, you may be very surprised to hear them "hiss" at you! Here's what's happening.

That hissing sound you may hear is actually a warning sign that your tarantula is feeling threatened, and is one of its defenses (although sometimes it can be used in mating or territorial behavior). Often, stridulation occurs as part of a threat pose. A tarantula may also make this noise if they are startled.

This sound is produced when the tarantula rubs special bodily structures, usually consisting of torn setae, paddle setae, and plumose setae, together. These structures are on the opposing faces of the chelicerae and pedipalps, as well as forelegs.

Depending on the species, the volume, length, and frequency in which stridulation happens will differ - but some tarantulas are so loud they can be heard all the way across the room, even from 15 feet away!

It should be noted that not all tarantulas have the ability to stridulate, although there are species in both the New World and Old World categories that have this ability.

The more you learn about and observe tarantulas, you will come to find that they're very much like 8-legged cats, and this "hissing" is another hilarious example of those similarities. Here's a really awesome video of a tarantula stridulating by Otticobiondo:

Photo Credit: Greg Schechter / Flickr

OTHER COMMON TARANTULA BEHAVIORS

Aside from defense warnings and temperament cues, tarantulas also display other routine behaviors as they go about their daily spider business! Here's what you'll see your spider doing (some of it is pretty adorable!).

The "happy dance"

The tarantula "happy dance" is one of the most adorable things to witness for a tarantula owner. Basically, after a tarantula has caught its meal, it does a little dance where it will spin around in a circle while moving its butt. Your spider will probably move its spinnerets and release webbing while doing this.

No one really knows exactly why they do this, but there are guesses that tarantulas do this dance and make a web mat to mark an area where it caught food for future reference. Sometimes the mat will also serve as a place where the spider can wrap up any unfinished prey for later. Regardless of the reason why, this dance is a common observation amongst tarantula keepers regardless of the species of tarantula. Here's a great video by Nina Jinx of a tarantula doing this dance:

Standing on tiptoes

Another interesting behavior that has been noticed across the hobby is when tarantulas stand up straight on their tiptoes. This is usually observed when a tarantula is eating. After catching prey, many tarantulas raise their bodies up away from the ground, standing up as high as they can on their feet. There are different theories about why tarantulas do this - such as trying to keep the

prey clean by preventing it from touching the ground, or even theories about how it might aid the digestion process. There hasn't been a consensus or study on this behavior yet, but it's still pretty cool to watch! Here's a picture of my own Spidey doing it (some spiders may exaggerate this stance even more):


Photo Credit: Patricia Colli

Spider yoga

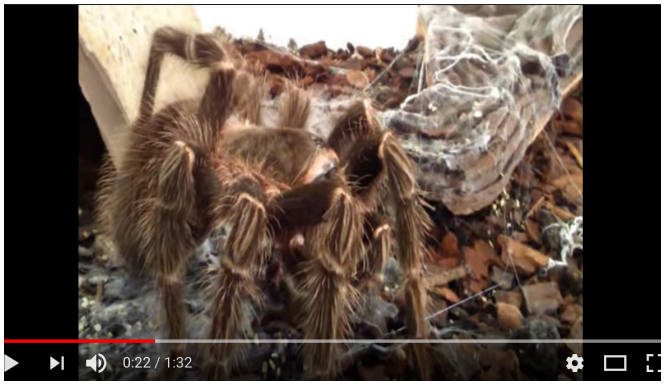
Every now and then, you might catch your tarantula doing its own weird form of yoga, where it will stretch out all of its legs away from its body. Tarantulas commonly stretch out their new bodies after molting, but sometimes they do this just for fun. Here's an example of one of Spidey's "yoga" sessions:


Photo Credit: Patricia Colli

Bathing

You'll never forget the first time you see your tarantula bathe - it might look like your spider is eating itself! Tarantulas are very hygienic, and they bathe themselves pretty frequently regardless of whether you can catch them doing it or not.

When bathing, tarantulas will use their pedipalps and legs to go over their entire bodies and fangs. They even clean their little feet by using fluid from their mouths! It's a thorough process and can take hours. Impressively, some tarantulas don't even need to be on the ground to do this - they can do it from the sides of their tank! Here's a great video by Living With Giant Spiders of a standard tarantula bath:



Sometimes when a tarantula uses its back legs to bathe its abdomen, this can be confused with flicking hairs, a defense move. But when a tarantula is about to flick hairs, it will lift its back leg and rapidly scratch the back or side of its abdomen where its urticating hairs are. Generally, bathing happens at a relaxed

pace for tarantulas. However, if you've been bothering your tarantula and see your spider doing this while it's not giving itself a bath, you will want to move away (read more about flicking hairs here).

Increased activity

While there are species that are more or less active than others, most tarantula owners will likely tell you that a content, calm tarantula just sits around and does a whole lot of nothing. So when your tarantula is roaming around far more than usual, it could be a sign of agitation, stress, or discomfort.

Look for signs that something in its tank could be bothering it (like uneaten prey) and that its surroundings are comfortable. Some tarantulas, such as the Grammostola rosea, will display abnormal behavior and climb their tanks if their substrate is wet. Some tarantulas are very antsy right after a tank change. It takes a tarantula a few days to get used to their surroundings, so just keep an eye on them and make sure their enclosure is safe.

Tarantula activity may be impacted by seasons as well. If your tarantula has been doing nothing all winter and suddenly starts moving around much more as it warms up, that's a normal seasonal change that occurs for many tarantulas.

Males may also become more active once they are sexually mature, as they are looking for a lady tarantula to mate with.

Excessive Webbing

Sometimes tarantulas just get in the mood to make a lot of webs to decorate their homes and there is no greater reason behind it. However, sometimes webbing more than usual can be an important clue.

For example, it could be a sign that your spider is getting ready to molt. If you have a male tarantula and he has reached the age of sexual maturity, it could also be a sign that he is making his sperm web.

We still have much to learn!

As far as tarantula behaviors go, studies are still very much in their infancy. We still have so much more to learn, and most of the "cutting edge" discoveries are coming from observant, curious tarantula owners. So if you see your tarantula doing something weird, it's a great idea to document it and hop over to tarantula forums such as Arachnoboards to see if others have observed this behavior and what it might mean!


Photo Credit: Wikimedia Commons

Photo Credit: Frank Juarez / Flickr

PICKING UP + HANDLING TARANTULAS

In this chapter, you will learn about:

- The risks of handling
- How to keep your tarantula safe
- Different ways to pick up a tarantula
- How to reduce your tarantula's stress during handling

SHOULD YOU EVEN HANDLE YOUR SPIDER?

Whether or not you choose to handle your tarantulas is up to you, but don't get too excited by pictures of people holding their tarantulas.

The truth of the matter is that tarantulas are actually the happiest when you leave them alone. Unlike cats, dogs, and other pets, it's not likely that tarantulas get pleasure out of being picked up or handled. In fact, often times it can have the opposite effect - tarantulas get stressed out pretty quickly, and being removed from their environment and messed with is one of the fastest ways to irritate your tarantula. I want to stress that if your tarantula bites you or tries to, it is not trying to be malicious. Tarantulas are not aggressive - they are defensive - and your tarantula is simply trying to protect itself and its home (they scare easily!).

You also aren't any less of a tarantula keeper if you never hold your tarantulas. Sometimes tarantula hobbyists use handling as "bragging rights", but don't feel pressured. What makes a great tarantula owner is the care you give your spiders, not how much you handle them.

Misconceptions about handling

The tarantula community is divided on whether tarantulas can be "tamed" or get used to holding. While some tarantulas and species are more docile and can tolerate more handling than others, these creatures are still wild by nature and will always follow their instincts. They are unpredictable and cannot be domesticated. Just because you have successfully handled your tarantula a few times does not mean that you can be careless or that your tarantula will never defend itself if it gets scared. You should treat every handling experience with the utmost respect, attention, and care, and be willing to take responsibility for the risks.

Photo Credit: Thomas Wanhoff / Flickr

The risks

The tarantula keeping hobby is split on handling tarantulas. Some endorse handling when done safely, and some believe it's truly dangerous and unnecessary. There is always the potential that your tarantula might not be in the mood and may bite you or flick hairs.

You must be extremely careful when trying to handle exotic and Old World tarantulas, because they tend to be much faster, have bigger fangs, and far more potent venom than the more docile New World species. They do not have the urticating hairs that the New World tarantulas sometimes use as a first defense, so there will be no hesitation to bite you if they feel threatened. Many experienced tarantula owners don't even attempt to handle their exotic species because they feel it is irresponsible and dangerous.

You must also accept that in any handling situation, you are a bigger danger to your tarantula. Do you trust yourself not to freak out and drop your tarantula (which could be fatal) if you get bitten? Can you resist the instinct to protect yourself and take the bite so you don't hurt your spider? What will you do if your tarantula gets scared and bolts? These are things to consider before handling.

A good majority of accidental tarantula deaths are caused by owners dropping them while handling. Your tarantula's life is literally in your hands while you are holding it and you should not take that lightly. Educate yourself on proper techniques and be aware of your tarantula's body language. Have a plan for what you will do if your tarantula gets defensive.

HOW TO SAFELY HANDLE YOUR TARANTULA

Even if you never plan to hold your spiders for recreational purposes, you still need to learn how to hold and handle them properly and safely - you never know if you will need to use it during a rehousing or other care-taking activity.

Precautions

First, you should not jump into holding your tarantula right when you get it - this is especially true if you've never handled a tarantula before. You should give the spider a few days to settle into its new home, and spend time studying and testing its temperament to see how docile (or not) your tarantula is and how they react when disturbed.

One really important thing about tarantula handling is providing a safe environment. Do not handle your tarantula around your loose cat or dog or any other animal (or human) who may pose a threat to it once it is out of its tank. Another major point is to be aware of how fragile your tarantula's body is. Never handle them from a high, hard surface, because if they fall their bodies can easily rupture on impact, or suffer another life-threatening injury. It's much safer to be closer to the ground, sitting down, or around softer surfaces like pillows.

Before handling your tarantula, be aware that they will probably not stay still. You will likely have to keep changing hands so your tarantula can "walk." Your tarantula may also try to crawl up your arms or other parts of your body, but it's safest to keep them in your hands. You may have seen photos of people putting their tarantulas on their faces. This is something I highly discourage because it's quite dangerous for you if your tarantula bites or flicks hairs. Another thing to remember is how sensitive their bodies are to air flow. If you breathe on your tarantula, there is a very high

probability that you will scare it and they will bolt or panic immediately. So if you are holding your tarantula, do not talk directly near it or breathe on it to avoid startling your spider.

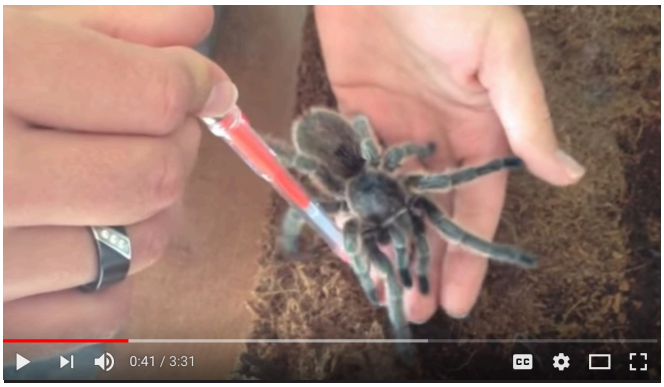
One last precaution. Many people are curious about tarantulas and may ask you to hold or touch your pet. It's your job to be very picky about who you trust with your tarantula, and to educate and supervise them if you decide to indulge their curiosity. Be careful and responsible!

How to safely pick up a tarantula

First, you should always test a tarantula's temperament by nudging it with a paintbrush or other apparatus. If it attacks the brush, your spider is not in the mood to be bothered and you should leave it be.

That being said, there are a few different techniques you can use to pick up a tarantula if it's docile. One method that I believe is most beginner-friendly is to gently place one hand on the ground near the tarantula and gently "nudge" the tarantula from behind so that it crawls into your hand. Because your hand is acting as an extension of the ground, I think this is the least stressful way for the tarantula. Your tarantula may pause a little when they feel the different texture of your skin, but will proceed once they realize you're a safe surface they can walk on.

Another safe (more advanced) way to pick up a tarantula is to grip it securely between its second and third pair of legs with your thumb and forefinger. This works because your tarantula's reaction is to stop moving when it feels its legs leave the ground at the same time. This is a good tutorial by RenoHerpSociety the demonstrates a few ways to pick up a tarantula:



When you are lifting or handling your tarantula, the key is to do everything slowly, smoothly, and gently. You should always keep a hand underneath the spider. It's a good idea to practice holding while your hands are in your tarantula's tank for the first few times, until you get the hang of it. That way in case your tarantula falls, they are on soft substrate and will only fall a few inches at most.

Remember - never feel pressured to handle your tarantula. If you do not feel comfortable, you don't have to!

Photo Credit: Beckwith-Zink (Diane) / Flickr

TREATING INJURIES + ILLNESSES

In this chapter, you will learn about:

- Tarantula first aid
- How to make an ICU
- How to perform surgery on your tarantula
- How to sedate your tarantula
- Humane euthanization
- How to prevent illnesses + injuries
- Common ailments
- Tarantula pain + death
- Human first aid + support

BASIC FIRST AID FOR YOUR TARANTULA

Unlike cats and dogs, tarantulas cannot tell us when they're sick or hurt, and exotic pet doctors aren't very common. To protect your tarantula, you need to be knowledgeable in prevention, first aid, and health threats to your tarantula.

As concerned tarantula owners, we all hope that we will never have to see our spider get injured, but sometimes it happens and it's better to be prepared and know what you can do. Unfortunately, exotic pet doctors are few and far between and many veterinarians are not well-versed in alternative pet care. It's certainly nerve-racking to know this, but I have to be honest with you: if your spider gets hurt, you will likely be its only hope. So these next few topics are extremely important for you to know.

How to make a tarantula ICU

One of the most important things to know in case of an emergency is how to make your tarantula its own intensive care unit.

If your tarantula is dehydrated, unwell, or injured, the first thing you need to do is make an ICU - which is pretty much the equivalent of a hospital bed - for a spider! An ICU is basically comprised of a deli cup or plastic container (depending on the size of your spider) with moist paper towels and elevated humidity. The advantage of moving your tarantula to this setup is that it raises the humidity, provides your spider with moisture, and gives you a more focused, hygienic area to work in if you need to help your tarantula or perform emergency "surgery." The key here is to provide moisture - but do not flood the ICU, because you don't want your tarantula's book lungs to get wet!

Besides moist paper towels and a clean container, you may also need tweezers, a scalpel or sharp scissor, q-tips, some spray dressing, petroleum jelly, cornstarch and superglue to mend your tarantula or stop your spider's "blood" (hemolymph) from leaking out.

This is a fantastic video by tarantula expert Rob Carman (aka Tarantulaguy1976 on YouTube) that visually explains how to make an ICU for your tarantula:

Of course, we all hope we will never have to put our spiders in ICUs, but dehydration, molting issues and leg injuries are one of the most common threats to tarantulas, so this is really useful information to know. It's also wise to have these first aid supplies stored somewhere so that you can get right to work if your tarantula needs treatment.

Photo Credit: Elroy Serrao / Flickr

DID YOU KNOW?

Tarantulas have the ability to regrow their limbs! For example, if a tarantula loses part of their leg, it will slowly grow back over a few molts (as long as there is not too much blood loss and the wound is closed).

Fixing a broken leg

The most common injury for a tarantula to get is a broken leg. In many cases, a tarantula can repair its own broken leg and the amputated leg will regrow or regenerate during the spider's next molt.

For minor breaks, it can be best to leave it alone as long as no blood or hemolymph is leaking out. Many times when spiders have a leg injury, they will have it at a 'break point', or joint that is close to the body. Tarantulas have special muscles at these break points that perform a process called 'autotomy', in which the muscles will clamp shut to make sure that the spider can't lose too much blood.

Tarantulas can usually survive with a missing leg (or two, or three) and will regrow them eventually. As long as the tarantula can still catch prey and eat, the spider has a good chance of recovering.

In one of the most inspiring recovery stories from the Bob The Former Disabled Tarantula Facebook page, a young tarantula lost all but one leg when he escaped from his enclosure and crawled onto a sticky pad to catch ants. His owner saved him and documented his journey - and Bob pulled through and eventually grew all his legs back!

Here's Bob, injured vs. fully healed!

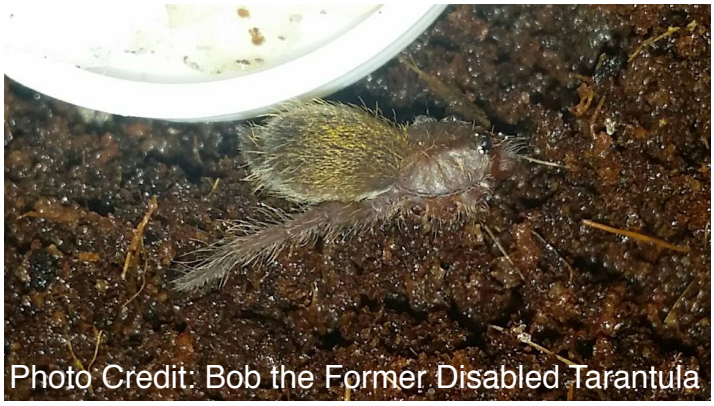


Photo Credit: Bob the Former Disabled Tarantula

Photo Credit: Bob the Former Disabled Tarantula

This tarantula was lucky due to the breaks being at a joint. However, a serious break that is not near a joint may not be able to repair itself during a molt, or may even continue to bleed out. In this case, it is necessary to make a clean amputation and seal the wound.

A tarantula losing too much of its hemolymph is deadly. It will have trouble moving and lose pressure in its body, which can be fatal. When a tarantula loses too much pressure, its legs will start to curl underneath its body in what is called a "death curl" (more on this later).

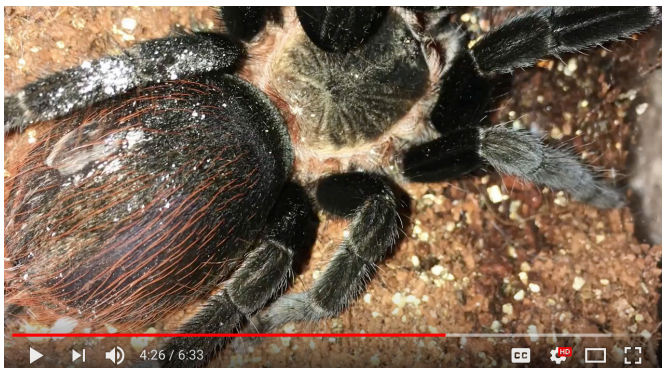
Photo Credit: Public Domain Pictures

Amputation and sealing wounds

To amputate a leg, a sterilized scalpel or sharp scissor should be used and the leg should be cut between the body and the break. If there are segments between the body and break, you should choose the leg segment closest to the break. Unlike human blood, tarantula blood - hemolymph - does not clot. So after the leg is amputated, the wound should be sealed with spray dressing, petroleum jelly, cornstarch or superglue (although superglue has risks).

Minor cracks and breaks in a tarantula's body can also be fixed with these items.

Here's a great YouTube video by TarantulaSam in which he shows and explains how he mended his tarantula's abdomen wound with cornstarch and talks about some concerns with using superglue:



However, some cracks and breaks can be so severe that they are untreatable and molting will not help. In these cases, you may need to euthanize your tarantula.

TARANTULA SEDATION + EUTHANIZATION

Sedation and euthanization are good to know in case your tarantula suffers a treatable or (unfortunately) untreatable injury or illness. While there isn't much scientific research or data on these practices, I'll explain what has been observed in the hobby and some best practices.

Contained (non)sedation

If you are trying to fix one of your tarantula's limbs, a way to temporarily "sedate" your tarantula without really sedating it at all is to simply contain part of its body in a container so you can work in peace on the injured limb. It is advised that you try this method first if possible and avoid having to actually sedate your tarantula, as there isn't too much research on sedation and mistakes can happen. Many tarantula owners agree that the risk of a possible bite is still a better option than trying to sedate your tarantula with methods such as chilling and carbon dioxide.

Your choice of action will all depend on what kind of injury your tarantula has and what you need to do to repair it quickly. Here's a useful video by YouTube user Guskoro Pradipta Prana Arief that shows how to use a container to safely hold a tarantula in place while doing a leg amputation:

Unfortunately, tarantula medicine is highly understudied, so there isn't much specific information about real sedation techniques - but it's critically important to be aware of some of the tried and true options.

If physically containing your tarantula won't work, you may need to actually sedate your tarantula because it's pretty hard to operate on a terrified spider that might be trying to bite you!

Note that these next sedation techniques have risks and should only be attempted in a life-threatening or particularly challenging situation.

Sedation technique 1: Refrigeration
This method involves using temperature reduction, in which you put your tarantula in a colder environment such as the refrigerator (NOT the freezer - it will die) for a short period of time to slow it down or immobilize the spider.

This method can be risky because the temperatures of refrigerators vary, as well as tarantula species and sizes. It is hard to come up with a definite rule for how long it will take for your tarantula to be sedated and how long sedation will last.

It is recommended to put your spider in a clear lidded container (with vents) and place it in the fridge for no more than 5 minutes before your first checkup. If your tarantula is still pretty active, check on it every few minutes until it is less active. It has been reported that 7-inch tarantulas could be chilled for 20-30 minutes, which yields about 5 minutes of immobilization to work with the spider. This time frame will be more or less depending on the size of your tarantula. However, it is not recommended that you should just leave your tarantula alone in a refrigerator for over 5 minutes without at least checking on it.

Once you've found that your tarantula is in a more sedated state, work as quickly as possible to fix its wound - it won't be long before your tarantula warms up again!

Sedation technique 2: Carbon dioxide
Another sedation alternative that is equally popular is the CO2 method. This works by temporarily depriving the tarantula of oxygen so that it stops moving.

CO2 has been known to yield rapid inductions and recoveries, however it has been noted that some species recover in a very disoriented state and have a higher tendency to attack in self defense when they regain mobility. One study noted that when carbon dioxide was used to sedate Grammostola rosea tarantulas, the inductions and recoveries were rather violent and the tarantulas became agitated when they were first exposed to the CO2. Before induction, researchers noted that the tarantulas would have seizure-like activity

and defecation. However, there was no notable short term or long term impact on the tarantulas post experiment.

If you would like to use CO2 for sedation, you can put the tarantula in a clear empty tub with no holes, and stick in a tube that has been attached to a CO2 cylinder. According to tarantula owners who have used this method, this works pretty fast to sedate the tarantula, however it will suddenly become revived if you don't work fast enough.

You can also use baking soda and vinegar to create CO2. Your tarantula should already be in an airtight container for this method. Take a soda bottle and put 1" of baking soda at the bottom. Then take an empty balloon in one hand and pour vinegar into the bottle - it will start to fizz and give off CO2. Take the balloon and quickly cap the bottle's opening so that the balloon will fill up (you will have to squeeze the bottle as the fizzing stops to keep filling the balloon). Then crack the lid to the container your tarantula is in and empty the balloon's CO2 into the container, closing the lid as fast as possible. The CO2 should start to work within 60 seconds but may take up to 10 minutes for the tarantula to become subdued. The keeper who used this method stated that their tarantula was down for about 20 minutes with this technique. Generally, recovery time will be about the time it took to put the spider to sleep.

Some tarantula owners have also used dry ice to create CO2, however it is important not to chill your tarantula if you are using this method, because this could lead to death. CO2 generated from dry ice is considered more risky by some because gas flow is harder to regulate. Also, you do not want your tarantula to come in direct contact with dry ice. There is not much information on the use of dry ice for anesthesia, but there have been reports of a tarantula owner successfully subduing their spider by putting dry ice in a cup of warm water and then allowing the gas to fill the tarantula's container.

Sedation technique 3: Isoflurane

Isoflurane as well as sevoflurane are anesthetic gases that have had some effectiveness with invertebrates. While they are slower to sedate a tarantula than CO2, it does not cause the convulsions and sudden responsiveness that carbon dioxide does. According to experiments, it is not uncommon for a tarantula to only become partially immobilized and still be slightly responsive to stimuli while using Isoflurane. In a study using Isoflurane

sedation, tarantulas were noted to be calm throughout the process and did not respond adversely to the gas exposure.

While Isoflurane is an alternative, you will likely not be able to use this method, as the purchase of the anesthetic gas usually requires a veterinarian's prescription.

Ideally, any anesthetic agent won't have any major post-anesthetic effects and should provide a safe, rapid, predictable response that allows you to treat your tarantula. Unfortunately, this is an area that still needs much scientific exploration and research.

Humane euthanization for tarantulas

In some unfortunate cases like severe sickness and injury, you may need to euthanize your tarantula. This can be an incredibly heartbreaking decision to make, and you owe it to yourself to know that you did the right thing for your spider and helped it pass on in the most humane way possible.

Which methods are the most humane way to put your tarantula "down" are debatable, controversial, and unfortunately lacking in any in-depth study. Some tarantula owners will argue that a massive trauma (blunt force such as smashing or crushing) is the most humane way to kill a tarantula because death is immediate and painless. However, most tarantula owners agree that the best, most kind way to euthanize a tarantula is through freezing - which is also a method The Tarantula Keeper's Guide recognizes as a humane route to go. As colder temperatures can be used to sedate a tarantula, it seems logical that freezing is the next humane step if your tarantula is dying. Freezing is also considered a more "natural" death, as tarantulas can often pass in the wild when temperatures drop.

To humanely euthanize your tarantula, you should put them in a plastic tub with a secure lid so they cannot escape. You should then place the tub in the freezer so that the cold can euthanize it, eventually freezing it and allowing it to pass on.

While we don't have much evidence to prove that this is quick and painless for tarantulas, this will at least slow your tarantula's internal organs so it falls asleep and dies. You can speed this process up for your tarantula by putting some substrate in the container with your tarantula and then pouring a little water on the substrate - this will allow your tarantula's temperature to drop more rapidly. Here's a really good

video by tarantula keeper Daylitor Knight on how to do that, in which his tarantula passed on within 35 minutes:

I know this isn't fun to think about, but it is somewhat comforting to know that there are things we can do for our tarantulas in their most helpless moments.

The truth of the matter is, we still have so much to study and learn about these creatures before we can claim that anything is truly "painless" for them.

To educate yourself on the pros and cons of these methods and others, here's a very fascinating thread on Arachnoboards about humane tarantula euthanization. While we may have limited knowledge, the more you are aware of your options and different points of view on tarantula treatments, the more you will be prepared in case your tarantula needs your help.

Photo Credit: Jim The Photographer / Flickr

PREVENTING INJURIES TO YOUR TARANTULA

The best way to avoid and save yourself the stress of having to operate on your tarantula is by safeguarding them against injuries in the first place.

It is important to know that tarantulas are extremely fragile and can get a life-threatening injury from falling. Even if a tarantula falls from a short distance, they can suffer broken legs or cracks in their bodies. However, falling from a long distance or onto a hard surface can cause death because their bodies can burst (especially in large or fat tarantulas).

Tarantulas can also sustain injuries from being handled too roughly or having something fall on them. The best way to protect your tarantula from this happening is to have its tank in a safe, secure place and to be careful not to hold them from a high distance when handling or moving them. Tarantula owners must be gentle and mindful when handling, and keep them close to the ground.

It is also important to ensure that they do not fall when they are in their tanks and climb the walls, or get stuck on a mesh lid if they have one.

A few ways you can safeguard a tarantula's tank is by making sure they have lots of substrate if they are a ground dwelling spider, taping up a mesh/screen lid so they can't get their claws stuck on the grid, and by making sure there are no sharp objects in the tank. I go into the exact steps on how to safeguard a tarantula tank in this section.

Another way to prevent tarantula injuries is to ensure that your tarantula is given appropriate prey at the right size, and that the uneaten prey is not left in the tank if the tarantula is in premolt.

Photo Credit: Big Rings Berlin / Flickr

TARANTULA HEALTH ISSUES + PREVENTION

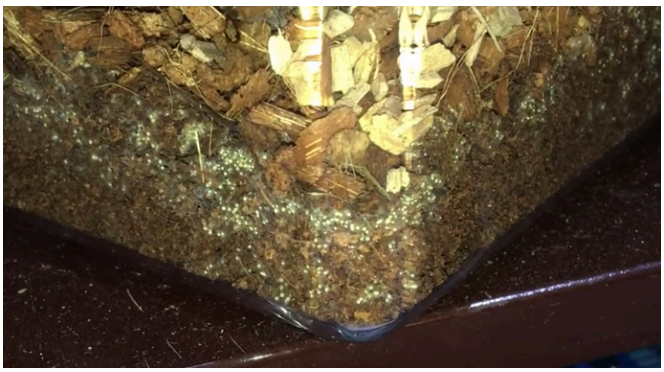
Tarantulas can not only get injuries - they can also fall ill to parasites and other illnesses. Hopefully your spider will never encounter these, but it's good to be aware just in case. Here are some common issues that may happen.

Mold and Fungus

While some spiders may require a humid, moist habitat, sometimes you might overdo it. If you have a mold issue in your tarantula's tank, your tarantula could develop a fatal internal organ infection if it is not dealt with promptly. A complete tank cleaning is in order if you have an issue like this - spot cleaning won't be enough!

You should be monitoring your tarantula's tank very carefully, because sometimes once a mold or fungal infection is large enough to be noticeable, it could be too late. If you have a burrowing species of tarantula, preventing mold should be a high priority since these species typically hide for long periods at a time.

In particular, mold and fungus like to grow on uneaten food items, so be sure to remove this. Here's an example of what a mold outbreak can look like, via tarantula YouTuber Exotics Lair:



If your tarantula develops an infection, it will look like a cream-colored, uneven area on the tarantula's carapace, abdomen or tips of the legs. To treat this, you should move your tarantula to a clean, well-ventilated enclosure and put an antiseptic such as betadine on the affected area with a q-tip. Sometimes you can simply wipe an infected area clean with a soft paintbrush, rinsing it clean

before each stroke. For extreme cases, some recommend immersing the whole spider in a 10% solution of alcohol but this should always be considered as a last resort. Some tarantula owners have even used piperacillin injections to treat an infected tarantula successfully. Here's a great Arachnoboards thread that shows what a tarantula with a mold infection looks like.

One fungus worth noting is Cordyceps, a deadly jungle fungus that attacks tarantulas and other arthropods. This fungi invades the host (tarantula) and its mycelium takes over and replaces the tarantula's tissue, killing the spider. Once the tarantula is dead, cylindrical or branch-like growths come out of the tarantula's carcass. Here's a disturbing visual of that:

Photo Credit: Wikimedia Commons

As this fungus is mostly found in Asia, you likely won't have to worry about Cordyceps, but it's good to be aware of!

Photo Credit: Andy Blackledge / Flickr

DID YOU KNOW?

If a tarantula has an infection on the outside of its body that isn't too serious, there is a good chance that the spider will be cured after its next molt, as long as you take care to treat the infection and prevent it from getting worse!

Parasites

Unfortunately, there isn't a topical treatment for parasites that prey on tarantulas. A common internal parasite for tarantulas are nematodes (roundworms), which can make your tarantula very sick and prevent them from being able to eat. Warning signs of a nematode invasion of your spider are restlessness, spinning more silk than usual, not leaving its water dish, not eating, a sweet odor coming from the enclosure, and a white, gummy mass of goo near your tarantula's mouth. Here's a short clip posted by Esotericman about what nematodes look like near the fang area:

There are currently no treatments for nematodes, so you may have to put your tarantula out of its misery through humane euthanization.

Mites are also an issue if your tarantula's moisture and humidity gets out of balance or uneaten food items aren't being cleaned up. Mites are usually present in a typically moist, humid tarantula set-up, and they're usually not troublesome. They're really only a problem when their numbers become excessive. Here's a great screenshot from the Fatich YouTube channel that shows mites around a tarantula's abdomen and carapace:

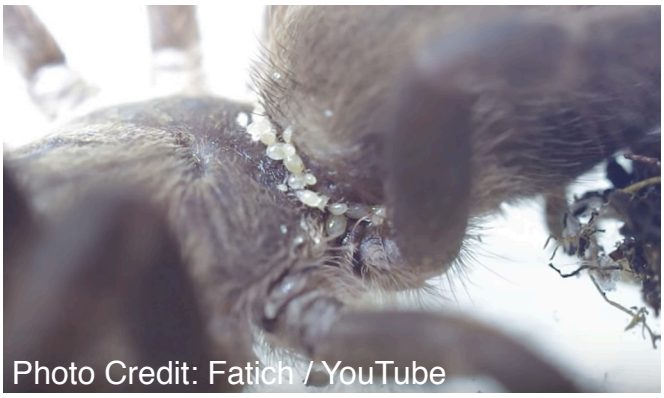


Photo Credit: Fatich / YouTube

Mites do not cause symptoms, but you might see them around your spider's mouth and other parts of its body. Luckily, these are easy to treat - you can remove them with a swab covered with petroleum jelly. The mites will stick to the swab as you touch the mites on your spider's body. Here's a great video by MyRealPetRocks that shows how mite removal can be done:


Photo Credit: Greg Schechter / Flickr

A mild infestation of mites can be easily taken care of by treating your spider and doing a complete tank cleaning. That means replacing substrate and placing any decor items in the freezer for a few hours to ensure any mites living on them are dead. However, more serious infestations may not be treatable and will eventually lead to death.

Abscesses and tumors

While there is not much research on the cause of or how these growths occur, some tarantulas develop progressively worsening blisters or wounds on their abdomens. Here's a photo by Guy Tansley of Giant Spiders that shows a growth on the tarantula's abdomen:


Photo Credit: Guy Tansley / Giant Spiders

Research is very limited on how to treat these growths. There have been some tarantula owners that claim their tarantula's condition improved after

molting, however when a tarantula has this kind of growth, the issue is usually pretty serious and cannot be fixed by the molting process (sometimes the growth even causes an additional complication during a molt).

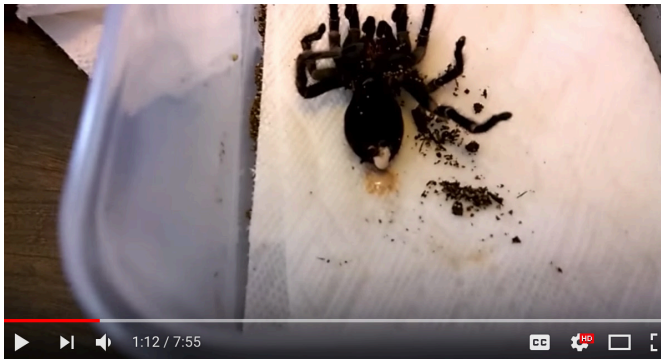
In most cases, it seems that tumors and abscesses are an eventually fatal condition and not much can be done. However, there have been success stories. Here's an interesting Arachnoboards thread (with pictures) that describes how a tarantula owner restrained, operated on, and drained his tarantula's abscess.

It should be noted that whenever you choose to operate on your tarantula, particularly if you are going to try and drain an abscess, you are aware of the risk you are taking. Tarantulas are fragile and their bodies are an open system - a puncture mistake could be fatal to them. You should only be operating on your tarantula if it is a truly serious situation.

Fecal impactions

A tarantula's anus can sometimes become backed up or clogged, and if this issue is not caught and treated early enough, it can be fatal. Basically, a tarantula is unable to go to the bathroom when this happens. Signs of an impaction could be a tarantula that refuses to eat after a molt while remaining bloated and plump, sluggishness, and unusual grooming habits on its backside. You may even notice some white waste caked around the tarantula's anus and spinnerets.

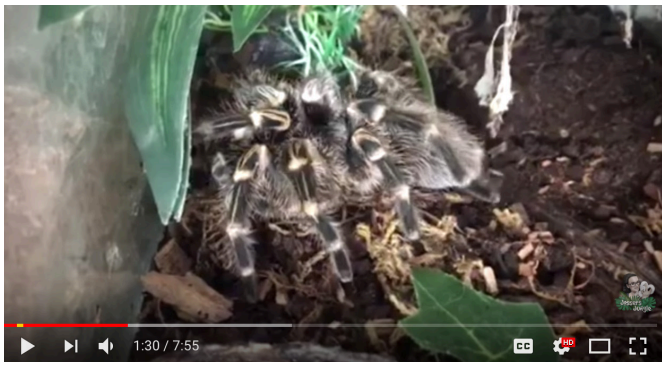
Unfortunately, there is little you can do to treat impaction other than try to use a paper towel or cotton swab that has been moistened with warm water to try to wipe away and loosen any feces that could be causing the blockage. Tom Moran of Tom's Big Spiders has a good video that demonstrates impaction and treatment:



Dyskinetic Syndrome (DKS)

DKS is yet another condition that is fatal to tarantulas, and not much is known about what causes it. There are some theories about pesticides, flea treatments, chemicals, micro organisms or other toxins, but there are no sure answers yet. Unfortunately, this is also a death sentence.

The symptoms of DKS are jerky motions, a loss of coordination, and the inability to eat. Once your spider starts to show signs of DKS, it may only take a few days before it succumbs to the disease. Jossers Jungle posted a video of one of her tarantulas who was dying of DKS. It is disturbing to watch, but you must be aware of this behavior in your tarantula:



Many owners will opt to euthanize their tarantula, since death is inevitable with DKS. Fortunately, the disease is not thought to be contagious if you have other non-contaminated tarantulas nearby, however the tank and decor of a DKS-infected tarantula should be thoroughly cleaned before you put another spider inside it.

Dehydration

Dehydration is perhaps the most common ailment that tarantulas suffer from. Fortunately, it is also the easiest to cure! While tarantulas can go a long time without eating, water is different - that's why you should always have a filled water dish in your tarantula's tank.

If your tarantula's abdomen (or "butt") is looking smaller or shriveled and the spider is lethargic, that means it is probably dehydrated.

In severe cases of dehydration or neglect, you may need to help your tarantula drink water by placing a wet q-tip or paper towel near their mouth. You can also do it with a dropper or syringe to help the tarantula drink. To demonstrate how to re-hydrate your tarantula, here's a useful video that was posted by ArachneQueen:

Just be careful when doing this - it is important not to get the book lungs wet when putting water near your spider's body.

TARANTULA PAIN + SIGNS OF DEATH

As tarantulas cannot communicate with us like dogs or cats, it can be hard to tell when there is a health issue or they are close to the end of their lives.

While there are sometimes signs of illness that you can spot if you've educated yourself, knowing whether or not your tarantula is truly suffering can be a guessing game.

Do tarantulas feel pain?

By now, you are aware of just how many unknowns there are about tarantulas. Whether or not they feel pain is another highly debated issue. Many believe that tarantulas probably do feel pain as a survival mechanism, but not as humans do. We still have much to learn about tarantulas' "brains" and their nervous system before we reach a definite answer.

While most entomologists would likely agree that insects and arthropods do not feel pain, some who have explored the subject have found similarities in insects' responses to pain in comparison to other animals and humans. This article by Joe Ballenger of Ask An Entomologist is a very interesting, heavily researched piece about this subject.

How will I know if my tarantula is dead? - The Death Curl

If your tarantula suffers an illness, a serious injury, is severely dehydrated or has reached old age, you will eventually observe the death curl. This is something no tarantula owner wants to see, but we all eventually will.

It's important to know what a "death curl" is, because a new tarantula owner can easily mistake other tarantula behavior as a sign of death. While most beginners mistake a spider on its back as a "death curl", it is usually just the tarantula

molting. The real death curl is much different than the molting position. In a true death curl, the spider will be upright but all of its legs and feet will be tightly curled under its body. This happens because a weakened spider cannot maintain enough pressure to keep its legs outstretched.

While a death curl usually means that death is near, in some cases you may be able to reverse it by tending to your spider and putting it in an ICU.

I must stress this point - if your spider is on their back, it is probably NOT a death curl. It is probably molting and you should leave it ALONE! Here's what a death curl looks like thanks to Tom Moran of Tom's Big Spiders:

Photo Credit: Tom's Big Spiders

Photo Credit: Siri B.L. / Flickr

DID YOU KNOW?

Many tarantula owners make an art of preserving their tarantulas after they have passed away and make beautiful displays out of them. There are many great taxidermy videos on YouTube that can show you how this is done!

FIRST AID, TREATMENT + SUPPORT FOR HUMANS

Now that we've covered all about how to treat your tarantula, it's time to learn about what to do if you get hurt or experience the death of your spider.

Human first aid

The biggest things you have to worry about with your tarantulas are being bitten or getting flicked with urticating hairs. You can read more about tarantula defenses and the warning signs here, but in this section I'll just cover what to do in case this happens to you.

Many New World tarantulas will opt to flick urticating hairs as a defense mechanism before a bite. Old World tarantulas don't have these hairs; it is a defense you only need to worry about with New World species. How serious of an issue urticating hairs will be for you will depend on the species of New World tarantula you have, and your own reaction.

For example, some New World tarantulas such as the Grammostola's urticating hairs are much more mild than those of the Theraphosa's, which can cause more serious reactions. Urticating hairs from these spiders can cause severe rashes and itching, as well as breathing issues.

If you still have the urticating hairs on your skin, you can remove them with either tweezers or some duct tape. If you suffer an allergic reaction, this can usually be solved with an antihistamine like Benadryl or a cream for itchiness such as hydrocortisol. Unfortunately, itchiness may last several days if you are sensitive. The biggest thing you want to avoid is inhaling these hairs or getting them in your eyes, as that can be quite serious. If you experience a serious reaction to being flicked with these hairs, visit a doctor or an ophthalmologist.

Tarantula bites are a more serious matter. While some tarantula owners will liken a bite from a New World tarantula to getting a bee sting, there are many who would disagree and report more painful and severe reactions. Bites from Old World tarantulas, who have stronger venom, are even more problematic.

A tarantula bite will usually cause redness, localized pain, and swelling. You should promptly:

- Wash the site with soap and water to minimize the chance of infection
- Apply a cool compress or ice cube to induce numbness and reduce swelling
- Apply a topical cortisone or Benadryl cream to reduce irritation
- Be alert for symptoms of an infection or allergic reaction

Signs of a more severe allergic reaction could be: abdominal cramps and nausea, chest tightness and trouble breathing, a rash (hives), or a headache (especially if accompanied by anxiety). If you are really suffering after a tarantula bite, it should not be ignored. Tarantula expert Rob Carman recorded a useful video which explains what a bite from an Old World tarantula feels like, and what happens to your body afterwards (from his own personal experience).

Support after the loss of your spider

Many people may think this is pointless to mention, but I certainly don't. Many beginning tarantula owners become very hurt and surprised by the sometimes heartless reactions they get from others after their tarantula has passed on. People are normally not as sympathetic to a mourning tarantula owner as they are when someone's dog or cat dies. Do not let others make you feel bad for getting attached to a spider - it was your pet and you took care of it, just like any other pet.

Even if your tarantula is still alive, you are likely going to come across rude comments once in a while. I wrote an entire post on this once - it is a widespread issue that all tarantula owners deal with at least once (usually several times). The first message I ever got on Spidey's blog was hate mail!

It is good to be prepared for these possible reactions from others, because the lack of support can be quite hurtful and isolating. Fortunately, there are great communities and forums on the internet like Arachnoboards and Tarantula Forum, for example, where you can talk to other tarantula owners who will understand.

Photo Credit: Wikimedia Commons

TARANTULA MOLTING PROCESS

In this chapter, you will learn about:

- What the molting process is + why it happens
- Premolt, warning signs, + precautions to take
- The molting process
- How to take care of your tarantula after it molts
- What to do if your tarantula has a bad molt

WHAT IS MOLTING + WHY DOES IT HAPPEN?

One of the coolest, most exciting (and freakiest) things you will ever watch your tarantula do is molt its exoskeleton.

It's also pretty stressful, too - especially when you are a beginner or have an older spider. Much like snakes and lizards, tarantulas shed their outer layer (exoskeleton) as they grow - a process known as "molting." Molting is a normal part of a tarantula's growing process and will happen several times in its lifetime.

Molting is extremely exhausting and strenuous for a tarantula, so it's important to know the behaviors and warning signs so that you can be prepared and do certain things to ensure that your tarantula's molting process happens safely.

Many first-time tarantula owners will mistake their tarantula's first molt as a sign that it is dying, because the sight of a tarantula lying on its back can be pretty alarming if you're not educated. However, a tarantula lying on its back (as well as doing a few other behaviors I will get to in this chapter) is usually a sign that it is going to shed its exoskeleton.

Often times, it will look like nothing is happening, as molts can sometimes take up to several hours (especially for older spiders). But eventually, your tarantula will begin to wiggle and push out of its older "skin" until it has completely pulled off its exoskeleton. Everything comes off in this process - including the tarantula's fangs and eyes!

Eventually, the tarantula will turn over and have brand new skin and hair, and the shed skin will be left behind. For the tarantula, its new body will be very sensitive for a while. The molting process can be amazing and regenerative for the tarantula. For example, there have been spiders who have lost a leg or part of a leg, only to regrow it after a molt.

Photo Credit: Wikimedia Commons

SIGNS OF PREMOLT + PRECAUTIONS TO TAKE

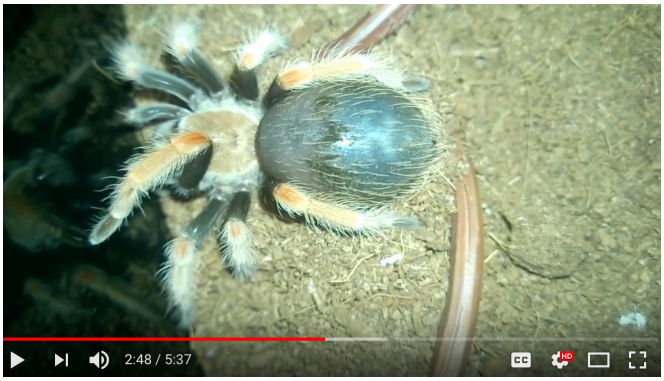
Before a tarantula begins molting, it goes through a preparation phase called “premolt”, which could happen anywhere from days, weeks, or months in advance, depending on your tarantula and its age.

If your tarantula is in the premolt stage, there are several behavioral changes and warning signs that could be indicators that a molt will soon follow.

Generally, your tarantula will do all or some of the following before a molt:

- Refuse food for a period of time
- Become less active
- Make a den or bury itself
- Secrete tiny clear droplets of fluid between the joints of its legs
- Excessively web
- Have a shiny, dark, bald abdomen or thinning hair on its abdomen

Here’s what premolt abdomens could look like, from a video posted by SgtSparkles69:



Another big sign that a molt is getting closer to happening is the presence of a molting mat. Generally, molting mats are far thicker than your spider’s regular webs and it will appear that they are making a bed for themselves - which they kind of are!

Some tarantulas will make their molting mats in more of a “hammock” shape, while some will make them right on the floor, to look more like a rug.

Below is an example of a molting mat from my own Grammostola rosea, Spidey:

A tarantula will generally start making its molting mat when they are pretty close to molting. However, the biggest sign that your tarantula is moving from premolt to the molting stage is when they start to lay on their side to flip over onto their backs.

Once your tarantula is upside down, it is going to begin the molting process. While tarantulas do occasionally molt right side up, they almost always do it upside down. Here's what that looks like:

Precautions

If your tarantula is in premolt, it's a good idea to stop offering food and to remove any live prey that is in its tank.

This is because if there are any live creatures in the tank while your tarantula goes into a molt, there is a chance your tarantula could be attacked, injured, or even killed - regardless of how small the prey is. As I'll explain a bit more in the next section on molting, tarantulas are defenseless when they are going through this process. Your tarantula will not be able to protect itself, run away, or fight back if it becomes attacked during a molt. There have been many reports of feeders killing tarantulas while they are molting, so don't take the risk.

You should also make sure that your tarantula has a full water dish. Even though your tarantula will not be drinking water while it molts, this helps to give the tank some humidity, which assists the molting process.

Other than that, enjoy watching the process and don't bother your tarantula! Any disturbance could be detrimental to completing the process successfully.

ALL ABOUT THE MOLTING PROCESS + AFTERCARE

When a new tarantula owner first sees their tarantula laying on its back with its feet up in the air, it's easy to get freaked out and assume that your tarantula is dead. Relax, it's only molting!

Tarantulas almost always molt upside down, although there have been reports of tarantulas molting (successfully and unsuccessfully) right side up.

You may have the urge to "help" your tarantula or examine them - but any disturbance could be fatal to your tarantula in its fragile state. The best thing you can do for your tarantula while it is molting is to leave it alone.

That means no touching or moving your tarantula. Your tarantula is extremely vulnerable and helpless during this period and any interference could negatively impact the outcome of its molt. Simply make sure there is enough water available and that there are no live food items or dangers to your spider in the tank. Molting is incredibly stressful for your tarantula so the less you interfere, the better off it will be. Your job is to simply keep it safe; your spider can do the rest.

The molting process

The molting process is fascinating to watch. As I said in the last section, after your tarantula is out of premolt it will make a molting mat and then slowly flip over onto its back. Once it's on its back, the molting process will begin.

During this process, the tarantula's exoskeleton (outer layer) will split open and your tarantula will begin to wiggle out slowly. It may seem like nothing is happening because sometimes this happens very slowly, but trust that your spider is

very busy and working hard to free itself of its old body. The tarantula's feet are the last thing to leave the exoskeleton before the tarantula has fully peeled its old shell off. It's a pretty impressive feat because everything comes off, including the tarantula's hair, eyes, and fangs.

These are photos of my own Grammostola rosea's molting process:


Photo Credit: Patricia Colli


Photo Credit: Patricia Colli


Photo Credit: Patricia Colli

Here is a great video by Vida Sangre Fria that shows a timelapse of how tarantulas usually molt (upside down):

Because tarantulas sometimes do molt upright, here's a video from Tarantupedia that shows a tarantula molting this way. This video is worth watching because it shows just how much of an exhausting process molting is for tarantulas:

Even if your tarantula starts molting in an upright position instead of upside down, you should leave it alone as your interference could damage your spider. Upright molts can still be successful.

What happens after a molt?
After molting, your tarantula will wiggle its legs around and start to stretch its body out. It will rest for a little while, and then slowly flip over when it is ready. Keep in mind that your tarantula has to adjust to its brand new body. It may have trouble walking or look a little flimsy, but that's normal because your tarantula's body is soft right after a molt.

You may also notice that your tarantula's colors are much more vibrant, that your tarantula has grown, or that your tarantula's fangs are white instead of black! You may also note that its abdomen seems a little smaller - that will correct itself once your tarantula drinks some water and adjusts to its new body.

It can be tempting to closely examine and touch your tarantula, but your tarantula's body is extremely fragile and sensitive right after a molt and it will take several days to harden up. You should avoid touching, feeding, or bothering your tarantula unless it needs more water.

How long does molting take?
Depending on your spider's age, a molt could take anywhere from one to a few hours - sometimes longer or less. However for older spiders, this could take a full 24 hours from start to finish.

How often do tarantulas molt?
The time between your tarantula's molts depends a lot on their age. Baby tarantulas, or slings, molt far more often than adolescent and adult tarantulas. A sling might molt every few weeks, but a mature tarantula may only molt once per year. Elderly tarantulas may wait over a year between molts. It is useful to keep track of the time between your tarantula's molts to ensure that they are happening regularly, and to know when to anticipate your tarantula's premolt patterns.

When should you pull the exoskeleton?
As long as it will not disturb your tarantula, you can take the old exoskeleton out of the tank a little while after the molt, however there is no rush. Some tarantula owners have reported that their tarantulas become quite defensive over the exoskeleton or are annoyed by being disturbed. If your tarantula is near the exoskeleton or you can't remove it without disturbing your spider, it's better to leave it until a better opportunity presents itself.

Many tarantula owners choose to save their spider's exoskeletons as a reminder of their growth.

Photo Credit: Bernard Dupont / Flickr

Aftercare

Tarantulas should not be touched, moved, or otherwise bothered after a molt. After your tarantula finishes its molting process, it will turn back over on its own. Make no attempt to remove its molt or do anything else in the tank immediately following the molt, as you don't want to startle your spider in this fragile state. Unless you need to refill your spider's water, you do not need to even be in your tarantula's tank. You can remove the molt only if it is not near your spider.

Your tarantula's body is very vulnerable and soft right after a molt and for several days after. An adult spider will need at least a week (sometimes longer) for its new body and fangs to completely harden up, so do NOT try to give your tarantula any food. For slings, they can accept food a little bit sooner - about 4-7 days after a molt. You will know your tarantula is ready to accept food again by checking the color of its fangs - they will change from their freshly molted white-red color to black. When your tarantula's fangs are black, its fangs and body have fully hardened and it is ready to accept food. Be cautious - you can really hurt (even kill) your tarantula by feeding it before its body is ready. When in doubt, wait!

Make sure your tarantula has access to fresh water, as this will help the humidity in the tank and hydrate your spider. Although tarantulas cannot eat right after a molt, they can drink.

BAD MOLTS: PREVENTION + WHAT TO DO ABOUT IT

Occasionally, a tarantula might have a bad or unsuccessful molt. While this is more common with adult tarantulas nearing the end of their lives, it can happen at any stage.

Preventing a bad molt

In some cases, a bad molt can be fatal, so prevention is useful. While sometimes a tarantula's bad molt has nothing to do with its owner, there are things we can do to make bad molts less likely to happen to our tarantulas.

One major thing is to make sure your tarantula is always hydrated and has access to fresh water, even if your tarantula ignores its water dish (it probably is drinking, but behind your back). Water maintains the humidity in your tarantula's tank, which is helpful during a molt. Also, you do not want your spider to be left thirsty when it finally decides it wants a drink - spiders' bodies need to be hydrated for good molting.

Giving your tarantula a proper diet (more on that in this section) is also important. While some tarantula owners like to feed their tarantulas small pinky mice, this is strongly advised against because the calcium in the mice has been observed to cause molting issues.

Common molting issues

A big molting issue is when a spider is stuck inside its old carapace. While most of the time only a small part of the tarantula remains stuck, sometimes the spider is truly trapped and it will likely lead to death.

Another common molting issue may involve the tarantula having difficulty removing one or more legs from its exoskeleton. While sometimes this will sort itself out in the completion of the molt, if the spider has completed the

process and a leg or two is still stuck, you can use tweezers to carefully pull the old shell away from the leg. Remember - your tarantula's new body will be very soft and fragile so take great caution.

In some cases, one of the new legs may be deformed after a molt (this sometimes happens with juveniles). If this happens, wait a few days to see if the deformed leg falls off by itself. If it does not, you will have to remove it because it can cause problems during its next molt (don't worry, tarantulas regenerate their legs). You may have to amputate the leg at the joint in order to prevent further molting issues (read about tarantula first aid here).

While bad molts are often a product of old age, this can also be caused by a lack of hydration and insufficient humidity. As molting requires lubrication, a lack of humidity can halt the process. This is why having a full water dish in the tank is incredibly important.

Last resort

In drastic circumstances, you should move your tarantula that is struggling with a bad molt into an ICU (read about that here) in an effort to raise humidity and help provide more moisture to help the molt along and keep your tarantula's membranes hydrated.

As your tarantula will be helpless and very fragile, this should only be done in dire situations and performed with the utmost care. Only interfere with a molt if your tarantula is facing death if you don't, because intervening with a molt can also be fatal.

To assist your spider, you can gently apply moisture to the stuck area with a wet paint brush and carefully separate the old exoskeleton from the new skin with a scalpel (be careful not to get any water on the tarantula's book lungs).

Here is a great educational video series by Rob Carman, Tarantulaguy1976, that shows how he tries to save his trapped tarantula from a bad molt (watch the whole "Sammy Update" series to learn tons!):

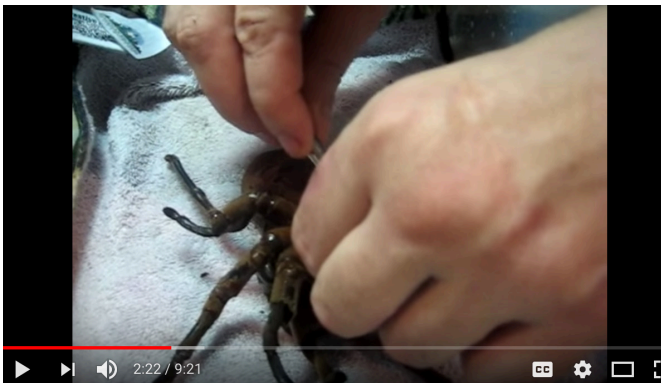


Photo Credit: Rushen / Flickr

GENDER: TARANTULA SEXING

In this chapter, you will learn about:

- The physical differences between male + female tarantulas
- The most accurate way to sex your tarantula
- What to do if your tarantula's molt has dried out before sexing
- Why you shouldn't wait too long to sex your tarantula

DIFFERENCES BETWEEN MALES + FEMALES

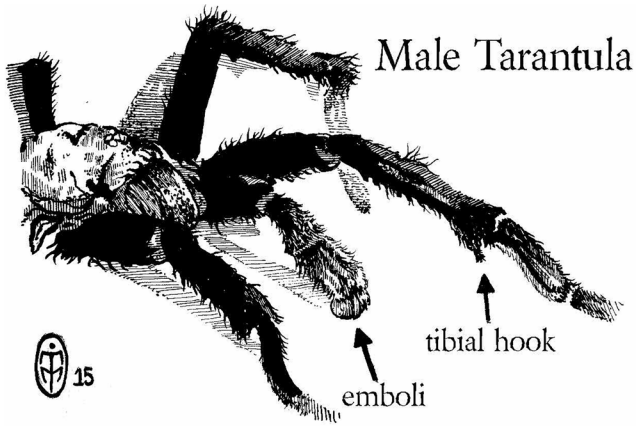
Sexing - determining if your spider is a male or female - is one of the most confusing subjects to beginning tarantula owners, especially if they have a young tarantula.

Before I go into specifics, a major difference between male and female tarantulas is their lifespans. While male tarantulas usually only live a few years, females can live a few decades. This is an important consideration to be aware of when you are first choosing your tarantula. Due to their longer lifespans, females are harder to get and more expensive.

Physical differences between sexes

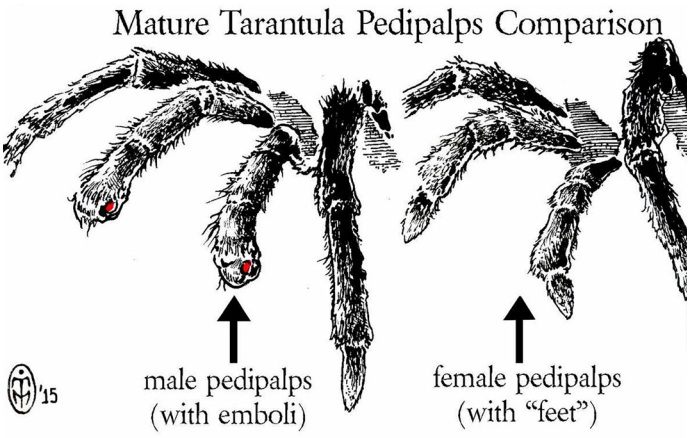
While I mentioned lifespans as a major difference between male and female tarantulas, there are a few physical differences that you can spot from the outside. When a tarantula is a baby (sling), it is usually very difficult to determine their sex and differences are impossible to spot. However, if you have a tarantula that is older, there are some noticeable clues that could help you determine the spider's sex.

For example, some species of mature males have little hooks on their first set of legs that females do not possess. This is called "hooking out" and is characterized by a little tibial "hook" that can be found behind a tarantula's knees in the first set of walking legs. Here's what they look like, thanks to this awesome illustration courtesy of Tom Moran from Tom's Big Spiders:



Whether or not these are noticeable or even present depends on the species - some tarantulas do not possess these hooks at all, and some are too small to notice.

A more reliable visual cue is to look at the end of your spider's pedipalps (the shorter appendages that are before your spider's walking legs). All male tarantulas, regardless of species, develop one bulb-like embolus (emboli, plural) at the end of each pedipalp. Basically, the end of your spider's pedipalps will look round and bulbous instead of the regular tarantula foot - like this (illustration by Tom's Big Spiders):



This method, although more reliable, does have a downside. A male tarantula won't develop these - which are basically the male's sex organ that delivers sperm to the female - until his final molt.

This can be a little heartbreaking to find out toward the end of a tarantula's life, so it's best not to wait too long before finding out the sex of your tarantula (I go into a more reliable method in the next section, which can sex your tarantula much earlier).

Male tarantulas also tend to look smaller, thinner, and "leggier" than females, and some species sport quite significant differences in coloration. As each tarantula species is different, it's good practice to read up on the species of your own tarantula to determine what visual differences there are. Here is an example of the physical differences, with the male on the left and female on the right:

Photo Credit: ZooKeys

While you can sex your tarantula using these visual cues, the most reliable and recommended way to determine sex is to use a molt, explained in the next section.

HOW TO USE A MOLT TO SEX YOUR TARANTULA

Noticeable physical differences aside, the most accurate, reliable way to tell if your tarantula is a male or female is to sex them using a molt (it's also good practice, too!).

Of course, the downside is that you will have to wait for your tarantula to molt, but any experienced tarantula keeper will tell you that this hobby is really just one big test in patience anyway ;)

It is difficult to do this with slings without the use of a microscope and good lighting, so just keep that in mind.

The first thing to know is that while tarantulas have the same body parts, each species is different - so it's good to use photographic references specific to your tarantula so you know exactly what you're looking for. A quick Google image search is all you need, or if you want to really nerd out you can hop onto Arachnoboards' Tarantula Sexing board.

You will need a molt (the shed exoskeleton) that is intact at the abdomen, particularly the part containing the book lungs. It will be nearly impossible to sex your tarantula if this part of the molt is damaged.

Basically, what you are going to look for is the presence (or absence) of the female's spermathecae (where the female stores the male's sperm). It is a little pouch/flap above the spider's epigastric furrow, as illustrated below.

Photo Credit: Wikipedia

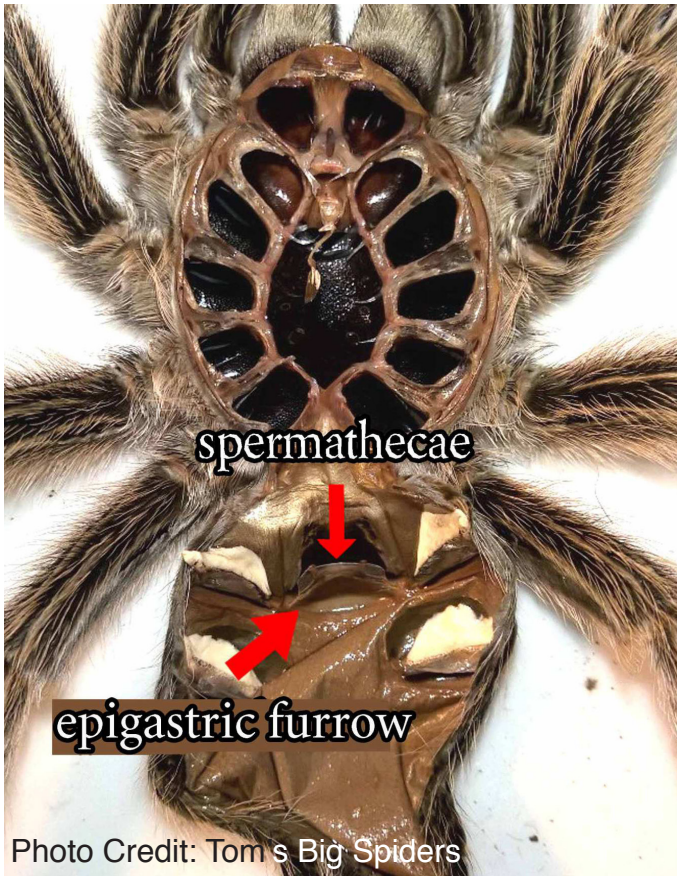
Photo Credit: Wikimedia Commons

Molts usually dry out after they are finished, so you can lightly spray the molt with water and wait a few minutes for the dampened molt to soften up. Then, lay the molt out on a paper towel to get any excess water off the molt. Be careful not to damage the molt or get any urticating hairs on yourself as you handle the molt.

Once you are all set with the paper towel or a clean surface to work on, place the molt down with its fangs facing up (so the molt is on its back). Remember, it will make your life a lot easier if you are working in a well-lit area. Now that your molt is soft and more pliable, carefully spread out the legs and gently unroll any abdomen skin that might have curled up or gotten twisted. You have to be extremely gentle because the molt is fragile and will rip easily. If you are worried about your hands being clumsy, you can work with cotton swabs, toothpicks, or tweezers.

Once you have the abdomen completely opened up, you should be able to see the underside, where the tarantula's book lungs are. You may see a slit between the set of book lungs that are closest to the tarantula's body, but don't get too excited. It is a common misconception that this is a sign the tarantula is female (this slit can be found on both sexes).

The real sign of a female is the "flap" or the spermathecae, located above the epigastric furrow as illustrated by this image from Tom's Big Spiders below:



If your tarantula is small, this will be more difficult to spot, so using a magnifying glass or microscope will be helpful. If you have a good camera on your phone, you could even use that to take a close-up and examine the molt in greater detail.

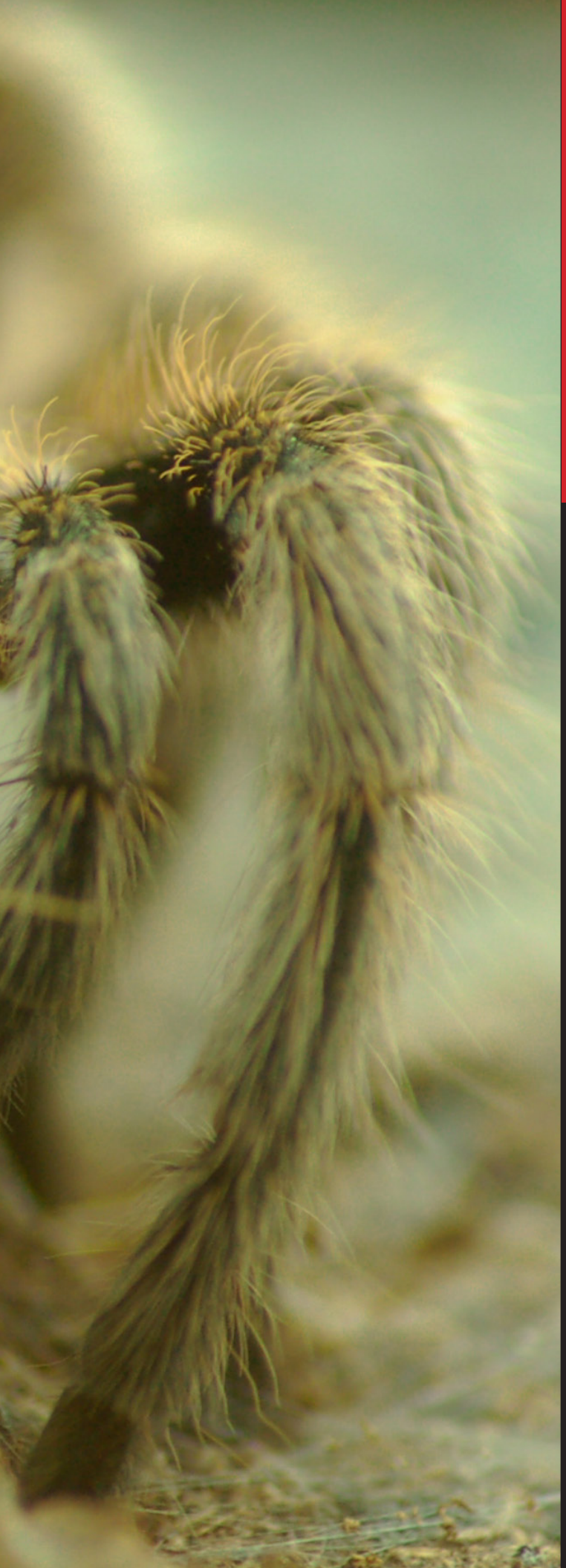
If you see the spermathecae, congratulations - you have a female! If you are sexing your tarantula and you do not see the tell-tale “flap”, then you probably have a male. Here’s a helpful video from Tom’s Big Spiders on how to sex a molt:

However, molts are not always so easy to examine and judge, so it doesn’t hurt to try again on your tarantula’s next molt. Figuring out the sex of your tarantula can be one of the most frustrating, confusing parts of being a tarantula owner, even for experts. Often times, it’s not so black and white. Some male tarantulas from certain species have organs that can be confused for the female spermathecae, so the best thing you can do is study photos and diagrams of your tarantula’s species for reference.

Also, don’t hesitate to ask for help from the experts on other tarantula forums like Arachnoboards!

Photo Credit: Rizuan J. / Flickr

Photo Credit: Wikimedia Commons



HOW TO FEED YOUR TARANTULA

In this chapter, you will learn about:

- How tarantulas eat + digest their food
- How to feed your tarantula
- What powerfeeding + gut loading are
- How to give your tarantula great nutrition
- How to care for feeders
- Why your tarantula isn't eating
- The best places to order food for your tarantula

A BREAKDOWN OF HOW + WHAT TARANTULAS EAT

The eating habits of tarantulas are one of the most fascinating things about them - and the most confusing as well! Trying to decode your tarantula's eating habits can be difficult, so we're going to dive into that here.

Tarantula digestion and metabolism

A tarantula's digestive system is literally fascinating and super unconventional. First, the tarantula hunts down and attacks its live prey. Once the tarantula has bitten into its prey, the fangs release venom and the prey is paralyzed. The tarantula holds the prey in its mouth while its digestive enzymes go to work to turn the prey's soft tissue into a liquid soup, allowing the tarantula to suck the nutrients from its prey. If the tarantula wants to save its meal for later, you may observe it weaving silk around it to store it away. They often leave behind empty "shells" as evidence of their mealtime victories.

It should be noted that tarantulas' metabolisms are nothing like ours - they are way slower, which allows them to fast and go long periods without eating while remaining healthy. While tarantulas can go without food for quite a while if they are fasting, they should always have access to water as dehydration is more of a threat to their health.

What tarantulas eat

Tarantulas are known to eat several things in the wild, with some larger tarantulas eating things like lizards, snakes, bats, toads, frogs and rodents! However, since your tarantula is not living in the wild, the choices are a bit more tame and you can choose to give your spider nutritious, quality meals!

What your spider eats should be dependent on its size - a good rule of thumb is to keep prey the same size as its carapace, or middle. Generally, crickets and roaches are the most nutritious for tarantulas. Mealworms and superworms, while very popular, tend to be higher in fat so these are not recommended all the time. The nice thing about having a tarantula is that its food is usually very cheap!

Some tarantula owners choose to give their tarantulas - particularly the larger ones - pinky mice, but this is very controversial and quite harmful to the spider. Tarantulas cannot properly digest mammals. The calcium in the bones of mice is not healthy for your tarantula to digest and can cause fatal molting problems for your spider.

It is highly recommended that you NEVER feed your spider a live mouse or other large live prey, as this could harm your spider. Even larger spiders can be put in harm's way by feeding them prey that may fight back. It's better to just keep your tarantula safe and healthy by sticking to insects for meals.

Photo Credit: Wikimedia Commons

DID YOU KNOW?

If a tarantula isn't hungry, it usually will not eat. There have been plenty of tarantula owners who have witnessed their spiders acting scared of or running away from their food just because they weren't hungry! Tarantulas are silly!

HOW TO FEED YOUR TARANTULA 101

While tarantulas are one of the most low maintenance pets you can have, getting used to feeding them and learning their eating habits can take a little bit of time. And keep in mind - they will still find ways to surprise you!

The mechanics of tarantula feeding
Feeding tarantulas is relatively easy. First of all, DO NOT use your hands. It is recommended that you get a pair of long tongs or forceps (some brave souls even use tweezers). If you're really squeamish, this is a good option since you won't have to squeeze the bug or feeder to pick it up.

Once you have the bug ready, simply place the feeder near your tarantula. Alternatively, you can also just drop the feeder into the tank and allow your tarantula to go hunting for it - however if your tarantula isn't very hungry or fast, there's a possibility it might get lost or wreak havoc in the tank.

If your tarantula is hungry, it will attack quickly. If your tarantula is not interested in its food, it is a good idea to remove the prey quickly (or at least within 24 hours) so it doesn't burrow, cause tank issues, or endanger your tarantula.

My own tarantula is quite a slow poke, so I created my own method for containing feeders while letting my tarantula "hunt" and it has saved me a lot of energy as far as keeping my tarantula happy and her tank clean. I advise on how to do it in the "hacks" section!

WARNING: Remove uneaten feeders
It is also highly recommended that you don't leave live feeders unobserved in your tarantula's tank. This is because if your tarantula goes into a molt, the feeders may attack and injure (even kill) your tarantula


Photo Credit: Wikimedia Commons

while it is defenseless. Unattended feeders can also breed with each other and cause a major infestation in your tarantula's tank. If your tarantula is not hungry, simply remove the feeder to keep your tarantula safe and the tank clean. Worms in particular can be difficult to remove if they are not watched closely, because they like to burrow quickly if your spider isn't quick to strike.

How often should your tarantula eat? How often your tarantula eats depends on several things, such as its age and what type of tarantula you have. Slings and juvenile tarantulas will eat much more often than adult tarantulas, and some species just have a higher appetite. Some species, such as the Grammostola rosea, are infamous for randomly refusing food for long periods of time. It all depends on your spider.

Most adult tarantulas can be fed 1-2 times per week. As I said before, baby tarantulas need to be fed a little bit more often (you can read more about sling care and feeding in this section). The amount and size of prey you should offer to your spider will depend on its size. A large adult can eat a

Photo Credit: Wikimedia Commons

few feeders in one sitting. Medium sized tarantulas could eat 1-2. However, it still depends on your tarantula. Some will only take one feeder in a feeding session even if it is large enough to handle more. It all depends on your spider's appetite. Generally, prey items should never be any larger than the middle section (carapace) of your tarantula.

It is important for you to observe your tarantula's appetite and habits and to tailor its feeding sessions to that. For example, do not stress your tarantula out by repeatedly putting 3 crickets in its tank if it has only ever eaten one. Or, do not try to feed it 3 times per week if it only takes food once out of those three times. Alternatively, if you are feeding your spider only once a week but it is attacking its prey very aggressively and could eat more, you might want to try to feed it twice a week. Also keep in mind that a tarantula's feeding habits can change depending on the seasons and whether or not it is nearing a molt. As long as you monitor your spider's habits, you should be fine.

For beginners especially, it is useful and advised to take notes about how much your tarantula is eating and how often, as well as when it is refusing food. This will help you create a good feeding schedule that is suitable for its appetite. Tarantulas will usually not keep eating if they're not hungry, so your tarantula will likely let you know when it's had enough. Paying attention to your tarantula's eating habits can also alert you when something is wrong or when your tarantula is about to molt. With all of that being said, sometimes tarantulas just randomly stop eating, and it doesn't necessarily mean there's anything wrong. Just make sure they have water and monitor them. Beginners often stress out about this the most, and there usually isn't anything wrong with their spider. I talk more about food refusal in this section.

Photo Credit: Insects Unlocked / Flickr

NUTRITION: POWER FEEDING + GUT LOADING

Once you have educated yourself about the basics of tarantula feeding, there are two other techniques worth mentioning: power feeding your tarantula and gut loading your tarantula's prey.

Power feeding - should you do it?
Power feeding is a bit of a controversial and much debated subject in the tarantula keeping hobby. Power feeding involves increasing your tarantula's frequency of meals or amount of food in order to accelerate your tarantula's growth. Many hobbyists use this technique on their tarantulas so that they reach breeding age more quickly. Some also do this with their baby tarantulas, so that they can get them out of the vulnerable sling stage faster.

The term "power feeding" has a negative connotation because it is associated with the belief that feeding your tarantula too much can shorten its lifespan.

In practical terms, it is not really possible to "overfeed" a tarantula. Tarantulas have their own internal intelligence and will simply not eat if they are not hungry - and it's not possible to force a tarantula to eat if it does not want to. Just like a tarantula will only drink when it's thirsty, tarantulas listen to their body cues and will not eat merely because food is placed in front of them. Many tarantulas have refused food for over a year before resuming a regular feeding schedule!

While it is possible to "trick" a tarantula into eating a little bit more, it's not as easy as just offering the spider more food. Two things must be done - you have to increase the temperature so that the spider's enclosure is in the low 80s because this speeds up your tarantula's metabolism.

Photo Credit: Jesse Andre / Flickr

Then you have to increase the amount of food offered weekly or every couple of days. Still, your spider may only eat what it can handle.

Basically, it's quite hard to "power feed" or overfeed a tarantula if you're not being extremely intentional about it. How much a tarantula wants to eat will all depend on what kind of species it is (some tarantulas are known for long fasting periods) as well as the stage of life it is in (slings eat far more frequently than older spiders).

As far as the debate about power feeding impacting lifespans, there has unfortunately not been any scientific research on this, so most theories are based on tarantula keepers' experiences only. Many experienced tarantula keepers do not believe overfeeding is an issue for tarantulas, however there are many others who say that aside from shortening lifespans, overfeeding can cause molting issues, make a tarantula more susceptible to serious abdominal injuries, and cause fertility issues.

Some of these concerns - like molting issues and fertility issues, have been disproved in the tarantula hobby. However, the concern that a fat spider may be more prone to abdominal injuries like ruptures is a valid point, so it's important to keep your tarantula's enclosure safe and to keep them away from harm.

While power feeding may not shorten lifespans, it is always safer to just go by the tarantula's own hunger cues. Observe your spider's eating habits and if it refuses food, simply remove the feeders and leave the spider alone. If they are hungry, they will eat. **NOTE:** While a shortened lifespan may not be too noticeable in female tarantulas since some tend to live 25+ years, a shortened lifespan may be a concern if you have a male tarantula, since they may only live to sexual maturation, about 3-5 years.

Gut loading your feeders

Many tarantula hobbyists like to do what is called “gut loading” to their tarantula’s prey items. Gut loading is when you feed your tarantula’s crickets, roaches, worms, etc. a special mix of nutrients so that those nutrients are passed on to your tarantula when they consume their meal.

This can be important because insects that are raised commercially generally do not have much nutritional value. By giving the feeders a good diet prior to feeding, they will be filled with nutrients to pass on to your spider.

Because feeders will generally eat anything, gut loading is very easy. Simply provide them with fresh fruits, vegetables, and cereals and they will eat all on their own. There are also some manufactured products that are made specifically for gut loading, like these. These products contain a mix of carbohydrates, fats, proteins, vitamins, minerals, and dietary fiber. Many tarantula owners prefer to use fresh food instead of manufactured options for gut loading, but both will get the job done.

Photo Credit: Bernard Dupont / Flickr

CARING FOR FEEDERS + WHERE TO GET THEM

Just like you should be picky about where you get your tarantula from, you should also be aware of where your spider's food is coming from and keeping those feeders healthy and alive.

As I talked about feeding your tarantula's prey items a nutritious diet full of vitamins and minerals in the last chapter, I want to drive the point home about why feeder care matters.

As a compassionate human being, you should be treating your feeders well to begin with. As a tarantula lover, you have already proven that you are able to see the value and feel respect for creatures that most people cannot - so it is easy to extend this to other invertebrates.

Although their lives may be short and for no purpose other than feeding your tarantula, I believe it is good practice to treat these creatures with just as much care as you would your tarantula or other pet (you might have them for a while!).

Once these insects are in your care, it is up to you to ensure that they are fed a proper diet and kept in a clean environment where disease cannot spread because you wouldn't want this to pass on to your tarantula. Feeders are infamous for eating each other when adequate food is not available (or even when it is), so monitor their environment and take dead feeders out regularly. Keep their area clean.

Feeder hydration

Feeders tend to get their hydration from their food - so as long as you are feeding them fruits and vegetables or perhaps a manufactured feeding product for insects, they will be able to get their moisture from that.

Where should I get my bugs?
Many major pet stores carry a variety of feeders, however the quality and treatment of these animals is up for debate considering most mainstream pet stores care much more about their more popular furry animals.

Fortunately, there are many great online companies that offer guarantees that their feeders will be live upon delivery. Some reputable companies are Mulberry Farms, Dubi Deli, and Roach Crossing.

You can find even more options in the resource section at the end of this guide.

WARNING: Do not feed your tarantula bugs from outside!
While it can be tempting to try to take matters into your own hands and catch your tarantula's food yourself, this is risky. By bringing a creature from the outdoors inside, you could be putting your tarantula at risk. The danger is that you do not know the history of the insect, if the insect is sick, or if it has come in contact with pesticides - all of which could impact your spider. It is better to get your feeders from a pet store or breeder who has raised the feeders in a controlled environment and can ensure that they are safe for consumption.


Photo Credit: TJ / Flickr

TARANTULA FASTING + WHAT TO DO ABOUT IT

Fasting can be a rough thing to go through for first-time tarantula owners. The most important advice I can give you is: don't freak out!

Many beginners go for a Grammostola Rosea due to their popularity, affordability and availability - but this species in particular has a reputation for long periods of fasting. Fasting is usually nothing but the spider going through a phase of not eating because its metabolism has temporarily slowed down (likely due to a changing season). Tarantulas will also go through a fasting phase when they are about to molt as well.

It is important, especially for beginners, to remain calm and not drive yourself nuts. Adult tarantulas are capable of going several months (even over a year) without eating and as long as they have water available to them, they are usually fine. Even slings, despite their more aggressive appetites, can refuse food for a period of time. Generally, as long as your tarantula's abdomen (or "butt") is plump and not looking shriveled up or getting smaller, your tarantula is fine. Just make sure they have access to water.

If your tarantula has been fasting for a long period of time and is not showing any signs of premolt and you have ruled out other factors, you can try to offer it food every few weeks to see if its fasting period has ended. Just remember to monitor your spider and to remove the prey items if your tarantula did not feel like eating.

Remember: it is pretty rare that food refusal is a sign of a serious problem. While it can be unnerving, tarantulas often do weird things just because they feel like it. I talk about some other things that may be causing it to refuse food in the next section.

Photo Credit: M. Stewart / Flickr

REASONS WHY YOUR TARANTULA WON'T EAT

Sometimes, your tarantula may not eat its meal. This can be really stressful for new owners, but this is often normal and nothing to be alarmed at. A grown tarantula or sling may not accept food for several reasons, like these:

The tarantula isn't comfortable in its environment yet:
Tarantulas are typically nervous creatures, and if it has just been rehoused or put into a new tank, your tarantula may need some time to adjust to its new surroundings. A common sign of a stressed out spider is a tarantula cowering in a corner with its legs pulled up over its body or a nervously pacing spider. Give it some time and you'll have better luck.

Your tarantula is fasting
Many species such as Aphonopelmas, Brachypelma, and Grammostolas, have internal clocks that signal to them that they should start fasting when the seasonal temperatures drop. If this habitual fasting has kicked in, you just have to wait it out. Make sure they have access to fresh water, and try offering food once a week or so to see if they are done fasting. If they refuse food, do not leave the prey items in the tank as it could cause stress or injury to your tarantula.

Your tarantula is in premolt
Most tarantulas will refuse food when they are preparing to molt, also known as premolt. If your tarantula has been eating just fine and suddenly refuses to eat, this is a good indication that a molt is coming - especially in combination with signs such as a pump, dark, shiny abdomen. In this case, do not keep offering prey items and simply make sure your tarantula has water and a moist corner of substrate until your spider has molted. After your tarantula molts, you will have to wait for its body and fangs to harden (which typically takes about a week) before you offer food again.

The prey is too big
Sometimes small tarantulas can be intimidated or scared off by the size of prey items. If your spider feels threatened or scared, it will usually do a standard defense pose by throwing up its first two pairs of walking legs. A less confrontational tarantula may actually run and hide from its prey. If your spider is displaying this behavior, try to feed it something smaller. You can even pre-kill the prey and see if your spider will eat.

You have a picky eater
While most tarantulas seem to like crickets, some species have zero appetite for roaches and mealworms. If your tarantula isn't eating and you have ruled out other possibilities, you may have luck by switching the type of feeder.

The setup conditions aren't right
If other possible causes have been ruled out, inquire into your tarantula's set up. Ask yourself questions such as "Is it too hot or cold? Does my spider have a hide? Is this the right setup for the species? Is the environment too moist or dry?" Don't be afraid to ask if you can't figure it out - ask a second opinion on great forums such as Arachnoboards or the Tarantula Heaven and Tarantula Keepers Facebook groups.

In all honesty, you really don't need to feed your tarantula that often, as tarantula's metabolisms are very unique and they can go months (sometimes over a year) without food. This doesn't mean you should withhold food from your tarantula, but it's important to know that tarantulas don't need to be offered food as often as other pets - especially if the prey is on the larger side. You can find a feeding schedule that works for you - many tarantula owners have healthy adult tarantulas that are only fed once every 1-2 weeks.

Photo Credit: Insects Unlocked / Flickr

Photo Credit: Bart van Dorp / Flickr

TARANTULA MATING + BREEDING

In this chapter, you will learn about:

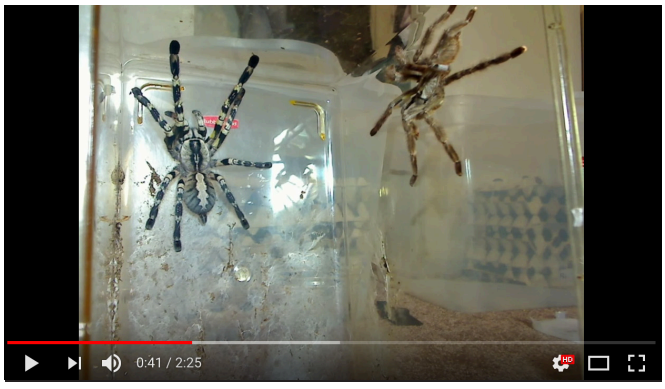
- Courtship rituals
- How tarantulas mate
- Sperm webs
- How to safely mate your tarantulas
- The risks of mating tarantulas
- How to tell if your tarantula is pregnant or sexually mature
- How to care for a pregnant tarantula
- What to do with an egg sac

HOW TARANTULAS MATE + ACCEPTING THE RISKS

Tarantulas mate quite differently than many other bugs - and if you ever searched for "tarantula mating" on YouTube, you know what I mean!

A tarantula's mating ritual comes with a few pre-mating behaviors that end with a hopefully successful pairing in which no spiders got hurt, attacked, or eaten (more on that later).

First, you must start with two mature tarantulas of the same species. You may observe that when your tarantula gets a little older, they do this "courtship drumming" behavior, as shown in the video by Talkenlate04 below.



Basically, the tarantula is tapping its pedipalps against the glass or floor.

Tarantulas will sometimes do this even without a partner in the tank if they are in the mood to mate.

Males that are mature will have mating (tibial) hooks on their first pair of legs as well as emboli on their pedipalps. Females have a flap of skin (spermathecae) between their book lungs (learn how to look for that here).

The sperm web

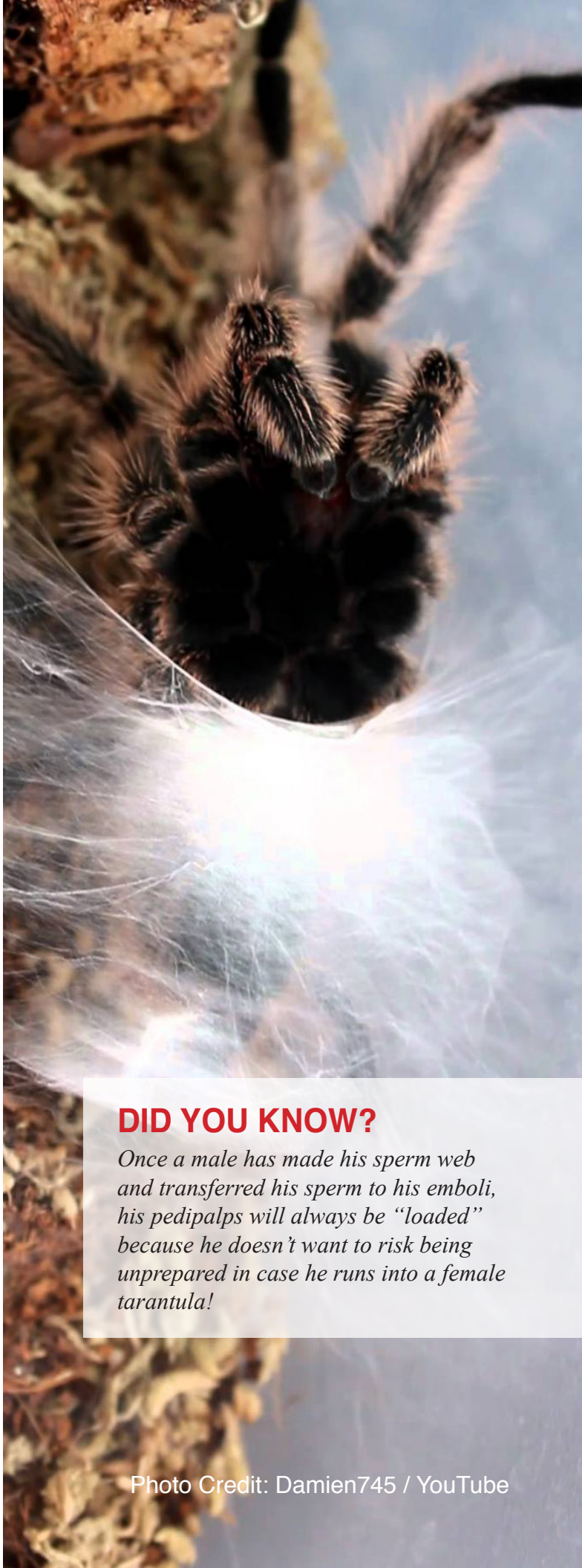
Before a male mates, he must create his sperm web, which is a small special web that he will spray with sperm. Here's what a sperm web looks like:


Photo Credit: Damien745 / YouTube

Basically, the male tarantula begins making his sperm web right-side up, but eventually turns upside down to move underneath it. He will then load it up with semen, making sure that both emboli are moistened to hold his sperm. Once his sperm web is finished, the male tarantula will rub himself on his web and load both moistened emboli with the sperm. This video is a great step by step recording of a tarantula making a sperm web, thanks to Daniel Valcárcel Muñoz de León:

Sometimes, you may not find the sperm web, because the male often eats it after charging his emboli. A typical sign that a male has built a sperm web is a bowl-shaped depression in the substrate.

Unfortunately, after the male spider makes a sperm web, he is near the end of his life whether he mates or not. A sperm web happens within a few weeks after a male tarantula's "ultimate" or final molt. A male may build several sperm webs after he has matured, but remember that a male's fertile period can sometimes be as short



DID YOU KNOW?

Once a male has made his sperm web and transferred his sperm to his emboli, his pedipalps will always be "loaded" because he doesn't want to risk being unprepared in case he runs into a female tarantula!

Photo Credit: Damien745 / YouTube

Photo Credit: Wikimedia Commons

as a few months. For example, a newly mature male might start out building a new sperm web every few days, but they will get further apart over a few months. Eventually, there will be no more sperm webs and he will eventually die of old age.

The mating process

Once the male is finished loading himself up with sperm, he goes out hunting for a female to mate with.

A male tarantula will use the pheromones of the female to guide him to her. Once he finds her, he will tap his feet on the ground to signal his presence (the "drumming" behavior I mentioned before). If she wants to mate with him, she will come toward him and allow him to begin a few courtship gestures such as lowering the front of his body, raising his abdomen, shaking his pedipalps, and moving back and forth.

However, if the female isn't interested, she will either ignore him or, in unfortunate cases, attack him. If the male is successful in peaking the female's interest, the actual mating will begin. The male will come close to the front of the female and hold her fangs back with his legs and tibial hooks so that her underside is exposed and he can transfer the sperm from his pedipalps into her epigynum (located in front of the epigastric furrow). Once this transfer is complete, he will try to get away from her as fast as he can so she doesn't try to attack or eat him!

Here's a great video by Nat Geo WILD that shows two tarantulas mating:

It should be noted that if you are not extremely careful, prepared, and attentive while mating your tarantulas, you could very well lose one. It's pretty common for an attack to come out of a mating session, and quite often it is the male who becomes the victim due to his smaller size and vulnerability.

It is worth knowing the risk you are taking when you mate tarantulas. If you aren't okay with the possibility of losing a tarantula in the process, then you shouldn't try to mate them.

HOW TO SAFELY MATE YOUR TARANTULAS

Despite the fact that your mature male tarantula is near the end of his life anyway, this doesn't mean that you shouldn't put in the effort to prevent him from being eaten or viciously attacked!

There are certain steps you can take to ensure the safety of both of your spiders and do this as ethically as possible. First, you should only try mating mature spiders of the same species. Trying to cross-breed or create a hybrid is highly discouraged not only because you could run into issues with mismatched reproductive structures and genes, but also because there is a higher risk of attacks and misunderstandings of courtship cues. More importantly, it is in the best interest of the tarantula keeping hobby to preserve the natural genetic diversity amongst captive spiders, so in short - only breed tarantulas of the same species!

Another word of caution; even if your tarantulas are the same species and they are both sexually mature, do not pair a female to breed with a male that is bigger than she is. Generally, you want the female to be larger than the male because you do not want the female to be injured. This is a great educational video by Exotics Lair that shows and explains how mating can go wrong with a big male and small female:

Once you have the spiders you want to mate, you should start preparations for a scheduled mating day about two weeks in advance. There are many approaches

and methods to mating, and some may consider this suggested method quite long and involved, but I personally favor giving tarantulas a lot of time to adjust. You do not want to do this on a whim - good tarantula mating involves a lot of calculation and preparation.

Pre-mating day

First, you can move the female tarantula to a larger enclosure than usual and give her time to settle in. Moving to new surroundings is very stressful for spiders, so she will likely need a few days to adjust to her new home. You should not try to rush this whole mating process - if you are trying to get the whole thing done in an hour or two, you are setting your spiders up for failure and a dangerous, inhumane encounter. So make sure that you plan your week and mating day accordingly so you can give this your full attention.

Once the female has had a few days to settle into her new tank, put the male in a smaller sealed container with air holes for ventilation and place this smaller tank in the larger tank with the female about a week before mating day.

You should feed the female more often than usual during this week to reduce the likelihood that she will try to attack or eat her future boyfriend. If you can get the female to eat two days before mating day and just before you let the male out, that is ideal.

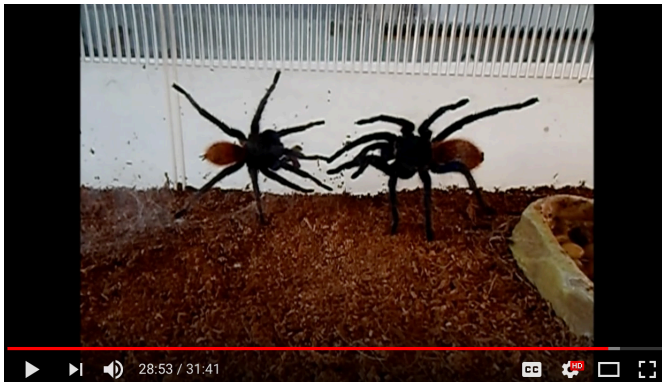
You may witness your tarantulas doing their “drumming” courtship ritual (mentioned in the last section). This is a good sign and means they are ready for mating. However, hold off and still try to feed the female even if this happens before the official mating date.

Photo Credit: Wikimedia Commons

Mating day

If it's mating day and the female has eaten recently, you can slowly let the male out of its smaller enclosure and into the female's larger enclosure. Watch the process carefully and give your spiders your full attention. Make sure you have a paintbrush or another apparatus ready to break up a fight if there is an attack.

If a fight does break out, carefully get in between the spiders with the paintbrush (or something like it) and separate them. This is tricky and you will have to move fast so make sure you are ready to jump in if needed. This is a really great video, courtesy of TheReapersride, that shows how to act quickly and break up an attack during a mating attempt (quite impressive!) - skip to minute 29:



It is important to have already accepted that attacks are common and you could lose a tarantula. Since your goal was to breed tarantulas and your mature male tarantula is near the end of his life, your female is more valuable - if you can only save one tarantula in a scuffle, it's wise to choose her.

If you succeed in the mating process and the male manages to transfer his sperm to the female, you can't relax just yet. Females often attack males after mating, so break them up and get the male out of the female's tank once an attempt has ended. If mating was unsuccessful, separate the tarantulas and try again in a few days. Do not continue to force them to mate several times in the same day - this will stress both spiders out and increase your risk of a fight, injury, or death.

Female maturity and infertility

It can be easy to tell if a male tarantula has matured, as there will be tell tale signs such as "hooking out" and a sperm web. You have to be extra careful to make sure that your female is mature as well. A female needs to be a certain size, and this all depends on what species of tarantula she is.

A good measure to use for a female tarantula's maturity is the span of time between her molts. Generally speaking, once a female's molts are about one year apart, she is mature enough for breeding.

Photo Credit: Matt Reinbold / Flickr

You can also go by the general size guidelines for a matured adult tarantula of the species you have - females that are under 75% of the full size they are supposed to get should not be used for breeding. I know this takes a lot of patience, especially if you are focused on breeding your tarantulas, but it is important to make ethical, safe decisions for living things that are in your care.

Another reason it's important to know when a female tarantula has last molted is to avoid issues of infertility. You don't want to breed your tarantula if she is in premolt and may go through a molt soon - because if she molts after breeding, there is a risk she will be infertile even if she has an egg sac. To be on the safe side, mating six months after a molt should give you a fertile egg sac. For this reason, it's very important to track your adult female's molt cycles. It can be tricky to make sure that your male tarantula also reaches maturity during those six months, but breeding tarantulas shouldn't be done carelessly anyway. If you are purchasing a mature male specifically for breeding, make sure he's less than 4 months into maturity. A recently molted mature male is best if you have a mature female.

CARING FOR A PREGNANT (GRAVID) TARANTULA

If you've had luck with breeding, you will end up with a pregnant female. During this time, take care of the mama-to-be as best you can.

How will I know if my tarantula is pregnant?

Even if it looks as though your tarantulas have mating successfully, you won't know for sure if your tarantula is pregnant for a while. Generally, a gravid tarantula will eat a lot and get quite big in her abdomen, and then sometimes suddenly stop eating. She may also move her substrate around and start webbing much more. She could very well be pregnant, or about to molt - only time will tell as these are signs for both.

Some tarantula owners use a method known as "candle lighting" to see if their tarantula is pregnant. To do this, you can shine a powerful LED flashlight right under or beside her abdomen (best if you can do this on a clear side of her enclosure so you can get a close, good look). If she looks yellow inside, she's pregnant! This is a useful video by Rob Carman (Tarantulaguy1976) that demonstrates this method:

If you're lucky enough to have gotten a pregnant tarantula out of your mating attempts, just make sure she has access to fresh water at all times and feed her all she can eat. Giving her a larger cage is also nice, but not necessary if she is already in a decent sized tank because it may cause her more stress than benefit.

When your tarantula delivers her eggs
It will depend on the species, but generally in a few months she will start making her silken bowl to lay eggs on. She may seal the entrance of her burrow to deliver her egg sac. Burrowing species may deliver their eggs at the bottom of their burrow. The female will spin a special web for her eggs, lay her eggs, wrap them up, and guard them. Here's a great video that shows the process of a tarantula making her web, delivering her eggs, and wrapping them by Rob Carman:

After the egg sac has been laid
Deciding on the time to pull the egg sac away from the mother will depend on the species, but if you wait too long you will have spiderlings all over the place or you run the risk of the mama eating her egg sac, especially if she's stressed out (so don't stress her out if you don't need to).

A tarantula guarding her eggs will usually behave and eat normally. However, if a tarantula has her egg sac hanging in a web in her burrow and not protected under her body, she may become more aggressive. You will observe your tarantula rotating her egg case several times every day, which is pretty much like a hen turning her eggs.

The general consensus in the tarantula keeping hobby is to leave the egg sac with mama for 30 days before separation. If you wait too long to pull the egg case (about 6 weeks), you might notice that the case has been torn open and eggs are missing. That means some spiderlings have hatched, escaped, or been eaten.

If spiderlings have escaped and are burrowing all over the tank, these spiderlings will likely die because you won't be able to feed them or get them away from their mother - so it's important to not wait too long to separate.

Most breeders, after the 30 day incubation period, will corner the mother and remove the egg sac to a separate container (more on this in the next section). Don't be surprised if your mama tarantula gets really aggressive if you try to do this. Generally, many spider mothers will fight to keep their babies from being confiscated (much like humans!).

CARING FOR YOUR TARANTULA'S EGG SAC

If your tarantula has laid a fertile egg sac, you could have an egg sac that, depending on the species, has anywhere from less than 50 to over a thousand eggs!

Once you have separated the egg sac from the mother, you will be responsible for caring for these babies and making sure you get as many hatched spiderlings as possible from the sac. Here's a good video by Deadly Tarantula Girl that shows how to pull the eggs from the mother safely (and goes further to show the opening of the egg sac):

Generally, you want to pull the egg sac a month after it has been laid to avoid it hatching in the tank or having the mother eat it. As shown in the video, the mother will likely be guarding the sac, so you must gently corner her and then pull the egg sac away from her with some long tweezers or tongs.

After the egg sac is pulled, it can be placed in a small plastic cup with a cover to keep the humidity. You should roll the case about 3-4 times daily for the next 2 weeks. Once the egg case is about 6 weeks old (from being laid until now), the spiderlings will likely begin hatching for most species.

When it's time for the eggs to begin hatching, carefully slit the top of the egg case open with small scissors and gently pour out the sac into a shallow dish (like a petri dish) with filter paper or paper towels at the bottom. Take care to remove any infertile eggs, as it's normal for there to be

a few “duds” in a sac. Here’s a good video by Pet Bugs that shows how to open and empty out an egg sac:

You will notice that some eggs may be in different phases - some eggs will look round and cream - brown in color, which means they still have a bit to go before hatching. Others will be in the post-embryo stage, which looks like an unmoving hump holding onto the egg with partially developed legs. The post-embryo cannot move and is still using the rest of the egg to continue development. If you are careful to keep the environment clean and humidity at 65% by lightly misting the lid, the eggs will continue to become full spiderlings.

When spiderlings first emerge from the egg case, they are called 1st instars and look like pale, translucent little spiders that can walk around and eat. In a few days, these spiderlings will molt into 2nd instars, which are more developed and even have the beginnings of a color pattern. When the spiderlings are in the 2nd instar phase, they have fully absorbed their egg and are now little individuals.

Photo Credit: Tarantula Addict / YouTube

Photo Credit: TarantulaGuy1976 / YouTube

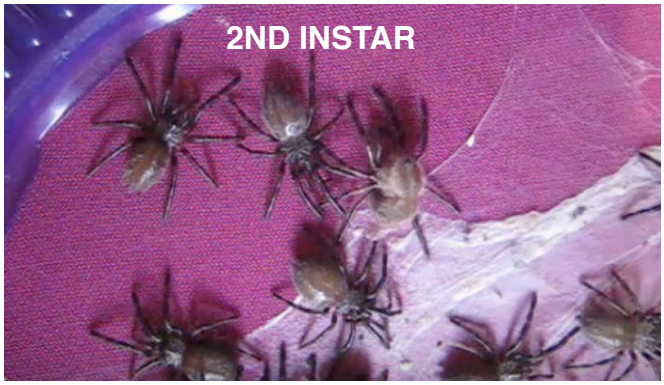
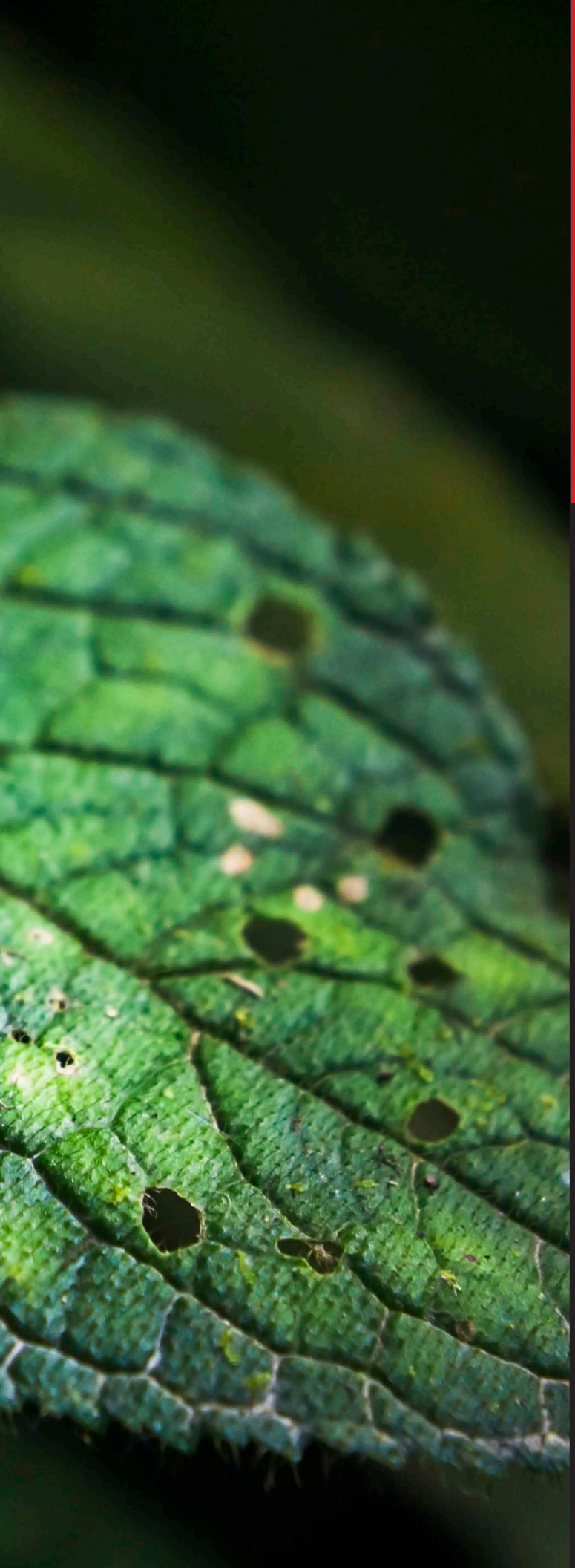


Photo Credit: TarantulaGuy1976 / YouTube

For more information about caring for slings, visit this section!

Photo Credit: Pure! Travel Group / Flickr



CARING FOR SLINGS (BABIES!)

In this chapter, you will learn about:

- The stages of sling growth
- Sling feeding, hydration, + care
- How slings molt
- How long it will take for your sling to grow up
- How to create a sling enclosure
- Recommended products guide for slings

SLING BASICS: THE STAGES OF GROWTH

There are three basic stages to a tarantula's life - the egg, spiderling, and adult phases - however the process from egg to spiderling is pretty interesting!

All baby tarantulas, or slings, start off as tiny little eggs within an egg sac. These will stay in the egg sac for about 6 weeks, until they start to hatch - that is when the life cycle of the tarantula begins!

First, the egg starts out as an embryo, which hatches into the post-embryo phase. Post-embryos are often referred to as "eggs with legs", considering they look like 8 little tarantula legs that are still attached to the embryo. At this point, the tarantula may be able to move its appendages but is not mobile.

Photo Credit: Wikimedia Commons

After the post-embryo's first molt in which the exoskeleton has been shed, the baby tarantula is considered to be in the 1st instar stage, and will go through a few more instar stages each time it molts before it is considered a juvenile. With each new stage, the tarantula will develop more and more of the characteristics of an adult tarantula of its species (hair, coloring patterns, etc.).

Photo Credit: The Gut / Flickr

It takes until about the 3rd or 4th instar for a spiderling to start looking like a

fully functional tarantula (it should be noted that “spiderling” and “sling” are interchangeable terms).

The number of molts a tarantula must go through to reach the juvenile middle stage depends on the species. Sometimes a tarantula’s growth rate can be affected by temperature and food, so there is no distinct timeline for this process. When a young spider starts looking like an adult, it is usually considered a juvenile. Eventually, the tarantula will reach the sub-adult and adult/mature phases. To read about how a tarantula matures and the signs of maturity, head here.

Photo Credit: The Gut / Flickr

HOW TO FEED AND HYDRATE YOUR SLING

While there are many similarities between caring for grown tarantulas and slings, there are also distinct differences, particularly when it comes to feeding routines.

Hydration

All tarantulas need water, but slings need a tiny water dish. For slings, a 1/2" water dish is good if it'll fit into the enclosure. Often times, a bottle cap will work great. If your enclosure is too small for a water dish, you can try an even smaller "dish" (like a tiny lego). You could also put a few droplets on the wall of the enclosure, or give the walls a little misting (if your tarantula species will tolerate that). You can also "make it rain" on the substrate by sprinkling water on the substrate to simulate a tiny rain shower. Just be careful not to get your little tarantula wet in the process - especially on their underside's book lungs.

Slings dehydrate easily

Slings are at a higher risk of dehydration because they don't have the waxy coating on their exoskeleton that older spiders have, which helps them retain moisture. Your spider will likely not have this protective coating until several molts later.

You should have a regular hydration schedule, as water can evaporate quickly - especially in the warmer summer months or in the winter, when your heat is running. If you are worried about your slings drying out, keeping a part of the substrate moist can be useful because the slowly evaporating moisture on the substrate will keep the humidity up in your sling's enclosure so it doesn't dry out. This could be useful if you will not be home for a few days. However, be careful not to completely saturate the enclosure - an environment too moist or stuffy can kill your sling.


Photo Credit: Wikimedia Commons

Feeding

Prey should always be smaller than the sling's carapace, or middle. As their small size makes slings very vulnerable, many tarantula owners opt to try to get their slings out of this early fragile infant stage as soon as possible. They do this by feeding them more often, giving them small meals 2-3 times per week.

However, if you use this method, you need warmer temperatures in the mid-70s or a little higher to increase the tarantula's metabolism to support an aggressive feeding schedule. Keeping your tarantulas at lower temperatures will slow your tarantula's metabolism, giving them a decreased appetite and slower growth rate. This aggressive feeding schedule is usually only done until the tarantula is about 1.5-2". After that, they will switch to a once per week schedule, or even a bi-weekly schedule. This is because while you may want to rush to get your spider out of the sling stage, you don't want to rush them into maturity after that stage has been passed.

NOTE: It should be mentioned that some finicky tarantulas, such as the Grammostola and Brachypelma, may not eat regardless of what you do to temperatures and feeding schedules. This is usually nothing to be alarmed at; some species just have habits of regularly fasting and refusing food.

ALL ABOUT SLINGS AND THE MOLTING PROCESS

The premolt and molting process for slings is similar to that of mature tarantulas, however they go through this process more frequently due to their more rapid growth rate.

Signs that your spiderling is in premolt may include:

- A sling that suddenly stops eating.
- A sling with a fat shiny abdomen, sometimes up to 1.5x the size of the carapace. The shininess is often seen more in slings than in mature tarantulas, as they have less hair.
- A sling that has become darker in color, especially on the abdomen - this happens as the new exoskeleton forms under the older one. Often times slings have a dark spot on their abdomen during premolt, and as they near the molting process this spot grows.
- A sling that is slower and more lethargic - while sometimes this is due to seasonal changes, a tarantula in premolt will also be less active and more secretive.
- A sling hiding in its den - many tarantulas will retreat into their burrows or even close the entrances while they are in premolt. Some may even bury themselves in premolt. If your tarantula buries itself, it's easy to be stressed out and want to "help", but they are not in danger of suffocating or being buried alive. Your tarantula simply wants privacy while it is vulnerable and will resurface after it has molted and its new exoskeleton has hardened. Resist the urge to dig your tarantula up because you will seriously distress it and could jeopardize the molting process.

- Your sling has made a web "hammock" or "mat" in its enclosure which is thicker and more spot-specific than its other webs. This is where your sling will flip on its back to molt. This is a sure sign that your tarantula will molt soon, usually within 24 hours. Arboreal tarantulas may build this web "hammock" off the ground or seal themselves in their funnel webs, which means the same thing - a molt is near.

Other important facts:
If your sling is in premolt and refusing food, don't leave any prey items in the enclosure overnight because the prey might kill or injure your tarantula if it starts molting. Also, make sure your sling has a full water dish and that a corner of the substrate is damp.

If your sling is on its back, it is molting and DO NOT touch or disturb it. Interrupting your sling or tarantula during its molting process could be fatal. Once your sling molts, you should wait approximately 4-7 days before offering your tarantula food, because its fangs and body will be too soft (this info is sling-specific, older tarantulas need more time to harden).

Frequency of sling/juvenile molts
While this depends on many different factors such as the species, the size, age of the sling, its feeding schedule, and the temperature of the environment, many slings can be expected to molt every six weeks to two months. Some tarantulas may molt faster if they are being fed more often or are being kept in a warmer environment.

How long until my sling looks like an adult tarantula?
Raising a spiderling takes a lot of time and patience, but it's very rewarding. There's no clear answer for this, as it depends on the species. Different species have different growth rates - some species can mature in just over a year, and some take several years to become adults. The temperature and feeding schedule your sling is given will also affect how quickly your sling matures. Your best bet is to ask some keepers who have raised the same species and to ask about their experience with it. For species-specific information, a great place to look is Arachnoboards or Tarantula Forum - these forums are filled with experienced tarantula hobbyists and beginners alike, so don't be shy to ask! You can also search the threads, as it's more than likely that your question has already been asked and answered.

MAKING AN ENCLOSURE FOR YOUR SLING

Taking care of a sling or spiderling can be much different than taking care of a mature tarantula or even a juvenile one. There are distinct differences in care that you must know, and one of the biggest is sling enclosures.

While Kritter Keepers and tarantula enclosures come in several sizes (some of which are quite small), it's important to know that these are inadequate for slings. Even the smallest of Kritter Keeper tanks will be too big and have ventilation slots that are too large and could allow an adventurous baby spider to escape! So what do you put a baby tarantula in?

You can find tiny enclosures online, or you might even have one in your house already! The most common enclosures for slings are little snap cap or "dram" vials - they are very useful if you have a lot of slings. These are great because they're transparent, secure, and you can find them in a wide range of sizes. However, you will need to create ventilation, which can be done by taking a thumb tack or needle and poking a few dozen tiny holes in the top. The only downside is that it's hard to create ventilation holes anywhere besides the lid - so cross-ventilation isn't much of an option with these enclosures. If you need or want to add cross-ventilation, you can use plastic spice jars because the plastic is thinner and a needle can be pushed through on the top half-inch of the sides. Some even have hatch lids, which makes feeding even more convenient.

When dealing with slings, it's important to make sure they can't escape through the ventilation holes. Spiders are escape artists, so if you make a hole that's a little too big, don't fret - just cover that hole with clear tape and try again.

Another popular enclosure used for slings are deli cups, for their ability to be easily ventilated and their ability to stack on top of each other (useful if you have a bunch of baby spiders!). These are extremely affordable - you can usually get 50 of them for only $20!

Terrestrial slings can be comfortably housed in a 16 oz deli cup, which gives them tons of room for substrate so they can burrow. Arboreal and fossorial slings will be comfortable in the 32 oz version, so they have more room to climb or dig (fossorial slings need tons of substrate). The tiniest slings can be kept in 2 oz plastic soufflé cups, which can also be found in delis and restaurants.

Photo Credit: Wikimedia Commons

DID YOU KNOW?

When a sling is just starting out, it will barely resemble mature tarantulas of its species! Slings will often be translucent and not very hairy - it can take quite some time before they start looking like real tarantulas!

Designing a sling's enclosure

Once the enclosure is ventilated and ready for the sling, you have to set it up! All ventilation must be completed before adding the substrate and other factors. To add the substrate to a terrestrial or fossorial sling's enclosure, you'll want to fill 2/3 of it up with substrate (to prevent a big fall if they climb) and pack it down. You can use coconut husk substrate or another similar substrate you would use for a grown tarantula. Arboreal species don't need as much substrate but they need about an inch or so of substrate to burrow.

You could also add a few decorations if you have room, such as a small piece of cork bark or twig to climb (for arboreals), some sphagnum moss (which is great for holding moisture), or plastic/silk leaves. These decorations will provide a small hiding area for your sling, as even the smallest spiders will want a place where they can hide. If you have a burrowing species (fossorial), you can create a starter burrow for your spider by using the end of a paint brush and pushing it into the substrate.

Slings and enclosure heating

Many sling owners safely keep their slings at temperatures between 68-75°F. Having slings at room temperature will usually not have any side effects, however keeping them at lower temperatures can give them slower metabolisms, which if done a lot can cause things like decreased appetites and slower growth.

Photo Credit: Wikimedia Commons

Photo Credit: The Gut / Flickr

MY RECOMMENDED PRODUCTS - SLINGS

For slings or very young tarantulas, you will need almost the same equipment you need for an older tarantula, but on a much smaller scale. Enclosures, decor items, and water dishes tend to be tiny and one bag of substrate will probably last you quite a while! If you have plans to get many slings, fortunately many of these products are pretty affordable and can be ordered in bulk.

Photo Credit: Wikimedia Commons

SLING / JUVENILE TARANTULAS

Sling enclosure:

Dram vial (various sizes)

ADD TO CART

Plastic spice jar

ADD TO CART

Deli cup (various sizes)

ADD TO CART

Substrate:

Premium substrate

ADD TO CART

Coconut fiber substrate

ADD TO CART

Compressed coconut fiber

ADD TO CART

Water dish:

Miniature dollhouse bowl

ADD TO CART

Miniature dollhouse bowls

ADD TO CART

Screw bottle caps

ADD TO CART

Hide/Decor:

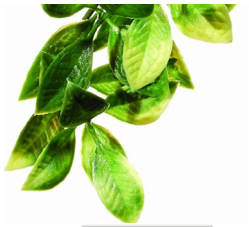
Small plants

ADD TO CART

Small succulents

ADD TO CART

Fake leaves / branch



ADD TO CART

Feeding tongs:

ADD TO CART

ADD TO CART

Photo Credit: Wikimedia Commons

COHABITING + COMMUNAL TARANTULAS

In this chapter, you will learn about:

- Why communal setups are not for beginners
- Species that are communal
- Challenges of cohabitation
- How to start + maintain a communal setup
- Tarantula care in cohabitation
- How to introduce a new tarantula to a community

COHABITING + COMMUNE FRIENDLY SPECIES

Cohabitation amongst tarantulas is widely disputed and controversial, and there are still a lot of gaps in information. Most of the time, experienced tarantula owners are simply documenting their experiences as they carry out experiments as safely as possible.

While most species of tarantulas must be kept separately, there are hobbyists who believe some species are communal tarantulas and can coexist and live in a communal setup.

A communal setup is considered a much more advanced level of tarantula keeping and definitely NOT for beginners. There are a lot of delicate factors involved, and even with the information I have provided here, you may have to learn through trial and error.

While it is safer to keep your tarantulas in separate tanks, some experienced tarantula keepers state that certain species of spiderlings and tarantulas actually thrive and do better as a community than they do living on their own - and they have tested this theory out to prove it. However, if you decide to embark on taking on a few tarantulas from a communal species, you must accept the risk of possible cannibalism and losses - and you must do your research to do this responsibly.

Safe communal species

Only tarantulas considered safe for living in a communal setting should be put in this set up. These tarantulas are:

- Coremiocnemis tropix
- Monocentropus balfouri
- Hysterocrates gigas
- Holothele incei
- Pterinochilus murinus
- Heterothele gabonensis

- Heterothele villosella
- Pamphobeteus species (Chicken spider)
- Poecilotheria species - P. rufilata, P. vittata, P. miranda, P. subfusca, P. formosa, P. pederseni and the P. regalis, P. hanumavilasumica, P. smithi, P. tigrinawesseli

There aren't many, and that's because most tarantulas have to live alone. It should also be said that you should NOT mix spiders of different species in communal settings.

Challenges in cohabitation

Before you embark on a communal setup, you will have to be prepared to deal with any number of unpredictable situations. For example, there could be sling litter-mates that not only grow faster than the others, but those who hog food and intimidate their roommates. For smaller spiders who are reluctant to eat, getting these tarantulas their food can be very challenging.

Molting also becomes a huge issue in communal set ups, since not all of your tarantulas will molt at the same time. Your recently molted tarantulas will be starving for food, but if you feed them you are putting the tarantulas that are in premolt in danger. The hungry ones may even eat their molting siblings.

Cage maintenance is also far more complicated as there is more waste. Cleaning a communal tank takes a lot of work and care, as any disturbance could cause a huge panic from an entire community of spiders (who might all run out of the tank at once!).

There is a risk of cannibalism and fatalities in communal settings - in the wild, tarantulas have enough space to retreat and stay out of each other's way if there's a fight. But in a confined tank together, it's an entirely different story. Fighting is sometimes inevitable.

Generally, tarantulas aren't very good at living together - but there have been successes in cohabitation. Just be aware that you shouldn't make the decision to embark on a communal setup on a whim. Understand the risks and be honest about your own level of expertise. If you aren't sure, here's a great article on Tom's Big Spiders, written by experienced tarantula owner Casey J. Peter about his experience with communal keeping. Tom also writes about his own communal experience here.

HOW TO START + SUSTAIN A COMMUNAL SETUP

Creating a communal setup can be risky and very intimidating. Doing your research and being thorough in your considerations for your tarantulas is very important.

The key to a communal setup is that you want a big enough enclosure so that your tarantulas are not always bumping into each other, but one that is still small enough so that your tarantulas must interact. Another problem with having an enclosure that is too large is that tarantulas will try to claim their own space and get territorial, which could lead to attacks and cannibalism.

With regular feeding and the right size tank, deaths between communal species should be minimal or nonexistent. If you notice a particular tarantula on its own and not taking part in the group, it may be wise to remove that tarantula and house it separately.

Start them young

It is not recommended that you start a communal setup with adult tarantulas - so if you aren't okay with the idea of raising a bunch of baby tarantulas (which can be more high maintenance), you may want to rethink a communal setup.

Starting with spiderlings is the most ethical way and will give you the highest success rate. While the spiderlings should be the same species, they do not have to be from the same egg sac - they should just be roughly the same size and introduced into the enclosure at the same time. If you are purchasing a group of spiderlings for a communal setup, you can ask the seller if your spiderlings are sac mates or not.

How many spiderlings in a commune?

If you want to have tarantulas cohabiting, you should prepare and plan on breeding them. About seven spiderlings is a good

Photo Credit: Selen Spender / Flickr

number to start with, which will give you good odds of having more than one male and female. As the complete communal cycle involves stages such as mating, laying an egg sac, incubation, spiderlings, mothering and enlarging the territory to make room for the new spiders, breeding is an important part of communal care. An advanced communal setup is considered to house at least three generations of the same species living together!

Creating a communal setup

Since you'll have multiple tarantulas, your enclosure should be larger and provide multiple hides, water dishes, and sticks/decor items for your tarantulas to make into their home. You will basically need all the items you need for an individual tarantula - just more of it.

You do not need a big tank for communal slings - most times a jar or deli container with ventilation will be fine. However, once your tarantulas begin to get bigger you will have to rehouse them. Eventually you will need a 10 gallon tank (or much, much bigger) depending on how many spiders you have and how big they are.

How to feed communal tarantulas

Feeling one tarantula can be pretty difficult on its own - feeding many is even harder. Feeding in communal setups is extremely important to reduce instances of cannibalism and attacks. If some tarantulas are left hungry, they will try to eat their roommates. You can pretty much use a regular feeding schedule, but you must provide enough prey to ensure that every tarantula has the chance to eat. Follow a regular feeding schedule and follow the

Photo Credit: Wikimedia Commons

guidelines for an individual spider of its size - but multiply it for the number of tarantulas you have.

Maintaining communal areas

Unless there is an issue of mold, mites, or parasites in the tank, doing a complete tank clean should not have to be done often. Often times, you can spot clean by using long tweezers or tongs to remove old molts, uneaten prey, and any other waste your tarantulas have created (be careful not to create a disturbance).

It is recommended by some hobbyists that you place a roly poly (Armadillidium) species of insect into the environment, as these can help keep the communal setup clean and mites in check. If you have an arboreal communal setup, you can clean the side of the tank by misting the sides, waiting for any spider poop to soften, then use tweezers with a wet paper towel attached to wipe things clean. Of course, one of the most important tank maintenance guidelines (for any tarantula) is to always provide clean water.

Transferring or rehousing your communal tarantulas

When your communal spiderlings have reached maturity or your colony has grown too big, you will need to rehouse them appropriately to a larger enclosure. This requires a lot of planning and meticulous attention, as rehousing even just one spider can be an arduous task if proper measures are not taken. You will need an open space and preferably, another person who is willing to help.

The new communal enclosure should already be set up and ready for your tarantulas with substrate, the proper hides/decor and water. Working one tarantula at a time, use a deli cup/plastic container and a paint brush to nudge each tarantula into the container and move them individually into the new set up. Having another person to help you can ease this process along as they can open and close the new setup for you so that no tarantulas escape during the transfer. Some communal species can be quite fast or defensive, so an experienced helping hand can be useful. Generally, if you are being gentle and following best procedures, your tarantulas will not feel as though they need to protect themselves. Tom Moran of Tom's Big Spiders created a great video that shows how he rehoused his communal tarantulas:

Communal molting

Having a tarantula molt in a communal setting can be a major concern, as tarantulas are extremely vulnerable during this process. According to experienced hobbyists who are familiar with communal setups, it has been observed that group members will allow a fellow tarantula to molt alongside them and will not kill or attack it while it is molting.

To prevent live prey from attacking the molting tarantulas, it can be useful to offer the prey to each tarantula by using tongs instead of letting the prey run around the tank to be hunted. This would be more difficult with larger setups where there are numerous tarantulas, but this method could work well for small communes where you can keep an eye on all spiders while feeding them individually. The last thing you want is for one to use it as an opportunity to escape while you are feeding its roommate! Having someone to help you could be very useful in this situation.

Communal mating and breeding

One of the goals with communals is to eventually end up with multiple generations of tarantulas.

You do not need to separate a mature male and female for mating in communal setups. In all honesty, they will probably mate without your knowledge anyway, until you realize you have a pregnant tarantula!

Some communal tarantula owners choose to pull the egg sac from the mother after about a month, however it's not really necessary in a cohabitation setting.

Introducing a new tarantula to the community

Ideally, your communal tarantulas were introduced to each other as spiderlings and were introduced into their communal setup at the same time so they were all on the same playing field. However, this is not always the case. If you want to add a new tarantula to an already established community, be prepared to accept any consequences that the community or new tarantula may suffer.

You should plan to be present the entire time you are doing this introduction, and for a while after to observe and make sure everything is working out. To introduce your new spider to the communal, put the newcomer in a deli cup and put it in the tank. Wait until it settles down, and then slowly and gently lift the top off. When the newcomer feels at ease, it will come

out of the deli cup or a tarantula from the communal group will approach it. If this happens and there is no panicking from other tarantulas in the community, there is a good chance your newcomer will be accepted and adjust successfully. However, if the community freaks out and starts running, you may have to intervene and wait for things to settle down before trying again.

Communal casualties

Whether in the wild or under human care, tarantulas are cannibals by nature and if you put tarantulas together, you are taking that risk. Even if you follow all the rules, you must remember that they are wild creatures and can sometimes behave unpredictably.

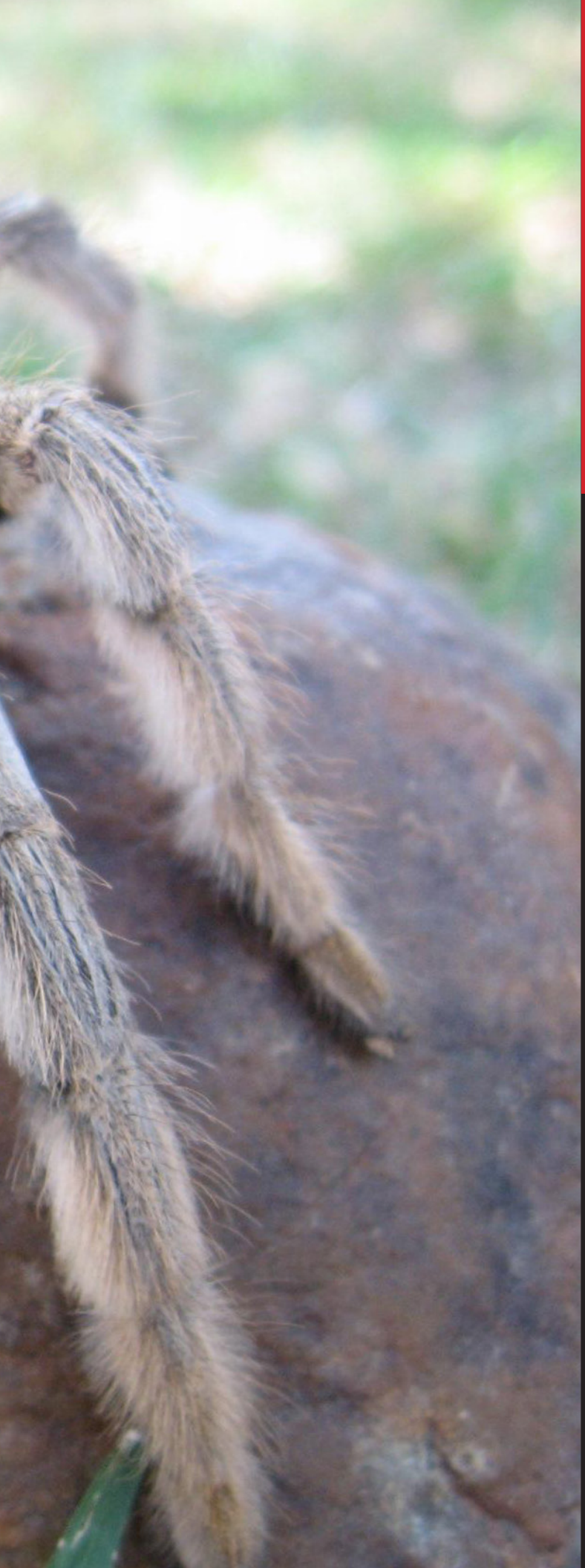
Even in the most ideal communal setup, a tarantula may turn on its mates. This could happen for any number of reasons, and communal oriented tarantulas have not been studied and documented extensively outside of the reported experiences of hobbyists. An attack could stem from anything such as a shortage of food to a diseased tarantula to an elimination of the "weakest link" in the pack. We still have a lot to learn about tarantulas, and communal living is one area that is lacking in answers.

DID YOU KNOW?

There have been reports by tarantula keepers stating observations of communal tarantulas working together to build their homes. There have even been reports of baby tarantulas sharing a meal together or piling up on each other!

Photo Credit: Wikimedia Commons

Photo Credit: Wikimedia Commons



PACKING TARANTULAS SAFELY

In this chapter, you will learn about:

- The packing supplies you will need
- How to pack your tarantula safely
- How to pack a fast tarantula
- How to send slings
- How to ship tarantulas in cold weather
- Making sure your tarantulas will arrive safe + unharmed

HOW TO SAFELY PACK + SHIP A TARANTULA

Whether you are moving and looking for a safe way to transport your tarantulas or are a new breeder looking to ship your first order, knowing how to pack your tarantulas is critical to making sure they are alive on arrival.

Most of this will apply for shipping tarantulas, but these principles could certainly be applied to keep your tarantulas safe and secure during a move or trip.

Here's what you'll need:

- Cardboard box
- Packing chips or newspaper
- Soft tissue or paper towels
- Clear plastic container (good size for your tarantula)
- Paintbrush or tongs
- Bubble wrap
- Duct or sticky tape

The first step is to prepare the container the tarantula will be held in. You'll want to line the entire perimeter of the container with tissue to protect the spider and hold them in place. Fold the tissue or paper towel a few times and place it on the bottom and sides of the container. Give it a light spray with water, careful not to make the tissue too wet. Make sure you also have a folded tissue ready to place on top of the spider, and that your lid is already prepared with holes for ventilation.

Then, you must put your tarantula inside of the new container (if your tarantula is docile, you can nudge it inside with a paintbrush or tongs). More aggressive species may require more involved methods.

Once the tarantula is in the new container, place a lightly misted tissue on top, followed by the lid.

Once the lid is on top, you can put some tape on the sides so it doesn't come off in transit.

Then, you can wrap the container in bubble wrap (but not too tight and leave space for air to flow through). Then prepare your cardboard box with either newspaper or packing chips, being sure to pack it tightly so your tarantula's container can't get banged around in the box.

If you are shipping in cold weather, you can add a heat pack, however be aware that shipping during extreme weather and using heat packs carries the risk that the tarantula might not be alive upon arrival. If you are using a heat pack, remember to start the pack 30 minutes before packing and do not put the tarantula's container directly near the heat pack. Some heat packs come with sticky pads that can secure it to one side of the cardboard box, which is ideal so the heat pack can't get too close to the tarantula. Generally, you want a decent gap between the tarantula's container and the heat pack, separated by newspaper or packing chips. If your heat pack does not come with sticky pads, you can use something like a toilet paper roll or paper towel tube to hold the pack in place, depending on how big your box is.

There are several great YouTube tutorials on how to pack different tarantulas. Here's a great video by TarantulaAddict that shows how to pack a terrestrial:

How to pack fast species via TarantulaAddict:

How to pack a sling, via The Spiderman:

Photo Credit: Rushen / Flickr

TARANTULA HACKS, TIPS + TRICKS

These are the techniques and methods that I use for my own tarantula (with some great suggestions from others!)

- How to feed a difficult tarantula
- How to make a mesh or screen lid safer
- How to keep your tarantula warm in cold weather

BONUS: Weird things I've seen my Spidey do!

MINI TANK: HOW TO FEED A DIFFICULT TARANTULA

One of the most common questions I get on Spidey's blog is, "Why does Spidey have a mini tank in her enclosure?"

Spidey was my first tarantula, so I learned the hard way about the odd eating habits of the Grammostola rosea, or Chilean rose hair.

I first started using the mini tank because Spidey is a very picky eater who spends most of her time fasting. It was through a lot of trial and error that I developed the "mini tank method."

I originally started feeding Spidey crickets but they were a bit too fast for her. Superworms and roaches seemed to work better. But even with this change, she was slow and her food would get away, burrow into the substrate, and make a disgusting mess of her tank. I recognized that Spidey enjoyed hunting and digging for her worms, so I sought to find a way that would contain her prey but still give her the luxury of hunting as she would in the wild. So that's how the mini tank came about! For reference, here's a lovely pre-mini tank pic of Spidey forgetting how to be a predator and letting a worm get away:


Photo Credit: Patricia Colli

First, the mini tank started off as a separate feeding area away from her tank. I would put some substrate in a small Kritter Keeper like this along with a worm. Then I would gently coax Spidey into the tank, place the lid onto it, and wait to see if she was interested in eating. I'd give her some time and either wait until she was done eating or until I realized she wasn't

Photo Credit: Patricia Colli

interested to return her to the larger tank. This worked decently well, except it was incredibly stressful for her to be moving between her larger tank and the mini tank. I also didn't like having to trap her in the mini tank with the lid until she ate.

So I eventually decided that instead of having the mini tank separate from the real tank, I could eliminate all her stress by just making it a part of her tank, as you see in the pic above!

I'm so glad I did this because it turns out she really loves her little tank. It's been a permanent part of her 10 gallon tank for a few years now and she's usually hanging out in it even if there's no food in there. I think she just likes the feeling of a small cozy space she can retreat to.

Having the mini tank in the big tank is also great because if Spidey doesn't want to eat, she can just leave the mini tank whenever she wants until I take the food out. I like the idea of her being free to come and go whenever she wants.

Basically, the mini tank is my stress-free feeding method for my picky, difficult tarantula! It has saved me a lot of frustration in tank cleaning (rest of the tank stays pretty spotless) and I no longer have to play a guessing game about whether or not Spidey is going to catch her food fast enough.

I hope this helps anyone in a similar situation. The mini tank I use can be purchased at any pet store, or online here!

KEEPING TARANTULAS WARM IN COLD WEATHER

Many concerned tarantula owners stress out about how they will safely keep their tarantulas warm during winter or in colder parts of the world.

There's a lot of misinformation out there about what the safest way to keep tarantulas warm is, and unfortunately this incorrect information has very serious consequences and could very well result in a tarantula being injured or dying. As a disclaimer, I should mention that different species of tarantulas have different temperature needs - so keep that in mind when thinking about whether this method will work for your tarantula. This is a safe, inexpensive method that has worked for myself and many other experts.

The first winter with my Grammostola rosea, I turned up the heat for Spidey all throughout the winter and it was a very expensive, avoidable mistake. I was shelling out hundreds of extra dollars on my heat bill every month. Fortunately, the next year I figured out a much better way for my wallet (and Spidey).

In my experience and research, I have found that the safest and cheapest way to keep tarantulas warm is with a space heater. I personally have had this one for years and I love it – powerful, quiet, and has a safety feature that automatically turns it off when it gets knocked over (great if you have cats, dogs, or small kids running around). I use it nonstop all throughout the winter, and it has been a life-saver for Spidey and my bank account!

The reasons space heaters are a great solution are because:

- You will literally save hundreds of dollars on your heat bill in winter - I learned this the hard way during my very first winter with Spidey and it was awful.

- Other methods such as heating lamps and heat mats can be very dangerous for your spider and put them at risk of getting burnt or being cooked alive! The truth is, most tarantulas usually don't need direct heat, so these methods are unnecessary - most are comfortable at the temperature humans are comfortable with.

How to set it up

My space heater technique is simple to set up. You simply put your tarantula's tank in a small room with the space heater and close the door to contain the heat. However, I recently discovered an even easier way that you will benefit from as well and save even more money. This past winter, I just kept my space heater in my living room (so Spidey didn't hog all the warmth) and simply put it near her tank (2-3 feet away). My living room is about 400 square feet and I only used one space heater, so you may need another depending on how big your space is. There's a pic of the very simple setup below (please ignore the mess):

Spidey took to staying on the side of the tank near the space heater most of the winter, so I think she appreciated it. With this method, you probably won't have to turn your heat on at all (I didn't), and now

Photo Credit: Patricia Colli

you and your spider will both be warm! Even though your electric bill may go up a little bit from running a space heater, it is honestly nothing compared to what your heat bill would be (in my experience).

Tarantula expert Jon3800 (who is huge on Youtube and a great resource for other tarantula info) also backs up the space heater method and advises against heat mats and other less safe methods. Check out this video where he talks about why you should "Use a small room heater. Heat mats are not needed nor they should be recommended. They do more harm than good":

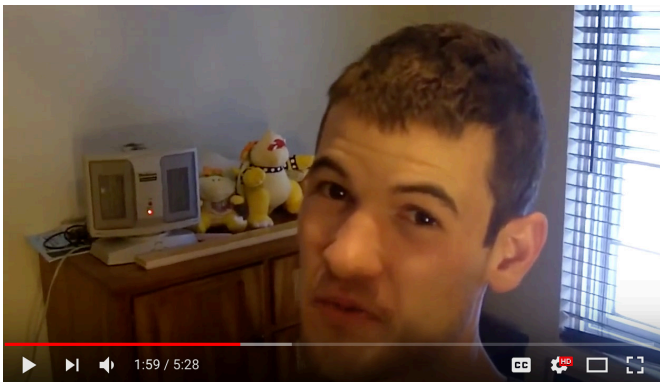


Photo Credit: Pixabay

Here's a space heater similar to what Jon uses in the video, if you're curious.

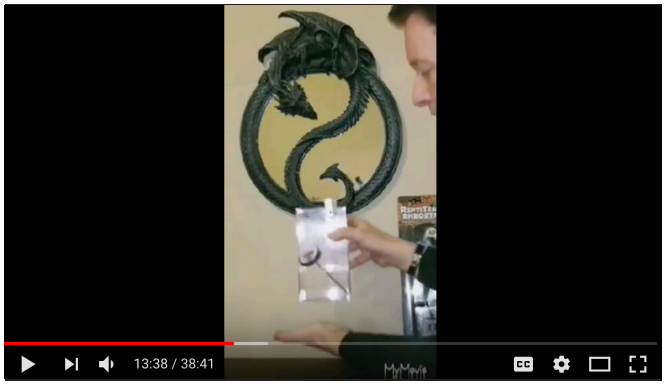
A space heater can be very convenient, especially if you are someone who has several tarantula tanks that need to be kept warm during the winter. This option enables you to raise the temperature for all of them at the same time.

A word of caution on the space heaters: Be smart. PLEASE make sure you get a good, safe, modern space heater if you will be running it a lot – the old metal ones are very dangerous to leave on, especially unattended!

One important thing to keep in mind when using any heat source is to make sure your tarantula always has water. When using a heat source, this means checking your tarantula's water dish more often as the heat will dry it up faster.

The space heater method is not the only way to provide a warmer environment for your tarantula, but it has been considered one of the safest options and I have personally had great success with it. With that being said, there are other options and we are always learning more.

If you would like to delve into this further, there's a great video by experienced tarantula keeper White Light on YouTube, in which he explains different heating methods, different tanks, and gives a pretty in depth analysis of how to gauge temperatures and use different equipment safely. Some methods are a little more complicated in setup and would be most suitable for someone who does not have tons of tarantulas (this is more of an individual tank setup), but he gives very good step by step tutorials on how to do it. Here's the video:



Remember that any method you use and consider must also be appropriate for the species of your tarantula. Some tarantulas may need a little bit higher temperature than others, so don't forget to do your research!

In closing, heating is still one of the most argued topics in the tarantula hobby. Hopefully this helps give you some food for thought on options!

SPIDER-PROOFING YOUR MESH SCREEN OR LID

Tanks with mesh or screen lids are incredibly common, especially for beginners. Unfortunately, they are also pretty dangerous - but if you already have one, there are steps you can take to make it safer for your spider.

Why are mesh lids or screens dangerous?

What you see in the picture on the opposite page is exactly what you DON'T want, especially in a terrestrial tarantula like my G. rosea Spidey. Sometimes terrestrials will try to pretend they're arboreals and go on climbing adventures, which can lead to dangerous incidents like this one. While it may look "impressive", this could result in a massive injury or death. A tarantula could get a claw or foot stuck in the mesh and be left dangling by one foot or leg (this happened to Spidey, who was fortunately rescued immediately), or the spider could fall to its death. So, it's incredibly important that you prevent this from happening in the first place.

If you have a mesh lid, a cheap, easy, and popular way to safe-guard against this situation is to tape up the edges of the lid so that your tarantula cannot grab onto the mesh screen when it climbs up the side of the tank. However, it's critical to use more than enough tape - in the picture to the right, you can see that I had already taped the underside of the mesh lid - my mistake was not making the tape wide enough, so Spidey simply reached her naughty little legs right over it. You want to make sure your tape goes deeper than your tarantula's leg span (while still allowing for adequate ventilation), because they're sneaky!

Here, I give an easy tutorial of how I do this with Spidey's tank. Luckily, once I made the tape wide enough, I have not ever had another incident like this in years - so I am confident in this method and have heard good things from other owners about this technique as well.


Photo Credit: Patricia Colli

1. Materials

The materials are cheap - all you will need is some clear packing tape and of course, the lid.


Photo Credit: Patricia Colli

2. Tape up the perimeter

Turn your mesh lid upside down so that when you put the lid back on your tarantula's tank, the non-sticky side of the tape will be facing the substrate.

Then, start to go around the underside's perimeter with tape, starting at the very edge of the lid. Press the tape down as you go, so that there's no chance your spider could get their foot caught in the tape if they tried to climb onto the lid.

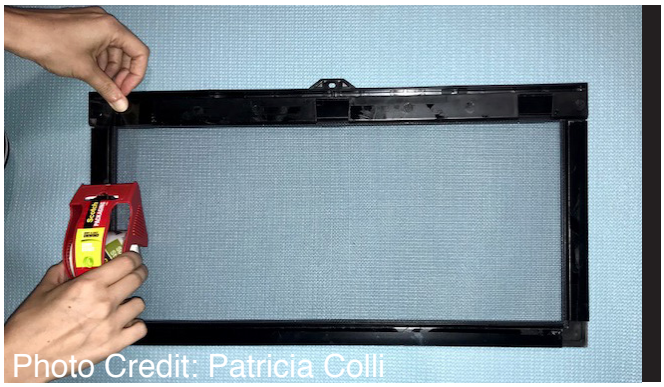


Photo Credit: Patricia Colli

Continue doing this around the rest of the sides, until you have the entire perimeter covered. This is what it should look like when you've finished taping up every side of the tank:


Photo Credit: Patricia Colli

But we're not done yet!

3. For larger spiders, more tape!
If you have an adult or larger spider, you may need to build in another layer of tape to make sure the tape is wider than the length of your tarantula's legs - or else your tarantula will do what Spidey did - they'll step right over it! So get an idea of how long your tarantula's leg span is and plan to build another layer of tape to extend out a little more (if your tarantula is young, you may have to redo this as your spider will grow with each molt).

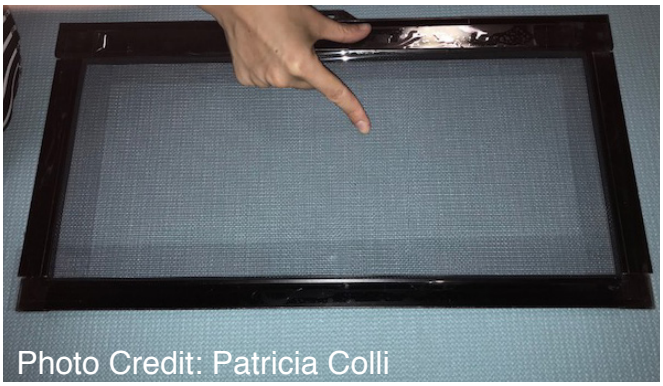


Photo Credit: Patricia Colli

Then, put another layer of tape around the first layer of tape. It should look something like this; note how much wider the tape is:


Photo Credit: Patricia Colli

4. Almost done!
Now you're almost finished. Smooth and press the tape down into the underside to avoid any sticky parts coming in contact with your tarantula. Place the lid back on your tarantula's cage and you're finished! Here's the final product:


Photo Credit: Patricia Colli

5. Prevention is your friend
This tutorial is very quick and easy, so there's no reason not to try to make your lid safer! But there's another major thing you could do as well to make your tarantula's tank safer if you have a terrestrial (ground dwelling) species.

A good majority of falls, as well as climbing incidents, can be prevented if you use enough substrate. Generally, you want 2/3 of the tank to be filled up with substrate, or at least enough so that the space between the lid and the substrate doesn't exceed your tarantula's leg span. By doing this, you shorten a possible fall and discourage climbing.

Photo Credit: Sarah Lowgren / Flickr

BONUS: WEIRD THINGS SPIDEY HAS DONE

In my several years of taking care of my Grammostola rosea Spidey (check her blog!), I have witnessed some pretty weird things. I thought I would show off some of her strangest moments to prove just how quirky and fun these creatures can be, and how little we understand of them!


Photo Credit: Patricia Colli

This is one of Spidey's weirdest moments, without a doubt. She has a few objects in her tank that she moves around occasionally, and one of them is a ping pong ball. One day, I came home and witnessed Spidey "planking" (or maybe pretending to be Superwoman?) on this little ball. She stayed like this for hours! Maybe she was pretending it was an egg sac?! I have no idea!


Photo Credit: Patricia Colli

Spidey also has a bottle cap in her tank in addition to her ping pong ball. One day I left the house for an hour and when I got back, I discovered that she had stacked her ping pong ball on top of her bottle cap and was using it to help her climb her tank! While tarantula intelligence has not been studied much, this coordinated move makes me seriously wonder what is going on in her little spider brain!

One day, Spidey took her empty teacup, spent hours filling it with dirt, and made herself a “bed”. She laid in it all night! This is one of the most precious things she’s ever done.

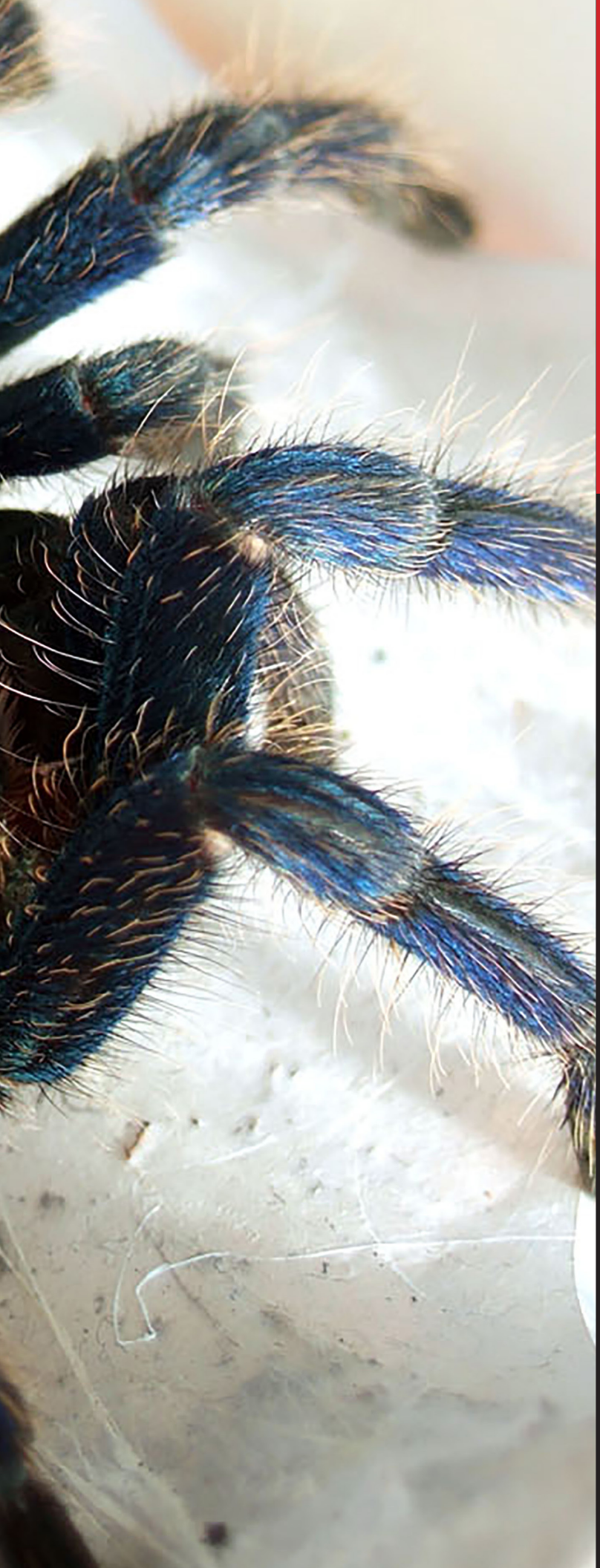
Here’s Spidey, stretching out on her log to do some spider yoga!

One thing Spidey LOVES doing is putting her butt in the bottle cap! Why?!

The time I caught Spidey with her butt in the air, because she was burying herself!

Another one of Spidey’s stacking projects - using her ball to climb her old shell!

Photo Credit: Wikimedia Commons



FREQUENTLY ASKED QUESTIONS

In this chapter, you will learn about:

- Why your tarantula is on the side of its tank
- Why your tarantula is burying or barricading itself in
- Why your spider is hanging out over its water dish
- What that weird white stuff in the water dish is
- How your tarantula keeps clean
- How to find a lost tarantula

TROUBLESHOOTING AND COMMON QUESTIONS

Even after you've done a good amount of research, it's normal to come across puzzling and concerning behavior from your tarantula. Here are some of the most common questions that new tarantula owners ask.

Why is my terrestrial tarantula climbing the walls?
For tarantulas that are supposed to be ground-dwelling, this behavior can be concerning but it is easily explained (and fixed!).

As tarantulas are nervous creatures, many will be fidgety and explore their new surroundings after being put into a new tank - which often translates to a naughty tarantula climbing up the walls. This shouldn't be too much of a safety issue as long as you've got 2/3 of the tank filled with substrate to prevent a nasty fall (but you also need to spider-proof the lid).

A terrestrial or fossorial tarantula will usually come down after exploring, but if it stays up there for a long time it is possible that the substrate is too moist - some tarantulas like Grammostolas hate damp substrate and commonly avoid it by climbing their walls. You can also prevent this behavior by providing a log or hide so that your tarantula has something dry to stand on instead of having to resort to the walls.

My tarantula is burrowing and burying itself - what should I do?
This freaks a lot of tarantula owners out, but the answer is simple: Absolutely nothing. Tarantulas and slings alike will burrow and dig to protect themselves, molt, or even make their home cozier. The best thing you can do is leave them be; they will eventually resurface.

P.S. If your tarantula burrows and you

need to feed it, don't dig up your spider or force prey into its burrow. Just drop the prey onto the substrate - your tarantula can sense even the slightest of vibrations and it will come up to hunt and eat if it's hungry. However, if your tarantula doesn't eat overnight, make sure to remove the prey item in case your tarantula is molting.

My tarantula webbed over its hide and burrow - what does this mean?
This is standard tarantula behavior for "do not disturb." This may mean your tarantula is in premolt, that it wants some privacy, or maybe it is ready to lay eggs if it's pregnant! Unless it's been an extremely extended period of time (a month or more for slings and several months for adults), you should leave your tarantula alone. There have been reports of adult tarantulas hiding for as long as 6 months, and they are perfectly fine when they come out.

Why is my tarantula hanging out over the water dish?
A tarantula will usually hang out over its water dish if it needs moisture. This could be for several reasons other than having an empty water bowl - such as low humidity or premolt - but it requires your attention. Make sure your tarantula has access to fresh water, and you may also want to moisten a portion of its substrate to raise the humidity and moisture levels.

What are those weird white dots on the walls/in the water dish?
It's usually spider poop! While seeing these little white stones can be stressful for newer tarantula owners, it's usually nothing to be alarmed at. If these little white dots appear hard and smear when wet, it's definitely spider poop. Here's a good example of what that looks like thanks to AlexRC113:

Unfortunately, no one really knows why tarantulas like pooping in their water dishes so much!

Why won't my sling web?
If you never notice your sling or tarantula webbing, it doesn't mean there's anything wrong. Some species will barely web, and some will web up their entire enclosures. Some tarantulas may even just need time to settle in. Each tarantula is different, and it doesn't mean there's anything wrong with them.

How does my tarantula get clean? Do I have to bathe them?

No way! Not only do tarantulas keep themselves extremely clean by routinely bathing, but putting your tarantula in water could be fatal! Tarantulas breathe through their book lungs, which are on the underside of their abdomens. Getting this part of their body wet could drown them! So please, keep your tarantula dry and let them take care of themselves!

Help, my tarantula escaped! How can I find them?!

This is every tarantula owner's worst nightmare. Many beginners aren't aware of this and learn the hard way, but tarantulas are great escape artists! If you realize that your tarantula has gotten out (and isn't just hiding or buried), there are several things you can do.

Think about when you last saw your tarantula in its tank. If this was a recent escape, it's best to immediately place towels under the doors and shut the windows to prevent your tarantula from getting out of the room, because he or she is likely still in there. If you have other pets (especially dogs and cats), put them in a crate or room far away from the room the tarantula has escaped from.

Also consider what type of tarantula you have. A terrestrial or fossorial tarantula will likely still be on the ground. But if you have an arboreal tarantula, you will have to look on the walls and ceiling, too. Tropical tarantulas will seek out warm, moist areas so around the bathroom or heater are good places to look. For any type of tarantula, they typically love to hide in dark areas and corners - so those are great starting points.

Keep in mind that tarantulas love to hide, and this is especially true for a terrestrial tarantula. They will seek out dark places, so use a flashlight to check under furniture. You might even want to check inside any shoes that are on the floor! If you have to move things around to look, make sure to do it slowly - the last thing you want to do is scare your spider and make them bolt. Be careful - you don't want to hurt them, either!

If you're unable to find your tarantula after a search, you could try leaving a shallow bowl of water out. Eventually, your tarantula will get thirsty and will look for something to drink.

Unfortunately, if your tarantula has been lost for days, it could be just about anywhere - so the key is to notice an

Photo Credit: The Gut / Flickr

Photo Credit: Taryn / Flickr

escaped spider ASAP! Your chances of finding it decrease with time, however some tarantula owners have reported finding their tarantula after 2 months, in perfectly good condition except for being thirsty and hungry!

Of course, the best solution is to prevent your tarantula from escaping in the first place. You want to make sure that you always close the door or shut the lid to your tarantula's cage, and that there are no gaps your spider could squeeze itself through. Many cages even have locking mechanisms on them to prevent incidents in which a door might not properly close. For lids, you can purchase clips or place something with a little weight on top of the lid (don't cover too many vents!) to prevent your tarantula from opening the lid. They might not look like they have the strength, but there have been many reports of tarantulas lifting their lids!

Is my tarantula a male or female?
While there are distinct physical differences in some species, you usually cannot visually distinguish between sex until a tarantula reaches a certain age. The best and most accurate way to figure out the sex of your tarantula is to use a molt - I explain how to do that here.

My tarantula is on its back with its legs in the air - is it dead?
Nope! Although it's an alarming sight the first time you see it, your tarantula is just molting - a normal process in which your tarantula sheds its exoskeleton. I explain the entire molting process in this section.

If you are concerned about your tarantula dying, the biggest giveaway of a dead spider is the death curl, which happens when a tarantula's legs are pulled tightly underneath its body. You can read more about the death curl here.

Help! I can't stop buying tarantulas!
Welcome to the struggle of every tarantula lover. It's extremely common for a beginner to start off with just one tarantula, and before they know it, they have 10 (or 50!). Taking care of tarantulas is an incredibly fun, rewarding, and addictive hobby, and there's not much you can do other than practicing some self control or hiding money from yourself. You basically have two options: stay the hell away from conventions and tarantula breeders' websites, or get another job (and bigger house) to support your growing collection!

Photo Credit: Danielle Griscti / Flickr

TARANTULA RESOURCES + MORE

In this chapter, you will find info about:

- Good educational websites + forums
- Cool supportive Facebook groups
- A new tarantula podcast
- Useful Youtube channels
- Recommended books
- Arachnophobia help
- Reputable breeders
- Where to get feeders

WANT MORE? CHECK THESE RESOURCES OUT

Tarantulas are becoming more popular and now there are tons of amazing forums, bloggers, YouTubers, and online shops and resources to support this growing hobby. Below are some of my very favorites!

FORUMS

American Tarantula Society
Arachnoboards
Tarantula Forum
Tarantulas US

HELPFUL WEBSITES + BLOGS

Tarantula Heaven (my website)
Theraphosidae.be
Tom's Big Spiders (Tom Moran)
Bugbbys Tumblr
Cancerides Tumblr (Tom Moran)
Count Tarantula Tumblr
Giant Spiders Please Tumblr
Living With Giant Spiders Tumblr
Sir-P-Audax Tumblr
Tarantula Cuties Tumblr (my tumblr)
Tarantuling Tumblr
The 8th Page Tumblr

FACEBOOK GROUPS

Tarantula Heaven (my group)
Tarantula Keepers
Tarantula Gossip
'T' Time Adoption/Rescue

PODCASTS

Toms Big Spiders (Tom Moran)

YOUTUBE CHANNELS

ArachneQueen
Deadly Tarantula Girl
Exotics Lair
Jon3800
Payden's Tarantulas
Steven Stamps
TarantulaAddict
Tarantulaguy1976 (Rob Carman)
Tarantupedia™
Toms Big Spiders (Tom Moran)
The 8th Page

The Dark Den (Petko)
The Spiderman
The Tarantula Chronicles

BOOKS
Manual of Exotic Pet Practice
The Tarantula Keepers Guide

ARACHNOPHOBIA RESOURCES
Guide to getting over arachnophobia
Spidey's tumblr blog

WHERE TO BUY TARANTULAS
Arachnoboards classified
Arachnophiliacs
Jamie's Tarantulas
JRs Inverts
Ken The Bug Guy
Net-Bug
Stamps Tarantulas
Swift Inverts
Tarantula Canada
For a more in depth description of each seller, click here.

WHERE TO BUY FEEDERS
Dubi Deli
Great Lakes Hornworm
Lady Silkworm
Mulberry Farms
Rainbow Mealworms
Recorp Inc. (Canada)
Reptiworms
Silkworm Store (UK)
Super Cricket (Canada)
The Live Food Warehouse (UK)
The Worm Lady (Canada)


Photo Credit: Patricia Colli

This guide is meant to be a working document that will be updated as I get feedback and as we learn more about tarantulas. If you have any suggestions for how this guide could be improved, please feel free to drop me a line at patti@beUtifulmagazine.com!

Photo Credit: Insects Unlocked / Flickr