An In-Depth Guide to Keeping Jumping Spiders

Introduction

Jumping spiders, or Salticids, are a family of true spiders. They are agile hunters that rely on their keen eyesight to find, stalk, and pounce on their prey. All Jumping Spiders have four pairs of eyes, with the anterior median (or middle) pair being enlarged and well developed. These large eyes are able to accurately sense distances by comparing a blurry version of an image with a clear one, a method called image defocus1. Salticids are generally arboreal, and are more active compared to most other spiders, preferring to search out their prey among the foliage, rather than building prey trapping webs or trapdoors to ambush prey. Many species of Salticids can be kept in captivity, and are an excellent pet for those looking for a low cost, entertaining, and easy to care for pet.

Enclosure and Set Up

Size: Jumping Spider enclosures do not need to be large, and as arboreal spiders, they will utilize more vertical space than horizontal. In fact, an enclosure that is too large can decrease the likelihood of finding and capturing prey, if you choose to leave prey like flies in the enclosure. The ideal enclosure size for an average sized juvenile through adult jumping spider is roughly around 6"x6"x9", although you can go a few inches larger or smaller on a case by case basis, depending on the size and species of your individual spider, and of course your personal taste. Just try not to exceed 12"x12"x18" for larger spiders, or 8"x8"x10" for smaller spiders, if you're not planning on personally supervising and assisting all of your spider's meals.

Temperature: Most jumpers do perfectly well at room temperatures above 68F/20C and need no additional heating to thrive, and as such heat mats are optional. However, in some cases, a heating mat and a thermostat are necessary, such as low ambient temperatures, or with a tropical species. Many spiders also seem to prefer having a hotter side of their enclosure, and will bask on the heated side. If you do use a heat mat, use no more than an 8watt power mat, and a thermostat is vital to prevent it from overheating the enclosure while unattended. Attach it to another surface such as a wall or a board you can position upright, and place it between 1/8" and 1/4" away from the enclosure side, to prevent it from directly contacting the enclosure surface. The thermostat probe should be placed about 1" away from the enclosure side near the heating mat, and temperature should not exceed 89F/32C.

Humidity and Ventilation: At most times, your spider will not need any additional humidity, barring exceptions of tropical species. Regal jumping spiders need to be misted every day. all spiders benefit from higher humidity during molting periods, so being able to monitor and control humidity is still helpful. Some ventilation holes or vents are necessary, but I would avoid mesh screened tops as they can prevent retention of humidity. Your enclosure should be able to reach and maintain at least 75% humidity during molting periods. You can also increase humidity with wet paper towels, ideally placed close to a heat mat. Change towels daily to prevent molding and bacterial build up.

Enclosure Accessories: Salticids generally nest and web at the tops of their enclosures, so a front/side opening enclosure is imperative in order to avoid disturbing your spider every time you open the enclosure. Provide ample vertical climbing space with branches, vines, or leaves, and they will reward you by exploring the nooks and crannies of their new home in search of prey and hiding spots. If you use natural wood branches and sticks, make sure it has been sanitized by baking it in an oven at 250F, and avoid directly misting it to prevent any molding. I tend to stick to artificial plants and decorations, but live plants and moss are fine if you are doing a bio-active enclosure with proper clean up crews. A feeding ledge with a dish can be helpful, but is not necessary. I use one to keep mealworms and dubia roaches from escaping into the rest of the enclosure, and my spood does eat from it, but if you plan to tong feed or are using feeders that can't be contained by a dish, there's no need for one.

Substrate: As arboreal spiders, jumpers do not need substrate, and do very well with just aquarium gravel. It's far easier to control mold and clean an enclosure without substrate, and prevents any escapee prey items from burrowing. If you choose to use substrate, for example in a bio-active enclosure, or with a tropical species that requires high humidity, you will need to maintain it and occasionally replace it - Springtails are generally the recommended cleaning crew in these circumstances. That said, it's more beginner friendly to just forego substrate and use aquarium gravel or the bare enclosure as the bottom.

Lighting: As visual hunters, jumpers do require strong lighting in order to see and locate their prey. A natural cycle of daylight and darkness is ideal, most jumpers will tucker out and head to their nest to rest after 12-14 hours of light. You can either use an overhanging lamp, or natural sunlight. If you choose to use sunlight, make sure the enclosure is never in direct, unfiltered sunlight without direct supervision, as it can very quickly spike the temperatures in an acrylic or glass enclosure to dangerous levels due to greenhouse effect.

Juvenile/Adult Feeding: Jumping spiders should be fed on at least a bi-weekly basis in their juvenile stage. You can tell it's time to feed if your spider's abdomen becomes visibly thin, or has indentations or wrinkles on the surface. With the exception of fruit flies and bottlenose flies, food should never be left unattended in the enclosure, and should be removed if the jumper doesn’t show interest. Though they have a wide variety of food, some jumpers exhibit personal preferences which should be taken into account. Jumpers, unlike tarantulas, cannot be overfed. If your jumper wants to keep eating, let them. They may be in premolt and need the extra energy.

For smaller spiders and slings (spiderlings) of larger species, Flightless fruit flies make for the perfect food. Many large retail pet suppliers such as PetSmart and Petco offer self-sustaining colonies that can be good for up to 6 weeks. To easily control the flies, put them in the fridge for a few minutes before feeding your spider, that way their metabolism will be slowed down and they’ll move sluggishly, preventing them from escaping the colony container. As they get bigger, some jumpers will stop seeing fruit flies as food, and move to bigger prey.

For average and large size species, food becomes more varied. Acceptable choices include Mealworms, Waxworms, Dubia roaches, Green bottlenose flies, and pinhead through medium crickets. Each feeder insect requires specific procedures and has differing nutritional value - a wide variety is best for your spider's health.

Mealworms are high in protein, and average in fat, while waxworms are lower in protein than mealworms, and very high in fat. Your spider will love waxworms, but don't use them as a staple food, it's basically McDonalds sprinkled with crack for spiders, they can and will refuse other foods until very hungry if given waxworms regularly. Waxworms are also 20-25% fat. Mealworms are a better option as a staple food, but inferior to dubia roaches and flies in nutrition ratios, while superior in overall value per meal. If your enclosure has substrate, mealworms and waxworms should be watched, or kept in a dish with smooth vertical walls, to ensure they do not burrow. If Mealworms successfully burrow and pupate, they will emerge as beetles and can damage or kill your spider. Waxworms emerge as waxmoths, which can make a great snack, but will take weeks to do so. As a note, Waxworms make a good emergency food for severely dehydrated or malnourished spiders, as they will rarely refuse them - if they are too weak to eat on their own, and have already replenished water, you can spread some worm guts on their pedipalps and chelicerae to help them regain some energy.

Dubia roaches are a very hit-or miss meal for many jumpers. Some have difficulty getting through the hard shell, and shy away, while others don’t mind the extra challenge. Spiders who do take them often grow to prefer them, and they're well balanced nutritionally, making them an excellent choice for a staple feeder. If your spider 'bounces' off their tops, try flipping it on it's back - they can't easily right themselves on a flat surface, and your spider will easily penetrate the roaches' soft underbelly. Dubia roaches can also be gut loaded for additional nutrition, as they have very long digestive tracts.

Green (or Blue if your spider is large) bottlenose flies make for excellent food, with average protein, very low fat, and high moisture content, but can be harder to come by. Josh’s Frogs offer pupae or spikes for purchase. Since they’re harmless to the spider, they can be left in the enclosure, but should still be removed if the spider exhibits signs of premolt or molting. Flies can make a great staple food source - just be sure your spider is catching enough to fill up before molts, offering an occasional waxworm or mealworm to help it top up can be beneficial if fed flies as a staple.

Crickets are a risky food, and are high protein, high moisture, and low fat. If left unattended, they can, and will kill and eat your spider while it sleeps. Crickets are not recommended for new keepers for this reason. If you are not confident you can find and remove a moving, jumping cricket from anywhere in your enclosure, then never let them roam - tong feed only (and you better have a sure grip, because a loose and lost cricket is a whole lot of anxiety for you and your spider).

As a rule of thumb, prey the size of the abdomen is a good choice, but some jumpers may be willing to go after prey multiple times the size of their body. Crickets especially should be smaller or the same size as your spider, otherwise you are rolling the dice with your spider's life, and that is never worth it. Refrain from offering mealworms to smaller spiders, as they can sometimes bite back.

After reaching maturity, jumpers show drastically less interest in food. Male jumpers may only eat once every couple of weeks, while females may only eat once a week unless preparing to lay eggs. Keep offering your jumper food, but don’t be alarmed if they turn it down for long periods of time.

Never feed your jumper ants, other spiders, hard-shelled beetles, or any wild-caught food. Ants produce formic acid and may prey on your spider, other spiders may get your jumper first, hard-shelled beetles may damage the spider’s fangs, and wild-caught prey introduces the risk of pesticide contamination and parasites.

Sling Care and Preparing for Slings: You can spot a gravid (pregnant) female spider when her abdomen becomes extended and swollen after reaching maturity. There is a chance you might have a fat or well-fed spider, but a well-trained eye can generally spot an abdomen larger than normal. If you aren't sure, the spider's webbing behavior over the next few weeks will tell you if she is gravid.

A gravid female will make a thick, fluffy web that she will lay her egg sac in. If you see her laying an egg sac, don't worry - you have some time. Eggs hatch within 1-4 weeks, so this is the time you can prepare for your new arrivals, or consider euthanizing a fertile sac if slings are unwanted. If infertile, a sac can be safely ignored until your spider leaves her nest in a few weeks time, after which you may remove it. This will be the best time to begin a new flightless fruit fly culture so that it is thriving by the time the slings are ready to eat. A female jumper will generally stay with her egg sac for a few weeks. She can be removed and placed in a new enclosure once she leaves the web. Feed the female as soon as you move her to her solitary enclosure - she should be very hungry after all that work she did!

To ethically euthanize an egg sac, wait for your female to leave her nest to drink, and carefully relocate her to a temporary container. Never try to remove your spider from her nest, she will defend it with her life and may bite or be injured. Once relocated, you can freeze the original enclosure. If your enclosure is too large to fit in your freezer, you can try to remove just the egg sac and freeze it, returning it as close to its original position in the nest as possible. Once the enclosure warms back up, you can transfer your female back in. With any luck, she will not be too stressed by the process, and will return to brooding over the sac until she realizes they are sterile, and then resuming normal activity.

Jumper females can lay up to 5 infertile or fertile egg sacs over the course of their lifetime. It is important if you catch or purchase a female spider that you suspect may be gravid, that you're aware she can lay up to 300 eggs at once. You will likely not end up with 300 slings by the time they emerge, but 150 slings is still... a lot of slings.

Premolt and Molting: To grow, spiders shed their exoskeleton through a process called “molting.” Jumpers will molt until they reach maturity, at which point they will retain their adult form until they die. If there are any injuries or damaged legs, molting will gradually heal them. If your spider drops a leg as a sling or juvenile, don't worry - it will likely regrow it completely by its adult form. Full leg regeneration takes 2-3 molts, depending on how much time between the injury and the next molting period, while partial or final joint leg injuries can be healthy after a single molt. Molting is a dangerous and energy-intensive process, which can lead to death if handled improperly.

The molting process begins with premolt; a period in which your jumper will eat more to stockpile energy, and then enter a dormant state, during which it will only rarely leave its web to drink. The excessive eating of premolt can sometimes be difficult to differentiate from normal behavior, but the reclusive behavior is usually a dead giveaway. During this time, try to avoid stressing your spider, as you want them to be as comfortable as possible moving into the molting period. At some point in premolt, your jumper will start to construct a thicker hammock, usually dense enough that light cannot pass through. Once completion on the hammock is done, they will retreat for up to 3 weeks to molt. During this time, do not disturb them, and only open the enclosure to mist it.

All food, even flies, should be removed from the enclosure. Occasionally, the spider may pop out of the web. If it does, you can offer food, but it should be removed promptly if no interest is shown. During this process, it is critical that the spider not be disturbed, as any outside influence could result in a mismolt. The most essential thing for a successful molt is adequate hydration - spiders molt by forcing fluid into the space between their two exoskeletons, so inadequate water can lead to stuck molts. The second most essential thing is humidity. Spiders lose hydration in their passive respiration process, and humidity is the deciding factor for the rate of evaporation. In addition, humidity will help ensure the exoskeleton does not harden too quickly, leading to a stuck molt. In short, without hydration, and water droplets kept available for your spider to drink, it will die in it's molt, while dry conditions will greatly increase the risk of injury or stuck molts.

Handling: Handling your jumper can be one of the joys of owning one as they climb around your hands and arms like you are a human jungle gym. There is also a huge amount of panic and horror if it happens to jump right off your hand, onto the floor, and dart somewhere you cannot see them! There are some things to keep in mind when handling your spider, as well as what to do if you lose one.

It may go without saying, but jumpers are small and fragile. It is best to hold them while sitting on the floor or over a large, flat surface, with a paintbrush nearby. By sitting low, if they fall they won't get hurt - and you have a better chance of being able to use your paintbrush to scooch them back onto your hand or back into their enclosure. Jumpers will generally move about with a built in safety line, a nearly naked to our eye strand of silk that they can use like a bungee cord when they miss a jump or otherwise fall. A new anchor point for the line is normally dropped each time it stops, changes direction, or prepares to jump. It is possible to accidentally snag or break your spider's safety line and fling them to a catastrophic fall that can harm them. Sitting low on softer surfaces like carpets or beds will prevent your spider from getting injured if this occurs. Always move your hands slowly when handling your spider, as these lines are nigh invisible and can travel quite the distance.

Jumpers love to crawl up, so using your hands like a stair-mill can be a great way to control where they want to go, and you can carefully wrap their silk lines around your hands while doing so, keeping it secure and predictable, while giving it good stimulation and exercise. Depending on your jumper's personality, it can be induced into jumping between your hands and fingers. First allow it to become accustomed to crawling up your hands in the above stair-mill fashion, and then slowly increase the distance between each hand until it is just out of their reach. They should respond by hesitantly grasping towards the higher surface, and hopefully after a moment's consideration they will take the leap. From there, just gradually increase the distance, but don't exceed 2-3 inches.

It's not common for jumpers to bite, but it's best not to try to pick them up with your fingers or hold them when in a "threat pose" with their arms extended into the air, focused on your fingers/hands with it's abdomen arched back or fixed in an odd position. Much like other animals we know and love, they try to look big when they feel threatened, but don't mistake their threat pose with grasping or reaching motions. A spider grasping or reaching will be moving or posturing forward, and not away from you or your hand. Their body language is much like a cats', the more rigid they are, the more likely it is to feel defensive. If you think your spider is spooked or threatened, put them back in their enclosure and leave them be for a few hours or the day. A scared spider is a spider that will dart so quickly your eyes might not even be able to catch it, or may even bite if encroached upon despite it's warnings.

If your jumper does happen to take a leap of faith and you are unable to locate them, stay near the location you lost them, and immediately seal off all crawl spaces and vents in the room that you know your spider is not within. You will likely find your spider exploring your beautiful wall near the spot they got lost, looking for bugs and enjoying their moment of freedom - their proclivity to climb upwards is to your benefit in this case. If you have any dogs or cats, keep them out of the room you lost the spider until you have found it.

Source: Reddit

Credits: /Night\_FoE for the intro and the enclosure sections, u/PhidippusHo for the sling care and handling sections, u/visc0siity for the feeding and molting sections.