



Northern Axolotls: Axolotl Basic Care Guide

By Shawn Hayes

Care requirements for your new Axolotl/s

Congratulations on your new axolotl. Depending on your experience levels, you may be an old hand at exotic pet keeping, or you may be hesitant, nervous, and excited all at the same time. I hope that you have taken the time to prepare and research your pet before your purchase, but, I will give you some tips in the care and keeping of axolotls as I know it. If you are an old hand at keeping these interesting critters, feel free to pass this on to someone else who may need the info.

You will find a lot of information online, and some of it will conflict with what you think you already know. I will share what has worked for me, and it may conflict with what you find online, feel free to do your own research and find what works best for you. I started keeping axolotls when I was around 20, and I hate to give my age away, but it was a decade before the millennium turned. What we knew of axy keeping then was slim and oh so wrong by today's standards it's a wonder they were so healthy!

There are some basic care requirements for all axolotls, and then there are some specialized concerns for the various ages. I will leave the egg and hatchlings off this care sheet, I have another just for them, let me know if you are interested in it. I will offer some standards then get into some further details later on.

Tank requirements: A full size adult (roughly 12 inch) axolotl will typically thrive best in at least a 20 gallon tank. Any additional companions will need 10 additional gallons per. So, if you want to have 3 girls all sharing a tank, the rule of thumb would be a 40 gallon at least. You can always go bigger than they require, and there are cases of using really good filtration and a low broad tank and putting more in than usual, ie, 4 in a 40 gallon breeder with extra filters. So, adjustments can be made. It's a rule of thumb, not a hard and fast must. I have seen 2 axolotls live quite comfortably in a 20 gallon long together because it has more floor space. I have also seen 2 axolotls in a 40 gallon breeder with no real room for another due to the bioload they create and the smaller filter used. You have to evaluate your situation and how your tank and babies are doing. Smaller axolotls, such as minis and dwarfs can sometimes fit quite comfortably in a 10 gallon, but some will not and will need extra room.



Tank Filtration and Cycling: One of the hardest parts about setting up an aquarium for the first time is getting the bacterial load of the filter established. This is called cycling your tank, and it is absolutely crucial

to the health of your axolotls. The bacteria in the filter helps break down the ammonia and nitrites that build up in the water and turn them into nitrates. The reason this is so important is ammonia and nitrites are toxic to your soft skinned pet and when they build up in higher levels, will cause burns to the skin, and loss of gill fluff, and can even kill your new pet, especially if it is younger. I cannot stress this enough, if you have not cycled your tank, pull your baby out and put him/her/it into a tub of cool clean dechlorinated water until you do. I will go over care of a tubbed axy later in the care guide. Trust me, your baby will thank you and would rather be in a smaller container of nontoxic water than in a big beautiful aquarium that is slowly filling up with poisons.

Axolotls prefer cool, low current hard water. So a fast moving filter system can be an issue. If you use a canister filter, make sure to project your return against the side of the tank in a fashion that causes the least water movement. If you are using a hang on the back filter (HOB) try to get one with an adjustable flow rate. I find that sponge filters provide a nice low current environment, but do take up space in the tank. You may need multiple sponges in a bigger tank as well. Therefore, it's up to you what sort of filter you prefer.

There are many guides to cycling a tank online. I am impatient and go with one of the quickest methods I know. Many people prefer a longer slower meticulous method, but I prefer to have the tank established and running in the least amount of time I can. Here is what I do: If I have another cycled tank available: I take the lovely black sludge from one cycled filter and add it to the brand new filter. If it is a hang on the back filter, I use a turkey baster, or small plastic bowl to drop it right into the new filter well. If it's a sponge filter, I suck up the gunk into the new filter, and the canister I dump in like the HOB. This will add the bacteria needed to seed the new filter. It looks awful, but in reality, this black gunk is priceless to your new tank environment. If I do not have one available, or know anyone with an established tank (ie friends, local fish stores, neighbors, schools, etc) there is a bottled bacteria starter available at most pet stores with fish. I have not tried it, but as a last resort, I would.

I have already filled the tank with dechlorinated water, I use prime or Aqueon to condition, and whatever décor I want to add. I like to add a real plant or two to help with nitrate levels. Then I add a couple of feeder guppies to

the tank to speed the cycling process. They are there to add natural ammonia to the tank, which feeds the bacteria. If you want to do a fishless cycle, I have heard adding a small piece of raw shrimp will also do the same thing. I prefer the living element personally, as they will continue to live in the tank after I put my axolotls in, but again, this is just me. However you cycle the tank, you need to get a master test kit, or take your water samples periodically to a local fish store for evaluation. You are waiting for your nitrites to spike up and then come back down to zero. Once this occurs and your ammonia and nitrite levels are gone, your cycle is established and you should be safe adding your baby to the tank. Watch that the extra bio load does not throw the parameters off again. I have had tanks cycle very quickly, and I have had tanks take a month. I have read about people taking up to 3 months to cycle in a fishless, add ammonia manually method, etc. Your PH should be neutral about 7.5 give or take a bit is ideal, and they like hard water. If your water is soft, you will have to add back in minerals with aquarium salt in small doses, or Holtfreter's solution. You will hear about parameters a lot on most axolotl forums and groups. Anytime you have any sort of issue with your tank and or your baby, the water parameters are the first thing that get checked...hence the need for the test kit. It's always good to know how to test them to see what may need to be adjusted. Their temps are on the cooler side, mid 60's is ideal, but anything from 50's to 69 is alright. If the temps approach 70, get a fan or an ice pack, or raise the AC up. You will want to keep them under 69. If you live in a habitually warm climate, you may even need to invest in an aquarium chiller to maintain your water temps to comfortable for the axolotls. They do just fine in cooler water, less fine in warmer, so it can be a constant battle to maintain. Thankfully, I live in Alaska, so room temperatures for me are mid 60's. I know some parts of the country are not so blessed.

Tank Décor: Tank decorations are solely up to personal preferences. You can go very natural, modern, neon, planted, themed, etc. There are some basics to keep in mind though. If the axolotl is over 5 inches it can go on fine sand, if it is under, it should be a bare bottom glass tank. You can still add decoration and plants to the tank, but you should wait to put sand in. Note, axolotls should **Never** have gravel in their tanks. They eat like a vacuum and will end up swallowing pebbles in their tank with their food. As a matter of fact, any rocks or stones that you use as décor should be the size of your fist or bigger. You would be surprised at how big an axolotl's mouth can get and how much they can accidentally fit inside. Those pretty glass pebbles that you swear are just fine because your axolotl would or could not swallow them, ya, they fit too. Look up a video of an extraction of one from where it was stuck inside the mouth of a little bugger. Not pretty. It is much safer to just stick with sand or bare bottom. Some people get creative and put tile, slate, or other flat pretty things on the bottom. This is also fine, it will just need to be cleaned off as well every now and again, and the slate should have the edges filed down smooth so it does not cut toes or feet. Tile should not have any glue on it at all.



Axolotls are nocturnal, and as such prefer a hide or two during the day. This is especially important if you have a planted aquarium and want to keep the lights on for a time each day. They do not particularly enjoy bright lights, and if you give them a place to hide away from it, they are much happier. Be careful about picking out aquarium safe hides and décor, it should not have any sharp or jagged edges that can cut your axolotl's skin. They are known to be derpy, and should be protected in their environment. Be careful about adding shells as they can change your pH levels. Other things can add toxins to the environment you would not even realize...so check first to be safe. If you gather items from outside, make sure you clean them well first, there are various aquarium safe methods. These methods should never use soaps or harsh chemicals. Vinegars, salt, or bleaches are sometimes, used in small doses, then rinsed well and bone dried after. Just do some research before attempting anything untried. For an inexpensive

solution, go to your local hardware store and pick up some white PVC pipe joints. They come in various sizes, are fairly inexpensive, and the axolotls find them just as comfy as the most expensive palace. As I said, personal preferences. . If you end up with snails on your plants, do try to remove them all. Your derpy axolotl could try to eat them and it could cause an impaction as well. Snails if they get into your system can be a pain. Wash your plants well before putting them in your tank.

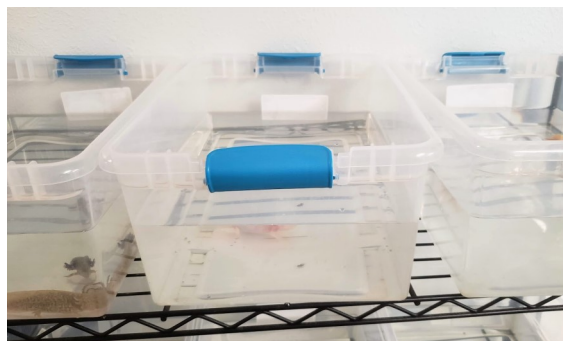
Food: The most balanced staple diet for an axolotl are worms. They can be just about any "real" worm, such as blackworms, red wigglers, or nightcrawlers. Blood worms are not an actual worm, they are an insect larvae. They are fine for a treat, or if you have nothing else to feed your smaller juvenile, but the sooner you get them switched over to a real worm, the better. Blackworms are an excellent diet for baby axolotls, they are a real worm, and aquatic in nature, usually fed live and do not foul the water. Babies fed on blackworms tend to be healthy fat and grow well. Blackworms can be difficult to get in your area though, and most 3 to 4 inch juveniles can already be moved over to cut up nightcrawlers or red wigglers. One note on wigglers, they produce a bile inducing slime coat when fed live and whole. Some axolotls who eat them will quickly throw them back up again, causing panic to their poor owners. There are many axolotls that get used to this slime coat and learn to keep them down. Alternatively, you can run the worms under hot water to stun/kill them before feeding them out, thus preventing them from producing the slime. Either way, do not panic if you see you axy throw them up again. I tend to skip right from Blackworms to Nightcrawlers for this reason. You can cut the nightcrawlers into tiny bite size bits that even a 4 inch axolotl can get down.

Hatchlings and juveniles under about 6 months or so, feed at least twice a day. I feed mine morning and evening. If an axy is underweight, no matter the age, you can also feed them twice a day. A healthy, well growing axolotl, will grow an inch a month, on average. Once they hit about 6 months, I tend to switch them to once a day, in the eves. My adults (around a yearish) I move to every other day. Again, this can change depending on the axolotls situation, but it's a rough standard.

Axolotls can eat a variety of other items. Pellets and repashy gel diets are one of the main staples besides worms. I prefer the soft sinking pellets for my growing juvies and will often substitute a meal of worms for these. A 5 inch juvenile will eat about 2 pellets per feeding, give or take. An adult will only need about 6-10 at a feeding. They do not need many pellets, especially as they soak up water and expand a bit after sinking. Unused pellets should be removed, as they will foul the water. I have less personal experience with making and using repashy, so I will just say, some people have great luck with it. I also feed my axolotls cut up raw shrimp or salmon on occasion, esp if I am out of worms for a meal. Sometimes I will have live ghost shrimp or feeder guppies in with the adults or larger juveniles. If you are feeding live shrimp or fish, you should quarantine them for about 30 days before adding them to your tank. They can contain parasites that are harmful to your axolotl and you would not want to introduce them to your tank. There are only a few feeder fish that I consider safe varieties, guppies and small livebearers are considered ok, though they do not like cold water. I like white cloud fish personally, they are a cold water, mild small fish, and pretty if they end up living in the tank for years. A well-fed axolotl may not develop a taste for live fish...so they could be in your tank for a good long while. Be prepared to lose them, but don't be surprised if they stick around. It is safer to have an axolotl specific tank and feed them worms anyway. Note, some feeder fish that are available at pet stores, ie: gold fish, rosy minnows, are not appropriate for an axolotl. While it might be tempting to add the pretty goldfish to your tank, they contain a higher level of Thiaminase which can ultimately lead to a number of issues. This, in addition to the added bio load, and their gill eating tendencies, plus the impacton risk their large bones can cause...not worth the risk.

These are the main diets, there are assuredly others I am forgetting, but a main diet of wormy parts is always your best bet. I break up my nightcrawlers into whatever size I happen to be needing to feed the size axolotl I am dealing with, so they are very versatile for any axy over about 4 to 5 inches.

Tubbing: It might be necessary to keep your axolotl tubbed for a period of time. If you have an issue with your tank you are dealing with, or your baby is too small to go into a proper big aquarium, or you are still setting your cycle, or treating a sick or injured baby, etc. There are many reason that we occasionally have to keep an axolotl in a tub. My preferred "tub" is a 16 liter plastic tote with 2 gallons of fresh clean cool dechlorinated water in it. I usually use multiple tubs, one for the baby, and one to change and clean daily or so. If you are keeping the axolotl in the tub over a period of time, you will need to do water changes frequently. Most prefer daily water changes to prevent any ammonia from building up, and to make sure your axolotl is in clean water and comfortable for the duration. This is especially true if you are using a smaller tub, with a smaller amount of water. I have found with the 16L tubs and 2 gallons, a baby can comfortably go 2 days between water changes, if I am feeding worms. If I am feeding pellets, its daily, they make a mess. Since all my hatchlings and juveniles grow up in tubs, I clean them A Lot, so I have gotten very good about moving babies from one to another quickly and efficiently. If you have less experience, you will want to put your clean tub next to your dirty one, then carefully net your axolotl and push it out of the net into the clean water. You want to do this while getting as little of the old dirty gunk and water into the new clean one. I tend to push up with my fingers from the underside of the net and allow the baby to fall into the new water leaving the old gunk still in the net. In actuality, I tend to carefully scope out the older babies with my hands (very clean and lotion free) and place them into the new water. This way I do not pick up any of the dirty water or gunk that the net can and will. It's only the really tiny little dudes that I use a net on. Go with your comfort levels, my nieces all scope out the babies with nets when they help clean tubs. Always use treated water for the new tub. I then rinse out the old tub with very hot water after scrubbing it with a special "axolotl" scrubby or brush and set it aside for the next change. An axolotl can safely stay in a tub for quite a while depending on size, they do prefer a tank and will thrive better in a tank ultimately, but can actually go months in tubs if needed.



Tank Mates: Axolotls can be kept together, but should be kept with others of their same sex only. If they are younger than 8 to 9 months, they are usually pretty safe, as long as they have adequate space, food, and hides for their size. Once they start reaching about 8 to 9 months, signs of sexual distinction should be watched out for. Females will tend to be rounder and fuller bodied without the telltale large bump under the tail that boys will develop. Said Boys will develop a large set of distinct lumps under their tail remarkably like a pair of "boys". The boys will also tend to be leaner in body, but not always. Sometimes it is harder to tell when they are still young, and to be safe, its best to separate until you know for sure. If you intend on breeding eventually, females should wait to be bred until they are around 18 months of age. Accidents happen all the time, and can easily be avoided. If your babies are siblings, these eggs will need to be removed and frozen to cull them. A pair of axolotls, if kept together, will eventually breed, usually a lot. The female will eventually lose her health because she is giving everything to the eggs, which she can lay up to every 2 weeks or so... and since she can lay upwards of 1000 or more eggs at a time, it takes a lot out of her. (typical is 3-800) Males and females should only be put together for approved breedings, when and if you want to deal with up to 1000 eggs and hatchlings that require tiny live foods. That is another topic. Adult axolotls of the same sex can and usually will live com-

fortably together as long as they are well fed and filtered. Accidents can happen, since, as I said before, they are derpy. But these are thankfully rare. I find they seek each other out and often can be found snuggled up together. That being said, axolotls also do very well on their own, being spoiled by their owners.

Axolotls are a species only tank pet. Besides the very few live foods that can be introduced, there are no other species that live well with an axolotl for many reasons. Some include being a danger to your baby, or having much different requirements to your pet. Mostly being a danger to your new pet. Since their safety is our main concern, this is paramount.

Health Issues: Axolotls can live a long healthy life with the right conditions, on average 10-15 years. I have heard of them living up to 20 years. They can have various issues. We will only go over the very basics. For more serious issues, we will do a different care guide. I often see fungal issues come up now and again on axolotls. Even those kept in seemingly great conditions can sometimes get a fungal infection in their gills. They show up as white fluffy cottony looking growths either in their gills or on their body. If there is an open wound from a bite or scratch, it is common to see fungus sprout up. If this happens, don't panic. The easiest method for dealing with a fungal infection is to do a salt or tea bath. The salt bath is a quick 5 to 10 minute soak in salt water (2 -3 teaspoons of aquarium salt per liter of fresh water). The salt bath can be done up to twice a day for up to 15 minutes, but I rarely ever soak for that long. I usually set my alarm for 6 to 8 minutes when I put a baby in to soak. This clears up the fungus quickly and the axy handles it quite well. I have put small juvies into a salt bath successfully. If you are worried that salt might be too harsh for your symptoms, you can always do a tea bath. This is made with straight black tea, made with dechlorinated water, cooled and then added to a tub of water until its a lovely dark tint, but not too black. Again, soak for a period of time, usually 15 minutes or so. You can let them soak in the tea much longer than the salt, it's the tannins that are effective. Other things to have on hand are Furan 2 for bacterial infections and Indian Almond Leaves to relieve skin conditions and general health (adds tannins). I find that my go to remedy is the salt bath personally. Also, getting the parameters fixed in the aquariums helps. Partial water changes can be effective and again, test your water.

Best of luck with your new pet! I am sure I have forgotten many small things, but you have to have things to discover also.

