



## **BASIC CRAB CARE**



### **Blondie the Ecuadorian crab**

### **Just the Basics**

To live comfortably in captivity, hermit crabs require the following:

- Temperature no lower than 72°F. Consistent low temperatures can kill a hermit crab. Don't allow them to bake in a window, either. If they get too hot they will die, and overheating causes irreversible damage and a slow, painful death. Signs of overheating are a musty smell and discharge of brown liquid
- A constant humidity level of at LEAST 70% humidity. Try to remember that you want the inside of your crabitat to have a moist, "tropical" feel to it
- Substrate deep enough that the crabs can bury but not so deep that it negates the effects of your under-tank heater. If you are having trouble keeping your crabitat warm, try moving some substrate from over the heater. If you are having trouble getting

- the crabitat to cool down, turn off the heater. See the [molting](#) page if you need information on heating a molter's isolation tank
- [Food](#), water, [shells](#) and other tank decorations to keep the crabs engaged and active.

## Friends!

I'm sure you've heard this before, but you really shouldn't keep only one hermit crab alone as a pet. The name 'hermit' is misapplied to our little friends -- they are quite gregarious and like to be around their own kind. In the wild, they travel in packs of up to 100 crabs, scavenging the beach for food and shells. The reason they travel in packs is simple: Where there are more crabs, there are more shells.

Researchers have found by putting one clean, empty shell on the beach, they can initiate a "cascade" of shells changes: One crab changes in to the new shell, another changes into his old shell, and another changes into the other empty shell, and so on.

Quite often I find about 20 hermie's of my clan all piled on top each other, sleeping. So, please don't consign your friendly hermie to a life of loneliness. As one seasoned crabber once remarked, "Two crabs does not a colony make." Go get him a friend, or better yet, two friends.

## Housing

The very first thing your new pet will need is a 'craibatat.' A crabitat is where your hermit crab will spend most of its time, so choose a home that is clean and roomy. A 10-gallon glass aquarium can be purchased at a reasonable price and makes an ideal 'starter home' for your crab.

If you are unable to purchase an aquarium, there are other options available, such as plastic critter carriers. Keep in mind how many crabs you ultimately plan on housing and how you would like their home to look. It will help you make up your mind when the time comes to decide on the size of your crabitat. Make sure the cage will hold your pets, their food and water dishes, extra shells and climbing toys. You want a cage large enough to hold all these things and still have space for the crab to roam if he wishes.

**This means that the small plastic box that you got from a mall kiosk or boardwalk store is not an adequate shelter for any hermit crab.**

One way to give the crabs room to wander is to leave an area at the back or front of the crabitat that is completely clear of obstructions. This way the crab has an "express lane" to run down if s/he needs to get some energy out and doesn't want to climb. While a plastic critter carrier makes a good temporary home or 'hospital cage,' it is not recommended as a permanent home.

The second most important aspect of the crabitat is the type of substrate you put in the bottom of your crabitat. After all, your crab will in all likelihood be sitting on it every day!

There are many different types of substrate available, but not all of them are ideal for land hermit crabs. You want a substrate that is relatively easy to clean, attractive and holds up to hermit crabs' tunneling activities. The best substrates are sand and coconut fiber (also known as Forest Bedding®, Bed-A-Beast®, and Eco-Earth®).

There are also many different varieties of sand available. The most expensive ones come in small bags and are labeled as special "hermit crab sand." Don't be fooled! When it comes to general crab care, "sand is sand is sand" and it doesn't matter where it comes from, as long as it is clean.

You can get a 50 lb. bag of clean play sand from a hardware store for the same amount you'd pay for 2 small bags of "hermit crab sand." (Try to get a bag of play sand which is towards the middle of the pallet, otherwise, it may be wet or contaminated).

A word of caution about play sand. Some crab owners have reported problems with an orange-colored play sand they purchased from Home Depot. The sand had an oily, diesel-like smell to it. If you open the bag of sand and notice any OFF smell, throw it out or take it back to the store. Do not put any strong-smelling sand into your crabitat. One sand that has been of consistent good quality is "high desert sand." You only need to concern yourself with special sand if you have a sick crab that needs calcium.

Most sand comes pre-washed and/or sterilized. Sometimes, however, individual bags can develop leaks through which moisture, insects, etc. invade. As a precautionary measure, please take a close look at the substrate before you put it into your crabitat. Pour some into a bowl and sift it through your fingers, hold it to a strong light and watch for insects. Lastly, put your nose to it and take a whiff to check for a musty smell which would indicate moisture contamination.

Coconut fiber (Forest Bedding or "FB") is another excellent substrate. The coconut is processed to be very fine, almost like earth, and pressed into a dry, hard brick. To prepare FB, you put the brick in a large bowl or tub and add enough water until the brick absorbs the water and become soft enough for you to break apart with your hands. Then you add the moist FB to your crabitat.

There are many benefits to using forest bedding, not the least of which is that it appears to be one of the very best molting mediums out there. Over time, the FB compacts a little bit and becomes stable, which allows the crabs to dig little tunnels all through it. An advantage of the FB over sand is that FB will not collapse heavily upon a newly-molted crab and damage it.

I have had many beautiful molts in the FB. The moisture in the FB helps to keep the humidity in the crabitat at a good range, without resorting to sponges and misting.

FB prepared as directed above is adequate, but if you want to make it extra special and healthy, you can prepare it using pre-prepared salt water instead of regular water. First you mix up your salt water according to the package direction, and then use the salt water to soak your FB. Hermit crabs love to eat FB and this helps them to get other, needed minerals in their diet.

There is one unique drawback to using FB and that is that it attracts fungus gnats. Fungus gnats are teeny black bugs that look like midget mosquitoes. They are attracted to warm, moist areas and will lay eggs and start a colony of their own in your crabitat. Fungus gnat larvae are worm-like with black shiny heads.

Since hermit crabs and fungus gnats are both arthropods, you **can not use any pesticides in your crabitat or it will kill the crabs!** There is however a solution to this problem. Back in October 2003 I found and used -- biological warfare! You can view all the creepy details on the [FAQ](#) page. Some people who have mixed their FB with saltwater have reported fewer fungus gnats.

Combination substrate is the latest and probably the best idea. It is a combination of coconut fiber and sand. You prepare the coconut fiber as you would normally, and put it in the crabitat. Then you add sand and mix it all together well until it is a nice, diggable consistency. Generally you want your substrate to be the same consistency as the sand you'd use to make a sand castle. Not too dry and not too drippy.

There is one universal problem with all good hermit crab substrates. They are messy. Expect to have sand or forest bedding in your kitchen and bathroom at one time or another.

Hermit crabs are not the most orderly critters and they do drag sand, FB or what have you into their food and water dishes. Also they bury shells that they aren't interested in. So you'll be cleaning out their dishes and shaking substrate out of shells, no matter what substrate you use! If it's crab-friendly, chances are it's going to be messy.



**Tiny crab after molt.**

**Notice the pink color as contrasted with the black eyes.**

## **WATER: DRINKING AND BATHING**

The basic rule of thumb for land hermit crabs' drinking water is this: Do not give the crab any water you would not put in a tropical fish tank. This means that you'll need to remove the chlorine and other harmful chemicals from water prior to giving it to your crab.

Bottled and filtered water are also acceptable, but usually more expensive. Plus there is no way of guaranteeing that during processing (with bottled water) that the chlorine was adequately removed or (with filtered water) that the filter you're using wasn't clogged or contaminated. I'd go with the method below, regardless of the type of water you use.

## **Removing the Bad Stuff: Chlorine**

Chlorine is harmful to land hermit crabs. Repeated exposure to it causes blisters to form on the crabs' gills, resulting in suffocation and death. You can remove this harmful chemical by purchasing from your pet store a general dechlorinizer (or tap water conditioner). It's relatively inexpensive and usually comes in a dropper-style bottle. You do not need to buy a large amount of it (in fact, you shouldn't, because the drops may gradually lose the ability to dechlorinate the water if stored for a long period of time).

Try to get a brand with instructions on how to mix only ONE GALLON of dechlorinated water, otherwise you'll have to do some calculating as to how many drops per quart, etc.

Read the instructions on the bottle or packaging. Usually you'll need something like 1 drop per gallon (if the dechlorinizer is really strong) or 5 drops per quart. Check your individual brand, though, because the amount per brand can vary significantly. Put the required amount of drops in the bottom of the gallon (or ½ gallon) jug and fill it up in the sink, tub, whatever.

I usually let the water sit open overnight after treatment, to be sure all the chemicals are neutralized. Once you've dechlorinated the water, it can be served to the crabs in practically any non-metallic, non-porous container. The two things you need to consider when selecting water dishes for your crabs are: How much water it will

hold; and how deep the container is. If you have large crabs, you will need a larger container, obviously.

Hermit crabs like to drag themselves (shell and all) into the water dish and just sit there sometimes. They may be replenishing their 'shell water' or they may be cleaning out their shells. It's important you check the water dish daily, and make sure that it is clean and full of water. To clean the water dish, run it under the tap and dry it well with a dishcloth. The best water dishes I have seen are molded plastic or cement reptile-type dishes that look like rock, sea shells, plastic jar lids and individual-serving size small Pyrex casserole dishes. NEVER use anything metal as a water dish. Land hermit crabs are extremely sensitive to metal.

**VERY IMPORTANT!** Be sure your water dish is not so deep that your smaller crabs will drown in it. If you have large crabs and small crabs together, put glass or regular pebbles into the large crabs' dish so a stray small crab will have a way to get out if it stumbles into the large dish. Smaller water dishes and jar lids don't need a sponge in them, but a sponge is critical if you're using a large clam shell, which may be very deep toward the middle-back areas. If the water seems deeper than your smallest crabs, don't take the risk. Put a sponge into the dish.

## **Wash Your Dishes!**

You may notice when you refill the crabs' water dishes that there is sometimes a slimy residue in the bottom of the water dishes. This 'scum' is probably the residue from the (traces of) oil that is used in many of the commercial crab foods.

This oil is used since our hermites need a bit of it in their diet. However, this does NOT mean to add extra oil to their crab food or feed them extra oil -- THAT could kill them! FMR, does use/add some oil (soybean and coconut) in/to their food, but not their treat. Another culprit could well be the oils from the natural foods (such as the coconut, etc.) you feed your crabs. The scum is probably a residue of this oil, combined with food particles and other items the crabs drag into the dish along with them. It is no cause for alarm. Just scrub out the scum (do NOT use any chemicals, a damp paper towel works perfectly).

## To bathe or not to bathe?

There is a lot of debate among hermit crab lovers as to whether bathing land hermit crabs is in fact necessary. When I was growing up it was taken as gospel and was held that way until maybe three years ago at the most.

The arguments for and against bathing are both good, but over the course of time that I've owned my hermit crabs I have come to stop bathing them completely. At first this was because I took into my care several species of exotic hermit crabs and I was unsure about their care. As time went by and all my crabs benefited from not being bathed, I decided to abandon the practice. Now my crabs receive a bath only after coming up from a molt, before being introduced to the rest, or in special circumstances.

The general rule for bathing is thus: If you keep the humidity level of the crabitat at the desired level (above 70% relative) then bathing is redundant and actually stressful to the crabs. This is not to say that hermit crabs should never be bathed.

**What they need is to be able to bathe themselves** when they feel the need. You should provide them with dishes of dechlorinated water (both fresh water and salt water) deep enough that the water will flow into the crabs' shell when the crab climbs into the dish. That is approximately one full inch of depth for large crabs, and a half-inch or less for smaller hermites.

**IMPORTANT: ALWAYS PROVIDE A WAY FOR THE HERMIT CRABS TO CLIMB OUT OF THE POOL!** Add a snip of sponge, a shell or glass pebbles, but always, ALWAYS have something in the pool they can cling to if they are uneasy with being in the water or especially if smaller crabs tumble in by accident.

**Some species of hermit crabs are terrified of exposure to water.** The species *Coenobita brevipennis* in particular is very sensitive to any water exposure. You can read up on it [here](#). After an initial very gentle bath, in which the crab is very slowly and gently immersed in the water and quickly removed, the crab should not be bathed AT ALL. In fact, if you isolate these crabs from the rest of your



crabitat for a month and do not notice any sickness, you can probably skip bathing them altogether.

**Some species of hermit crabs cannot live without exposure to water.** The species *Coenobita perlatus* or "strawberry hermit crab" cannot survive without access to a full dish of salt water in its crabitat at all times. To deprive these beautiful crabs of salt water is to condemn them to a slow and painful death, as they cannot regulate their body's salt level without it.

## **Bathing new crabs and/or new molters**

Hermit crabs that you just purchase from a pet store should be bathed, if to only get the grime off them and make them "smell the same" to the other hermit crabs.

New molters should also receive a quick and gentle bath once they have emerged from their underground molting hide-outs. New molters retain a smell of shed exoskeleton and may smell like a delicious treat to other hermit crabs.

To prevent cannibalism, you bathe them and wash off this molting smell. Remember that your hermit crab cannot tolerate chlorine, so please be sure to dechlorinate the bath water. The temperature of the water should be tepid, that is, about the temperature of the surrounding room (not noticeably hot OR cold).

For a really special hermie bath, put in a couple drops of [Stress Coat®](#). Most people bathe their hermit crabs in dishes, mixing bowls and plastic containers.

Take your hermit crab from his crabitat and try to get him to walk down your hand or arm into the bath water. If he won't then you can slowly lower him into the bath by himself. Set him at the bottom of the 'tub' so he is fully immersed. After a minute, take him out of the bath, whether he comes out of the shell or not.

NEVER leave a hermit crab unattended in the bath, as bathing makes them very active and they might crawl out and possibly injure

themselves. Drain the excess water from his shell and allow him to dry off. Some people have special 'playgrounds' for their crabs to exercise in while drying off. Their 'drying off area' can be as simple as a shoe box with a paper towel in it to absorb the excess moisture.

Place your dried-off hermie back in his crabitat and sit back and watch. They are incredibly active after their bath time and love to explore!

## **Spot Clean-ups**

The introduction of crabs to a crabitat is an excellent time for you to clean and re-order things. Use a kitchen strainer or fish net to strain the sand to remove all crab poop, bits of exoskeleton and buried food. Shake the sand out of the empty shells and replace the food in the food dish. Put all their climbing toys back to where they were the week before, or arrange them differently for a new look. I strongly advocate that all crabitats be 'remodeled' occasionally to keep your crabs from becoming bored with their environment.

## **Toys!**

Hermit crabs LOVE toys! They really enjoy climbing all over and hiding in almost anything you can give them. There are many varieties of 'hermie toys' available in your average pet store. Some of the better ones are:

- Dried choya (or cholla) wood (they actually like to eat it too)
- Sand-blasted grapevine
- Driftwood in any shape or form
- Plastic plants
- Coral, barnacles and sea fans (coral also provides additional calcium)
- Man-made 'hermie huts' for them to hide in
- Man-made 'half logs' also as hiding places
- Unpainted clay flower pots
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So you see, there are all kinds of things you can put into your crabs' tank to keep them interested and active. Just be careful and don't put any resinous (evergreen) wood into the crabitat. Crabs are

arthropods (in the same phylum as insects) and, just as cedar or pine irritates moths, it also annoys hermit crabs.

## **Sponge Care**

A large (baseball-sized or larger) natural sponge in a dish with water in it, close to or over the substrate covering the undertank heater is VERY effective as a means of dispersing humidity into the air. The sponge helps to 'pump' the humidity into the air better by providing a larger surface from which the water evaporates. You might compare it to how quickly a kitchen sponge dries out, as opposed to the time it takes a dish of water to evaporate.

The key to using the sponges is to have a couple of them, so they may be switched out on a regular basis to prevent any mold or bacterial growth. A thorough rinse in hot water only and a short soak in a sea salt solution, followed by a rinse in with some dechlorinated water helps to clean the sponges. Squeeze out the extra water and allow them to air dry.

If additional disinfecting is needed, place the COMPLETELY DRY sponge in the microwave for two minutes. Don't put it in the microwave when they are moist (or even damp), or it will quickly shrink up to nearly nothing!

Large natural sponges can be expensive, and the upkeep of them is mandatory. Since they sit in water and the crabs crawl on them, they are a prime breeding site for bacteria which could kill your crabs. Anyone 'electing' to try this method needs to be aware that neglecting the cleaning of the sponge on a regular basis is asking for problems.

## **Handling**

There is a lot of information floating around about the proper way to handle hermit crabs. Some people recommend picking the crab up by his shell, and others recommend placing the crab on your outstretched palm. The proper handling of hermit crabs is tricky; if you hold them by the shell, they could reach around and pinch your fingers. If you place them on your hand they could wander a ways and then grasp on to the flesh between the thumb and forefinger.

## **Ouch! So I Shouldn't Hold Them?**

It is perfectly fine for you to hold your hermit crabs. However you have to respect the crabs' ability to pinch. They are in fact CRABS and most people associate crabs with claws. The key thing to remember when you are holding your hermit crabs is to not take your eyes off of them.

If you are paying attention to your wandering crabbie, you cut down on your chances of getting nipped and you also reduce the possibility that the crab could escape from you and become "lost." When you pick up your crab, always grasp him by the back of his shell. NEVER pick up a crab from the front, or put a crab in your pocket and close your fist around him.

The crab will become alarmed and stick out the claw and pinch. Pick up the crab carefully by his shell. If it is a very active crab, be ready to quickly transfer him to another surface, such as a sofa or bed. If you want to hold the crab in your hand, keep an eye on it and make sure that it has room to both wander and also that it seems to be comfortable.

A good example of a happy, held hermit crab is one that wanders from hand to hand without stopping. You do this by placing one hand horizontally in front of the other hand, giving the crab a continuous walking surface. Do not place your hands fingertip to fingertip -- because there is not enough surface area and the crab will become alarmed and pinch.

## **Handling Tips for New Crab Owners**

Be especially cautious with new crabs that you don't know, crabs that have in most cases been abused at the pet store and have every right to be pinchy. Think about it -- if someone picked you up and poked at you all the time, you'd pinch too!

One of the reasons that new crabs pinch is because they are

literally starving to death and they automatically pinch onto things, in the vain hope that they might snag some kind of food.

A friend and I once went into a pet store and found a jumbo crab who was pathetically pinching the air about every 3 minutes and bringing up his empty claw to his mouthparts. It was heartbreaking, and on the way home with us, he ate an entire cracker all by himself.

A simple suggestion that plays on this is to feed your new crabs well, and try not to play with them for the first few days they are living with you.

Use gloves if you are nervous. There is nothing wrong with protecting your skin from a crab that you don't know. Thinner gloves are better because then you can feel the crab walking and get used to his weight on your hand. If you're nervous about them however, thicker gloves are fine.

Start out by holding the crab over a bed or sofa, so if the crab makes a move that startles you and you drop him, he will land on a soft surface and not be harmed.

Never allow a child to hold a new pet crab in a kitchen, bathroom or other areas with uncarpeted floors. A fall from three feet or more onto a hard surface can be fatal (the crab's delicate internal organs rupture).

So please supervise all children with their new crabbies until they are comfortable with the crab and respectful of the crushing power of his claws.

On the one hand, a softball-sized hermit crab can completely crush a No. 2 pencil in seconds with the large claw. On the other hand, the large crabs are generally more gentle. Respect the claws and you won't be caught by surprise.

## **Helping Children Get Used to the Crabs**

When I was a little girl, one of my favorite ways to play with my hermies was to lay on my stomach and put my arms out in front of me

in a big circle, and put the crabs in the circle. They would crawl around in there, and I got used to how their feelers and legs feel on my skin (inner arms) without worrying too much about being pinched.

If you have carpeting, that is fine (they won't get snagged), or you can put down a blanket. Sometimes they try to escape underneath the armpit, but then since they were on the floor already, I'd just move myself and make a new circle around them, or roll them back into place.

I've often been asked "What is the single most critical element of keeping land hermit crabs alive?" The answer to that question would have to be keeping their environment humid. Land hermit crabs have modified, stiffened gills which allow them to breathe air.

They are GILLS, however, and not lungs, so are not able to breathe as we do. The air a hermit crab breathes has to be humid or the gills will dry out and the crab will endure a long unpleasant death of suffocation, similar to a human's death by dehydration.

To make sure your crab does not suffer this awful, very common fate, make sure the humidity in your crabitat is kept at a steady humidity level. Make sure of this by purchasing a [humidity gauge](#), and check it daily.

Most humidity gauges read relative humidity, so unless your gauge specifically says it reads [b]actual[/b] humidity, you want to keep it at at least 70%. Many crabbers report success with a humidity reading of between 70% and 80% relative humidity.

If you are keeping your crabs in a plastic critter keeper, use plastic wrap to cover the holes on the lid to trap humidity, or place a warm moist towel over the lid for an immediate humidity boost.

If your crabs live in a glass aquarium, you can purchase a glass lid for it at most pet stores. Since the glass lids store flat and out of the way, many pet store employees might not be aware they stock them.

Do not overdo the humidity, however. Like all things, too much of it can be bad for the crabs and can cause unhealthy bacteria to bloom in their habitat.

I have personally gone for months without a single crab death, and I firmly believe that having adequate humidity in the tank is the main reason. If your hermes are acting listless and bored, check your humidity gauges, it might be that they are struggling for breath!

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