Basic Hermit Crab Care

❖ Yay! I’m getting a hermit crab!
Congratulations on choosing one of my favorite exotic pets! Hermit crabs are clean, disease-free, cute, fun, and inexpensive. There are many myths and inaccurate care sheets and advice out there, so please read on! Hermit crabs come from tropical regions; therefore, they have a few easy, yet essential requirements for their “home away from home” (which we like to call a crabitat). Once these basic requirements are met, you will find hermit crabs to be a relatively simple yet rewarding pet to care for. Provided the proper high humidity and temperature, a substrate they can dig in, and plenty of fresh and salt water, food, toys, and extra shells, your hermit crab will live up to 25 years and grow from the size of a marble to the size of a baseball!

1. Which one do I pick?
First, don’t pick just one! Unlike their name would suggest, “hermit” crabs are actually quite social, and get lonely without friends. Crab companions should only be other hermit crabs though; do not place them in the same tank as other reptiles, amphibians, or mammals. A healthy crab can be seen walking and waving its antennae happily, either on its own or when you pick it up (hold your hand flat so it can’t pinch!). Crabs in natural shells are usually healthier than crabs that were forced into painted or bling shells. Most crabs dump their painted shell first chance they get.

2. What kind is it?
All land hermit crab species (except the giant coconut crab) begin with the name Coenobita (C.). They are born in the ocean, but quickly grow up to live on ocean beaches as well as further inland. Do not confuse them with marine hermit crabs, which spend their whole lives in the ocean. The most common kinds are the Purple Pincher (C. Clypeatus), which has a big purple pincher with light-orange to dark-red legs, and the Ecuadorian (C. Compressus), which has smaller claws, gray-green to tan coloring, and big eyes that look like “<”). Recently, Ruggies (C. Rugosus), Brevies (C. Brevimanus), Violas (C. Violascens) , and Strawberries (C. Perlatus) have been popping up. However, Strawberries, with all-red bodies and white spots, are very fragile and should only be owned by experienced crabbers. Different species can be mixed together, but you should have at least two of each species.

❖ So, I need some supplies, right?

3. Hermie needs warmth and humidity!

Humidity gauge (hygrometer)
Hermit crabs breathe using modified gills: not quite fish gills; not quite human lungs. Their gills must remain moist at all times or they will slowly suffocate. It is therefore essential that their crabitat have sufficient humidity. A humidity gauge, which can be purchased with reptile supplies, is one of the most important crab supplies. Ideal humidity is between 70 and 80% relative. By contrast, most houses are only at 40-50%. Do not let your crabs go below 65% for extended periods of time. Also, do not let your crabitat stay above 85%, or you might get fuzzy mold.

Temperature gauge (thermometer)
Along with humidity, our tropical friend needs warmth. The ideal temperature is between 75 and 85 degrees F. If the temperature falls below 70 degrees for too long, they begin to go dormant, and may not survive.

Moon/night glow incandescent bulbs
Overhead lights are the most natural way to heat your crabitat, but the wattage must be based on tank size and house temperature. Small 10 gallon tanks should start out with a 25w bulb in an incandescent fixture. Large tanks can have over 100w. Special night- or moon-glow bulbs are the best (since crabs are nocturnal), and they can be kept on at night. However, do not use blacklights, as these emit lots of UVA and are quite different from special moon lights.

Under-tank heater (UTH)
UTHs used to be widely used for warming the substrate in crabitats, but are less natural, dry out the sand over the UTH, and don’t heat the air or upper climbing areas. The thermometer might not register much change. The UTH should only be on one side of the tank to let the substrate on the other side remain moist.
Other sources of heat
Heat lamps should not be used with small tanks because they only come in high wattages, and heat rocks and mats can burn your hermies. Fluorescent lights don’t add heat, but special UV lights can be used during the daytime.

Sources of humidity
Getting the humidity above 70% can be tricky at first. The tank and lid will need to be mostly sealed to keep the humid air from escaping. You will need large water bowls, as the lights or UTH will evaporate the water to increase humidity. Large sponges help in the process, but small sponges or small shallow water dishes will have little effect. Misting has only short-term effect, as the mist evaporates quickly. The key to keeping humidity up is a moist substrate. Finger holes in the corners of the tank, and dump ¼ cup water down each hole. Repeat every few weeks as necessary, and the moist lower-substrate will provide longer, more stable humidity.

4. Extra shells
Hermit crabs have a soft, delicate abdomen. In order to keep it protected, they wear shells on their backs. These shells are not a physical part of the crab; rather they are borrowed from other shellfish. As the crab grows, it will need to move into bigger and bigger shells. Some crabs just love to change shells for fun, or to find a better fit. The perfect sized shell has a circular or oval shaped opening the size of the crab’s big pincher; however, some crabs enjoy shells that are either too big or too small for them. Crabs cannot fit their bodies into shells that have thin openings. You should provide at least two shells of each size needed by your crabs. If a crab does not have enough shell choices, he may try to force another crab out of its shell and steal it. Neither you (nor another crab!) should ever try to force a crab out of its shell. Shells should be boiled in water before given to crabs to ensure they are clean.

5. Crabby needs a home!
Glass aquarium or terrarium
This is by far the best home for your crab, and a 10 gallon tank is very cheap. A cover for the tank is essential, as it keeps in the extra humidity crabs need to survive. A glass or plexi-glass cover is ideal (propped open slightly for air circulation), and supports overhead lighting, but a mesh cover will also work – provided that you seal about 90% of the mesh with saran wrap to keep in the humidity.

Critter keepers and wire cages
Plastic cages are not recommended as permanent homes, but will work as temporary homes. They are typically more expensive than a similarly sized glass tank, and the slotted-cover will need to be mostly sealed with saran wrap to keep in humidity – the same as with mesh aquarium covers. Also, wire cages are never a good home.

6. Crab-approved substrates
Crabs don’t just walk on their substrate, they dig in it! Crabs need to be able to dig, tunnel, and bury themselves to relieve stress, molt, and, well, just for fun! Your substrate needs to be twice as deep as your largest crab and able to retain moisture, as moist, deep substrate is essential for successful molts. When molting season comes around, you’ll be fascinated by the holes and mounds in your substrate!

Sand
Sand is probably one of the best substrates for hermit crabs. When it gets moist, it’s like building a sand castle; the crabs have an easy time playing in it. Playsand is also very cheap (a couple dollars for 50lbs).

Compressed coconut fiber
This type of substrate comes in brick-shaped blocks. When soaked in water, it expands to fill a tank. Crabs have an easy time digging and molting in this stuff. You can also mix sand and coconut fiber together in a tank.

Crushed coral (fine-grained)
This substrate is often used for reef tanks, and can be expensive, but provides a great source of calcium.

Gravel
Crabs cannot easily dig and cannot form molting tunnels in gravel, so it is not a suitable primary substrate.

Calcium-carbonate and extra-fine sand
These fine-grain sands clump like cat litter when moistened, so it is unsuitable as a primary substrate.
Bark, wood chips, and dirt
Bark and wood chips mold if wet, and crabs can’t properly dig in them. Aromatic woods such as cedar and pine can be harmful to crabs. Dirt may contain chemicals, bugs, and bacteria.

7. Crabs gotta eat and drink too!

Food and water dishes
You’ll need to provide three bowls or dishes in your crabitat: one for food, one for fresh water, and one for salt-water. The water dishes need to be big enough to fit a bathing crab, and to hold enough water to maintain the humidity level of the tank. If you have small crabs, you will need a sponge or rocks in the bottom of the bowl so they don’t drown. Large sponges in large bowls can also help with humidity.

De-chlorinated water
If you want to use tap water or bottled drinking water, you’ll need to purchase a tap water conditioner (commonly available with fish supplies). The conditioner must remove chlorine, chloramines, and heavy metals. Letting water sit for 24 hours or using plain dechlorinators will only remove chlorine, and does not remove the more harmful chloramines and heavy metal ions. Place a few drops (read the label) into a gallon water jug and stir. Bottled natural spring water is also OK. There is some concern that distilled or RO water may not have all the nutrients crabs need.

Salt-water
Most species of hermit crabs live on beaches, and thus require a source of salt-water. Do not use table salt however – the iodine is dangerous to them! Use marine salt, which is sold with fish supplies. It is usually purchased in bags or tubs, and usually one-half to one cup of salt (read the label, 1lb ~ 1cup) makes one gallon of water. You also need to dechlorinate the salt-water, so follow the above paragraph as well. Providing them with both salt and fresh water allows them to regulate their salinity themselves, which is essential for maintaining their shell water and health.

Quality crab food and treats
In the wild, crabs are scavengers and will eat just about everything they come by, from plants to dead animals, but this doesn’t mean you can just feed junk to your crabbies! T-Rex Crab Island food is the only approved commercial food, as all the others contain the preservatives ethoxyquin and/or copper sulfate which pose long-term health risks. You can feed your crabs any fresh or dried fruits and vegetables, whole grain foods, cooked egg, meat, and fish, and dried shrimp/plankton. Calcium powder or crushed cuttlebone is also recommended.

8. Accessorize!

They’re climbers!
Yep, crabs love to climb, exercise, and practice acrobatics, so they’ll need some toys to climb on. Cholla wood, cork bark, and large coral are their favorites, as they are both easy for them to grab on to, and they make a good snack! They will also climb driftwood and wicker baskets. Explore ways of creating second levels for your crabs!

My spot!
Just like everyone else, each crab needs their own little “spot” – a safe place to retreat to for sleeping and to relieve stress. You’ll need to provide some type of shelter, such as a hollow half-log, plastic cave, or coco-hut. Crabs will also hide behind fake plants. You should have enough hidey-space for each crab, otherwise your crabitat may be too crowded and this will stress the crabs. The more plants and shelters they have to hide in, the safer they will feel and the more you will see them. Insufficient shelter can cause hermits to bury underground more often.

Are they always this active?
Hermit crabs are nocturnal, which means they are most active in the evening or at night, and often hide during the day. Sometimes crabs just need time to get adjusted or relieve stress, and will bury themselves for a week or hide in a corner. Crabs love to explore, so re-arranging the tank will often entice them to play around. You can also create a play-pen and place them in there for a few hours and watch them play. But keep an eye on them, or they might escape!

Organics in the substrate
If you use any organic climbing or hiding structures, like wood and wicker, don’t partially bury it in the moist substrate, or it may start to mold underground. The surface is usually safe if you have overhead lighting, as this keeps the surface drier and warmer, and inhibits mold growth.
**Items to avoid**
Crabs should not have contact with anything chrome, as chromium ions are dangerous. Nickel, arsenic, and cadmium are also dangerous. Don’t use Spanish or decorative moss, as this is actually colored pine shavings, but true terrarium moss is OK. Also, be aware that iron will rust in the high humidity.

❖ **Take care of your babies!**

9. **Introducing new crabs**
New crabs should be kept in a separate ISO tank for a few weeks to a month – both to help them graduate to the improved conditions, and to prevent introducing a crab illness to your main tank. Sudden, extreme changes in temperature and humidity, even if for the better, can result in stress-syndrome, which includes dropping limbs. If your crab came from a pet store tank that was 50% relative humidity, and your main tank is at 75%, slowly graduate the new crab for four weeks in the ISO at 55%, 60%, 65%, and 70% each week before adding them to the main tank.

10. **Daily fun**
Assuming you provide your crabbies with a proper environment, they require relatively low maintenance. You should check the temperature and humidity every day and make adjustments as necessary. For instance, if the humidity is too high, you can prop open the glass cover a bit, or remove a small amount of saran wrap from the mesh. If the humidity is too low, you can prop the cover less, add more saran wrap, add another sponge to the water bowl, or pour more dechlorinated water down the sides into the lower substrate. You should also remove any fresh food from the previous day to prevent spoilage.

11. **Weekly fun**
Every week, you need to completely clean out the water and food bowls and swap sponges. Rinse the old sponge in water, and then let it dry. Once it is completely dry, microwave it for a minute to sterilize it (don’t microwave a wet sponge!). Keeping the water clean is of utmost importance, as crabs can be very sensitive to water quality. If you have large water basins that are filtered and aerated, they still need to be completely cleaned once a month (you can’t cycle water under five gallons). You can also spot-clean poo from the tank (looks like tiny brown macaroni). However, if your sand or coconut fiber is kept properly moist, beneficial microbes will naturally recycle the poo.

12. **Deep cleans**
You will need to replace your substrate once every 6 months. You can retain up to 1/3rd of the old substrate to preserve the beneficial microbes. You should also wash the crab toys in hot water. Cholla, driftwood, and cork can be microwaved for a couple of minutes while wet to kill any bacteria or mold.

13. **Bath?**
Regular bathing used to be recommended, but it is no longer. Hermit crabs auto-regulate the salinity of their shell water (osmoregulation), and stock up before molting. Bathing disrupts their shell water and can stress them, plus you should never dig up buried crabs. Provided the proper fresh and salt water bowls, they will clean themselves.

❖ **Molting time!**
Hermit crabs don’t grow like people. About once every few months to a year, they have to shed their exoskeleton and grow a new one. This is called molting, and it is a very stressful time for your crab. Some warning signs include an ashy texture, blurry eyes, confused antennae, a water sac (looks like a black jelly bean just behind their back left leg), digging, and spending a lot of time around the water dish. If a crab is missing a leg, you might see a small ball of clear gel begin to grow – your crabbie may regenerate its leg during the molt! A deep, moist, diggable substrate is essential to a successful molt. Your crab will likely completely bury for several weeks so you can’t even find him anymore. They need the dark seclusion of the underground for their molting hormone (Ecdysone) to work. The water pressure maintained with the moist substrate allows them to bust out of their exo. If crabs are prevented from burying in moist substrate, or are regularly dug up, they can build up a molt-inhibiting hormone (Xanthurenic acid) which can have dire effects. If your crab molts on the surface, you should cover him with the top-half of a plastic bottle (with the cap open for air) to prevent the other crabs from bothering him. If you pick up a molter, the exo may look like a dead crab falling out. Check way back in the shell for a newly molted crab before starting the funeral! He will need to eat the old exoskeleton in order to regain the lost calcium and nutrients, so don’t take it away.
Learn more, and talk with your crabbing buddies!
There’s a whole community of crab-lovers out there, so stop by one of these websites:
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Basic Hermit Crab Care Checklist

Hermit crabs are a fun, fascinating exotic pet. Hermit crabs will provide endless amusement, from feeler wars to acrobatic climbing, hole digging, staring at you with those beady eyes, and general crabitat mayhem. Therefore, the humidity of the crab tank needs to be kept high or they will slowly suffocate. Below 65% is dangerous (but above 85% promotes mold). Hermit crabs come from tropical regions, and need to stay warm. If the temperature falls below 70 degrees, they become dormant. Hermit crabs have soft, delicate abdomens, and protect them by wearing discarded shells. Hermit crabs spend much of their lives on ocean beaches, and require salt water in addition to fresh water. Finally, hermit crabs grow by molting – the process of shedding their exoskeleton and growing a new one. They require a deep, moist substrate they can bury in, a good calcium source, and high humidity to survive this difficult process.

The official Hermit Crab Association recommends the following supplies (easily found at pet stores and on-line) in order to ensure the health, happiness, and longevity of your hermit crabs:

✔ A friend! Hermit crabs are social and will get lonely without a friend or two or ten.
✔ Glass aquarium or terrarium (plastic/wire cages are too small and don’t hold in warmth and humidity).
✔ Glass or plexi-glass cover for the aquarium, or a mesh cover with 90% of it covered with saran wrap to keep in humidity.
✔ Humidity gauge (hygrometer) to make sure the tank stays around 70-80% relative humidity.
✔ Temperature gauge (thermometer) to make sure the tank stays around 75-85 degrees F.
✔ Low-wattage (15-25W) incandescent moon- or night-glow bulbs or under-tank heater for heat.
✔ Playsand or compressed coconut fiber as a substrate, at least twice as deep as your largest crab, and kept moist. Crabs need to bury themselves to molt and relieve stress, and also for fun.
✔ Extra shells – at least 2 of each size needed by your crabs, with round or oval openings the same size as the big pincher – to allow them to grow up, have fun shell-shopping, and to prevent shell fights.
✔ Food dish filled with ethoxyquin-free/copper sulfate-free commercial crab food, fresh or dried fruits and veggies, whole grain foods, cooked egg, meat, and fish, and dried shrimp/plankton (no dairy).
✔ Crushed cuttlebone or calcium-powder sprinkled in the food as a calcium supplement.
✔ Freshwater bowl with a sponge (so smaller crabs don’t drown).
✔ Tap water conditioner that removes chlorine, chloramines, and heavy metals.
✔ Saltwater bowl with a sponge (to maintain the proper salinity of their internal and shell water).
✔ Marine salt found with saltwater aquarium supplies (do not use table salt; the iodine in it is harmful to crabs). Additionally, the saltwater must also be dechlorinated.
✔ Climbing toys, such as cholla wood, cork bark, coral, driftwood, and wicker baskets.
✔ Hiding shelters such as half-logs, caves, and coco-huts (they need a place to feel safe and relieve stress).
✔ Foliage such as fake plants or true terrarium moss (not Spanish/decorative moss).

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