

# Hermit Crab

## *Coenobita clypeatus*



**LIFE SPAN:** can live to be over 30 to 40 years old!  
"Jumbos" are thought to already be over 20 years old.

**AVERAGE ADULT SIZE:** 1-5 inches

**CAGE TEMPS:** 75 °F

**CAGE HUMIDITY:** 75-80%

\* If temp falls below 75 degrees at night, the enclosure may need supplemental infrared or ceramic heat.

**WILD HISTORY:** Most pet land hermit crabs in the United States are Caribbean hermit crabs (also commonly known as Purple Pinchers) *Coenobita clypeatus*. They are also called soldier crabs, tree crabs and Caribbean crabs. Other land hermit crab species include:

**Hermit crab species that typically prefer shells with circular openings include:**

- Indonesian hermit crabs, or "Indos" (*Coenobita brevipanus*)
- Caribbean hermit crabs, or "Purple Pinchers" (*Coenobita clypeatus*)
- Strawberry hermit crabs (*Coenobita perlatus*)
- Rugosus hermit crabs or, "Ruggies" (*Coenobita rugosus*)

**Hermit crab species that typically prefer shells with oblong or D-shaped openings include:**

- Ecuadorean hermit crabs, or "Eccie" (*Coenobita compressus*)
- Viola hermit crabs (*Coenobita violascens*)
- Cavipe hermit crabs, or "Cavs" (*Coenobita cavipes*)
- Blueberry hermit crabs (*Coenobita purpureus*)

All of these species are available in the pet trade. Just to be on the safe side, it is advisable not to mix the species together in the same habitat. It is also advisable to choose crabs that are a similar size as one another.

Land hermit crabs cannot breed in captivity, so all hermit crabs available in the United States for the pet trade are imported.

**NORMAL BEHAVIOR & INTERACTION:** Nocturnal (most active at night). Docile and tolerant; can be handled, but excessive handling may cause stress to the animal.

Hermit crabs should NOT live alone. They are colonial creatures and do best in captivity when living in a group of three or more. It is possible to tell the difference between male and female crabs, but they must be out of their shells in order to do so. However, it is not necessary to sex your crabs when purchasing them for the same habitat. Males and females get along fine, not matter the combination. Also, there is no danger of your crabs over-reproducing, as land hermit crabs cannot breed in captivity.

Hermit Crabs are very clean – they defecate into their shell, then occasionally “scoop their poop” out with a back leg, usually all in one place. This makes spot cleaning the enclosure very easy.

**FEEDING:** Omnivores, scavengers

Land hermit crabs are opportunistic omnivores. They are scavengers. Commercially prepared hermit crab food has a proper balance of vitamins and minerals for your crabs. However, it is believed that if you offer a variety of good, nutritious foods, the commercial food is not necessary.

Offer good vegetables and grains in a variety of colors such as shaved carrots and ground corn, nuts, oatmeal, dark leafy greens, sweet peppers and cucumbers, eggplant, sweet potatoes and zucchini.

Mangoes, coconuts and papayas would be found in their native habitat, so are also perfect for your crabs.

Crabs will eat meat such as chicken, beef and seafood. Be sure that there is not butter, sauce or spices on the meat when you feed it. Crabs also love to pick meat off bones.

Other good choices are cooked egg, peanut butter, cereal, popcorn, and pesticide free grass and marigold flowers.

Remove all uneaten food after 24 hours and replace with fresh.

In addition to all of the healthy foods, sprinkle crushed cuttlebone or oyster shell over the food 2-3 times per week.

**MOLTING:** Most crabs will molt every 18 months or so. Some smaller crabs will molt more often, but not always. Molting sometimes takes **2-6 weeks** to complete. Try not to worry and check on your crab constantly, as this will disrupt the process.

If your crab is new to the habitat or your habitat is too warm, cold or dry, your crabs may want to dig down into the substrate. If all is fine and your crab is digging, he may be ready to molt. If your crab pops out of his hide hole at night, he is probably not molting, just hiding.

Signs that your crab is ready to molt:

1. Eating and drinking more, but may do most of this at night
2. May slow down and become lethargic
3. May become dull colored with cloudy eyes (like a snake before a shed)

Do NOT touch your crab while he is molting.

When your crab molts, his old exoskeleton will pop out of his shell, looking like a dead crab. Don't panic and be distressed that your crab has died, his new 'self' is hidden tucked into the shell behind the old molt.

Do not remove the old molt; your crab will eat it. It contains many good nutrients for your crab, and he knows it!

SEE "SHELLS" SECTION BELOW

**WATER:** Land hermit crabs require TWO dishes of water. One dish should be fresh water; the other dish should be saltwater. Without **both** types of water available at all times, your crabs will die.

**FRESH WATER:** A shallow dish of clean fresh chlorine-free water must always be available. Place it on the cool side of your hermit crab's enclosure. Change it daily, or as needed. All water given to your pet for drinking, as well as water used for misting, soaking or bathing must be 100% free of chlorine and heavy metals. (Not all home water filtration systems remove 100% of the chlorine and heavy metals from tap water). We recommend that you use unflavored bottled drinking water or bottled natural spring water; never untreated tap water. If tap water is used, you should treat it with a de-chlorinating treatment. De-chlorinator is available in the pet store fish department. If you do not want to chemically de-chlorinate the water, you can leave an open container of tap water out for at least 24 hours. Do not use distilled water, which can cause severe medical problems, since it lacks minerals that are essential to important body functions. If only tap water can be used, at least de-chlorinate the water.

**SALT WATER: Hermit crabs must have both fresh AND saltwater in their enclosures.** Use 8 tablespoons (1/2 cup) of aquarium salt per each gallon of de-chlorinated water **or**, you can make each dish individually by mixing just 1 and 1/2 tsp of salt per 8 oz (1 cup) of de-chlorinated water. Hermit crab water mixes are available, but can become expensive. It is easier and cheaper to purchase a box of aquarium salt and a bottle of de-chlorinator. Your water dishes should be shallow enough that the crabs can crawl in and out of it easily, yet be submerged up to at least half their shell when they are at the deepest point. If some of your crabs are smaller than the others, place pebbles or a sponge in the deepest areas. Do NOT use metal water dishes for your crabs; land hermit crabs are extremely sensitive to metals. A daily misting or two with chlorine-free water will also be appreciated. However, care should be taken not to allow the enclosure to become too damp. Also, do not mist less than two hours before turning the heat lamps off for the day, as the droplets will not have proper time to dry and may contribute to respiratory disease.

**HUMIDITY: Land hermit crab habitat humidity is CRITICAL in maintaining your crab's health and longevity. Cage humidity CANNOT fall below 75%!! Land hermit crabs breathe not with lungs, but with gills. These gills must always remain moist (with environmental humidity) in order for the crab to continue breathing. If they do not remain moist, the crab will slowly suffocate to death. Glass aquarium tanks are best for keeping your crab properly as they can maintain the best heat and humidity while allowing your crabs enough play room. Plastic critter keepers are NOT the proper container for a crab habitat. Pay close attention to and follow closely the directions for heat and humidity on the care sheet.**

### **RECOMMENDED SUPPLIES:**

\*10 or 20 (L) gallon aquarium or breeder tank or larger with metal mesh top & locks

\*Under tank heater – placed under same side of tank as basking light

\*Several dry hide houses

\*2 water dishes which the crabs can crawl in and out of, yet be submerged up to at least half their shell

\*Flourescent UVB light and housing

\*10 gallon - small light dome and 50 watt basking bulb

\*20 gallon – small light dome and 75 watt basking bulb

\*Temperature / humidity gauge – do not stick to side of tank

\*Coconut fiber substrate, moistened + sand  
MUST HAVE BOTH SUBSTRATES

\*Large natural sponge

\*Aquarium salt

**HOUSING & ENVIRONMENT:** Invertebrates like hermit crabs are ectothermic, or cold-blooded, which means they are dependent on the temperature of their immediate environment to regulate their body temperature. Therefore, we must create an environment with several heat gradients – warm on one end and cool on the other. With this set-up, your pet can go to either end depending on whether he needs to be warmer or cooler.

**ENCLOSURE SIZE:** The enclosure should be a solid glass sided tank long enough to create the two separate temperature gradients (warm and cool); a hermit crab tank should be about 10 to 20 gallons, depending on the number of crabs. A larger habitat is ALWAYS better.

**IT IS NOT TRUE THAT AN ANIMAL WILL ONLY GROW AS LARGE AS ITS ENCLOSURE!!**

**COVER:** Make sure the cage has an escape-proof metal mesh top. It should fit snugly onto the tank and have strong clips locking it on. It is important that the top is METAL mesh, as you will place the heat lamp directly on top of this cover.

**HEAT PAD:** Reptile heat pads can be adhered directly onto the underside of the glass bottom of the tank. Stick the pad on the glass on one of the very far ends of the tank (opposite the water dish). For safety reasons, make sure to attach the rubber feet (contained in the box) at all four corners of the underside of the tank. This will allow air to circulate underneath the tank and prevent the heat from being trapped under the tank. Leave the heat pad ON 24 hours a day. A human-grade heat pad may be used on the low to medium setting. Do be sure to allow for proper ventilation for safety reasons. **\*\*Be sure to purchase a heat pad without automatic shut-off, which are still available.**

Heat pads specifically manufactured for reptiles and human-grade heat pads are safe to leave on 24 hours a day. **DO NOT** use reptile heat rocks. They heat unevenly and have caused severe thermal burns in reptiles and amphibians.

**\*\*\*** Although your gecko will most likely NOT spend much time on the floor of the enclosure, the heat pad will help contribute to the overall humidity and ambient temperature of the enclosure.

**HEAT LAMP:** Place the heat dome with the basking bulb on top of the cage directly over where the reptile heat pad has been placed on the underside of one end of the tank. The heat lamp should be turned on in the morning, and off at night. (See “Day/Night Light Cycles” below.

Follow directions carefully with all products – **READ THE INSTRUCTION SHEET!!**

Always choose fixtures with ceramic sockets and be careful to choose the socket that is properly rated for the wattage bulb that you will be using. Do not place the fixtures by dry wood or flammable fabrics.

All heaters should be placed out of the reach of children and all pets – including cats and dogs.

Be very careful to make sure that your caged pet cannot reach and touch the heating device in its own cage. A thermal burn to the face or body can be painful and life threatening.

**UVB LIGHT: Although hermit crabs are nocturnal and do not require UVB light, some research has proven that they can benefit from low levels of UVB light.**

Exposure to UVB (ultraviolet B) light is critical in allowing an animal to synthesize vitamin D3 in their skin and metabolize calcium in their body.

If an animal is not exposed to an adequate level of UVB light, it will gradually develop physical problems from the result of mineral deficiencies such as low blood calcium (hypocalcaemia), soft eggs (females), stunted growth and metabolic bone disorder, which can be fatal if left untreated. In addition, recent studies have linked sub-optimal vitamin D levels with poor immune system function.

All day-active (diurnal) indoor reptiles, amphibians, birds and hermit crabs should be allowed self-selected exposure to UVB lighting for up to 8-12 hours a day. This means they should be able to bask in the light but also get away if desired, much as they might in the wild. Many twilight-active (crepuscular) and night-active (nocturnal) species do get some exposure to the sun and may also benefit from low levels of UVB, which helps regulate their photoperiod and vitamin D levels as well.

Please see our additional “UVB Lighting for Companion Birds and Reptiles” for specific instructions for your particular pet and the UVB bulb that we recommend for him or her.

**HIDE HOUSE:** Place one or two hide house(s) inside the cage directly over where you have positioned the heat pad, and directly under the heat lamp above. Place several more hide houses around the cage if you have a group of crabs. Each will need its own hiding place.

**WATER BOWLS:** The water dishes can be placed on the opposite end of the cage. Choose a water dish that the crabs will be able to crawl in and out of easily, yet be submerged up to at least half their shell. If you have smaller crabs in the enclosure, place a small sponge or pebbles in the deep end of the dish so your little ones will not drown.

**LARGE NATURAL SPONGE:** One or more damp, natural sponge(s) placed on the heat pad is an excellent way to increase the humidity in your crab habitat. (Your crabs may also drink from them.)

Purchase two or more sponges so you can interchange them regularly.

In order to clean the sponges so they do not harbor bacteria, rinse them well in hot water, soak in a sea salt solution for a few minutes, and then rinse in de-chlorinated water. Squeeze excess water out and air dry.

**SHELLS:** It is extremely important to have many empty land or marine snail shells scattered around the inside of the habitat. When molting, your crabs will find and inspect each individual shell carefully to see if it is the proper fit to be their next home. If the crab does not find the perfect shell, he may give up and eventually die. At least 3-4 shells per crab in the habitat should be available in the cage. Choose shells of different shapes and sizes, paying close attention the openings of the shells and the size of your crabs.

Always offer more shells than you think necessary, as fights over shells can result in death.

Do not purchase painted shells; the paint can be toxic to the crabs.

**SUBSTRATE:** Hermit crabs love to dig burrows, especially in a shed period – when it actually becomes extremely necessary. We recommend a loose coconut fiber substrate, available in the reptile department and made by several companies. It is made from the husks of coconuts. This substrate is ideal for hermit crabs, as it will help hold humidity in. Keep the substrate slightly damp, but not watery. A depth of at least three inches should be just right.

In addition to the coconut bedding, sand should also be available. Mix the sand into the coconut bedding to create a somewhat loose yet compactable substrate similar to that which would be good for potting plants.

**BRANCHES & TOYS:** Hermit crabs enjoy to climbing and playing. Include items like sand-blasted grapevine branches, cholla wood branches (dried cactus), and pieces of coral, half coconut shells, rocks and plastic plants. Be creative with your decorating, but try not to clutter the tank. The crabs will appreciate some clear running room as well.

**TEMPERATURES:** Cage temperatures should be monitored daily and kept at the temperatures listed at the top of this page. Use your reptile temperature/humidity gauge to check the temperatures in different places in the cage regularly to make sure they continually match the listed proper temperatures.

\* If the room temperature falls below 75 degrees at night, a supplemental infrared or ceramic heat fixture may be necessary. (These fixtures do not emit a light spectrum that is visible to the crabs, so it will not disturb him at night, but they WILL provide the necessary supplemental heat.)

If your hermit crabs do not receive the proper heat at the proper temperatures, they may become sick with issues such as respiratory disease and may stop eating, as hermit crabs have a hard time digesting their food without proper heat. Also, without the proper heat and humidity, your crabs will not be able to molt properly and will die.

**DAY/NIGHT LIGHT CYCLES AND HEATING:** All hermit crabs must have distinct day and night periods in their enclosure to maintain their biological rhythms. Hermit crabs need 8-12 hours of daytime and 8-12 hours of night time. However, as the daylight hours change seasonally outside, daylight hours inside the tank should try to reflect the same.

**The day period must be light, and the night period must be dark.**

A timer should be used to set day/night periods.

**HABITAT MAINTENANCE:** Daily maintenance should consist of spot cleaning by removing soiled substrate, cleaning water bowl thoroughly and wiping glass clean.

**BE SURE NO CRABS ARE MOLTING THAT MAY BE DISTURBED – IF THERE ARE, DELAY THE CLEANING**

The entire tank should be cleaned thoroughly at least once every 2-3 months with:

- A mild dishwashing liquid (a weak dilution) in warm water, THEN
- Vinegar & water (1:8)  
OR bleach and warm water (1:32)
- Cage “furniture” should also be scrubbed clean with the same dilution.
- RINSE OFF ALL SOAP AND BLEACH THOROUGHLY WITH PLAIN WATER BEFORE RE-INTRODUCING YOUR PET TO ITS ENCLOSURE!!
- NEVER MIX VINEGAR AND BLEACH – IT CREATES A TOXIC SOLUTION
- NOTE: water used for cleaning does not need to be de-chlorinated, as your pet will not be drinking it or bathing in it.

**GROOMING & HYGIENE:** To reduce the risk of contracting and spreading salmonella poisoning, all handlers should wash their hands after handling.

**THE TOP COMMON PROBLEMS THAT IMPACT LAND HERMIT CRAB HEALTH INCLUDE:**

1. Humidity too low
2. Both freshwater and saltwater not included in habitat
3. Improper substrate – crabs can't molt
4. Unhealthy, incomplete diet
5. Not enough empty shells available
6. The presence of mites – check your crabs for small white or brown grainy spots. Contact your exotic pet veterinarian immediately.
7. Disturbing crab while it is molting (or mistaking for dead)

<sup>1</sup>. available at <http://about.com> - accessed 15 March 2012