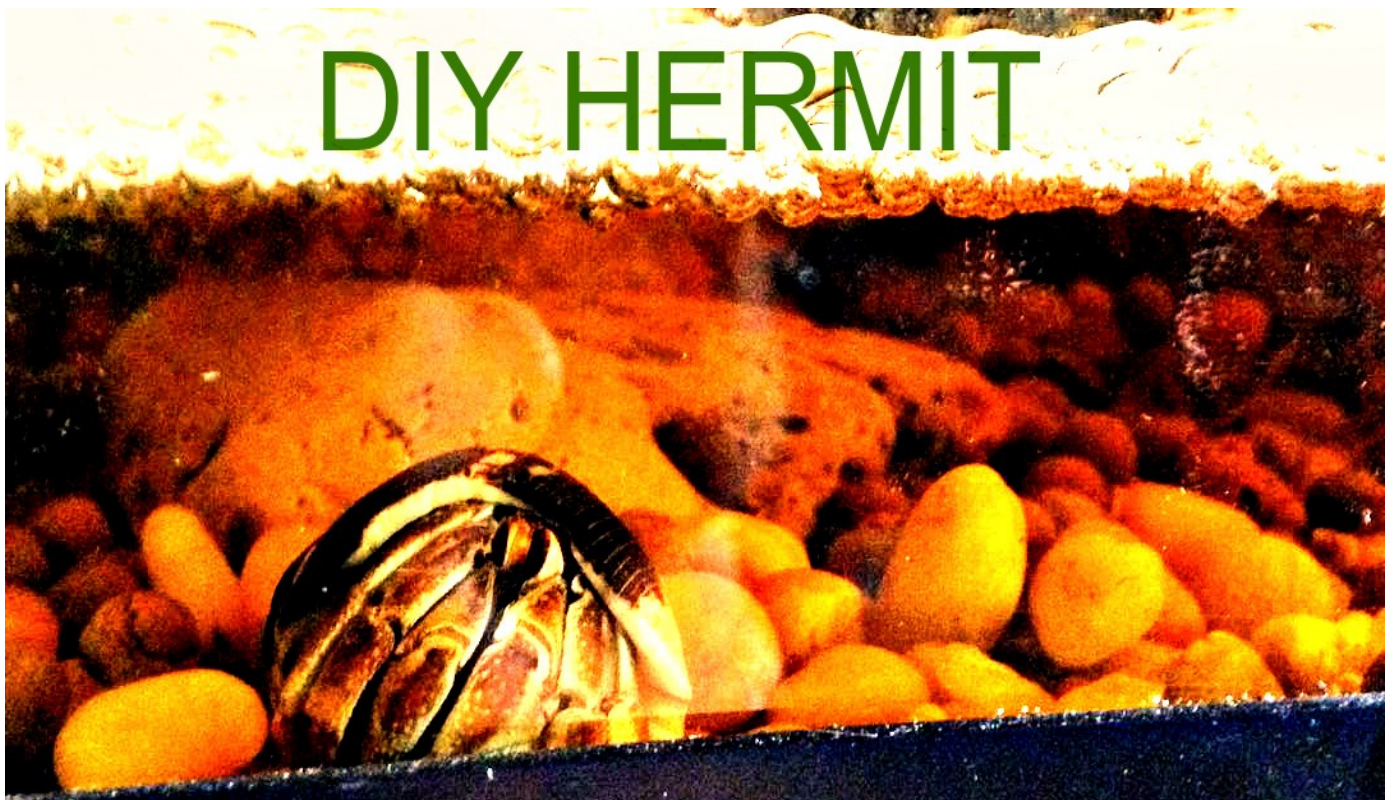


Getting Started With Hermit Crabs

DiyHermit's Official Guide To Hermit Crabs

The DIY Approach To Caring For Hermit Crabs



For more information follow me on Instagram @WingraMax and visit my site: diyhermit.weebly.com

Getting Started With Hermit Crabs

Whether you are looking for a full time hobby or just fun pets, hermit crabs are the choice. Hermit crabs are complex and entertaining creatures. With proper care, hermit crabs can live for more than thirty years! The sad part is, most hermit crabs in captivity don't live for more than one year. This is a result of improper information about hermit crabs that is being given out by most pet stores. Let me take a moment to say, the Internet is partly to blame (and to thank). Many inexperienced hermit crab owners share improper information VIA the Internet and social media. But, the Internet is also to thank (like I mentioned before). Without the Internet, we wouldn't have the Crab Street Journal, LHCOS, many Facebook hermit crab groups, and the Instagram hermit crab group. These groups are dedicated to providing safe and reliable information on hermit crabs.

A proper setup for a hermit crab requires many elements. For simplicity, I am going to break this packet into separate elements. The sub-categories I am going to use are tank/lid, substrate, heat/humidity, water, food, decor, handling, shells, cleaning, lighting, and a shopping list.



Photo Credit: @WingraMax on Instagram

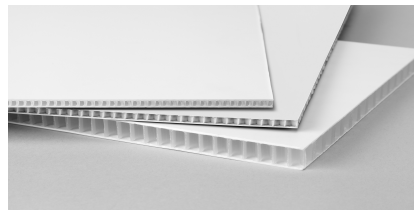
Tank and Lid

When adopting hermit crabs, you need to have a proper setup in order for your crabs to live long, fruitful lives. So, to kick this off we will now talk about the tank. The minimal tank size you can buy for a crab is 20 gallons. Many people say the general rule of thumb is 5-10 gallons per crab. This means 20 gallons should hold 2-4 small crabs just fine. Please keep in mind that the only tank you should be buying is a glass one. Glass tanks are sturdy and don't damage under high heat and humidity. Larger glass tanks can get a bit expensive, so checking your local Craigslist or a garage sale can be a good way to pick up one for cheap. Now lets talk about the lid. Our tank needs to be able to hold high amounts of humidity and heat. This means a screen (or no lid) is not going to cut it. Many people use Plexiglas they cut to fit on top of the tank. I personally use Coroplast, which is a lightweight sheet plastic. Some people have also used screen lids that they wrap with plastic wrap, but making a Coroplast lid is much cheaper. Coroplast is available on Amazon or you can pick some up at your local crafts store.

Glass Tank:



Coroplast:



20 Gallon Tank:..... < \$30

Plexiglas or Coroplast lid:..... < \$10

Total:..... < \$40

(Please keep in mind: these prices are estimated and will most likely be cheaper in your area)

Substrate

It doesn't matter what pet you are keeping (gerbil, guinea pig, bearded dragon), all pets need some kind of bedding/litter/substrate. In this case, hermit crabs need substrate. Now, when you are looking to get some substrate for your crabs, please keep the following in mind. Hermit crabs live on (or near) beaches in the wild, so simulating a beach is crucial. The absolute, hands down way to simulate a beach is by using the good old 5:1 ratio. The 5:1 ratio refers to the mix of sand and Zoo Med “Eco Earth” that is crucial for hermit crabs. You need 5 parts sand (keep in mind: the only sand you should be using is sandbox sand from the hardware store). Then, you need 1 part Zoo Med “Eco Earth”. “Eco Earth” can be bought at any local pet shop. I prefer Amazon, for it's a lot cheaper there. I suggest buying the bricks of “Eco Earth”, because the bags are way over priced. A package of 3 bricks should last you awhile. The minimum depth of substrate for a hermit crab is 6”. This means the top of your 5:1 mix should be 6+ inches off the bottom of your tank.

“Eco Earth” (3 pack):



Sandbox Sand:



Zoo Med “Eco Earth”..... < \$10 (For a 3 pack)
Hardware Store Sand..... < \$6 (For 2 bags)
Total:..... < \$16

(Please keep in mind: these prices are estimated and will most likely be cheaper in your area)

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Heat and Humidity

When it comes to hermit crabs, I believe that heat and humidity are the most crucial parts of care. Crabs are tropical creatures and breathe through modified gills which enable them to breathe in high humidity areas. These gills also make it so the crabs cannot breathe if it's not humid enough. For a crab to maintain its health, it needs to be 75% - 90% humidity and 75 – 87 degrees Fahrenheit. Many people aim for 80-80 at all times. Please make sure your tank never drops below 72 degrees Fahrenheit, for this is dangerous to the crabs. Now that we talked about good humidity and heat ranges, lets talk about how to maintain those numbers. For heat, many people use an under tank heater. Buyer beware: under tank heaters don't get very hot and can't keep large tanks above 72 degrees Fahrenheit. While we are on the topic of under tank heaters, I must mention that placing an under tank heater under your tank is very dangerous to your hermit crabs. This is because hermit crabs like the colder environment under the substrate. Placing your heater under the tank warms the substrate, therefor making it warmer underground and colder above. Placing an under tank heater on the side, back or even top of a tank is fine. For my 60 gallon custom tank, I use four 15 watt florescent bulbs and a large Zoo Med under tank heater. The timer I have turns the bulbs on during the day while the under tank heater stays on 24/7. This keeps my tank at 75 degrees Fahrenheit at night and at 86 degrees Fahrenheit during the day. For humidity, simply having large water dishes and wet moss keeps most tanks in the proper range. Others have tried using humidifiers and misters, but if your lid is made correctly you won't need to. Don't buy moss that was made with chemicals. Moss made by Zoo Med, Exo Terra, or other reptile shops are fine. For a 20 gallon tank, I suggest using a 40 gallon UTH and a temperature controller.

| | |
|------------------------------|--------|
| Temperature Controller..... | < \$20 |
| Exo Terra Sphagnum Moss..... | < \$10 |
| 40 Gallon UTH..... | < \$30 |
| Total:..... | < \$60 |

(Please keep in mind: these prices are estimated and will most likely be cheaper in your area)

Water

Water is essential to anything living. Hermit crabs live in beach areas, so it's necessary to simulate salt and fresh water. A very common “newbie” mistake is to make the dishes very shallow. Your water pools need to be deep enough for your largest crab to fully submerge in. With water depth in mind, your crabs also need a way to easily climb out of the water pools. I suggest using branches and lining the bottom of the pool with gravel. I suggest using a tupperware or “Gladware” to create deep pools. To create salt water, never use table salt. For ideal salt water, use a reef salt. A great brand of reef salt is Instant Ocean. Never buy any products labeled “hermit crab water conditioner” or “hermit crab salt”, as many products labeled for hermit crabs are actually very bad for them. Any water you are putting in the crabitat needs to be dechlorinated. Prime dechlorinator does a great job of removing Chlorine and heavy metals from water. If you are using another brand of dechlorinator, make sure it removes iodine.

| | |
|--------------------------|--------|
| Glad Containers..... | < \$3 |
| Instant Ocean..... | < \$10 |
| Prime Dechlorinator..... | < \$7 |
| Total:..... | < \$20 |

(Please keep in mind: these prices are estimated and will most likely be cheaper in your area)

Food

Hermit crabs are omnivores, which means they eat anything they can get their claws on. This doesn't mean it's good for them to eat anything. To start off I would like to say: never feed your crabs pellet or a crab diet. “Hermit crab food” is mass produced by underpaid workers in some factory who knows where. Not to mention the food contains many harmful chemicals. You see, it's part of something called Capitalism. Let me tell you, capitalism couldn't care less about your hermit crabs. Foods that are ok for hermit crabs are the ones you get at the grocery store. Yes my friend, you can shop for crab food while you are looking at flavors of Ramen Noodles. Before you purchase a food for your crabs, it is important to...

1. Make sure the food is “crab safe”.
2. Make sure the item contains no added preservatives, salts, or sweeteners.
3. If it's meat, make sure it's cooked (you can cook it at home or buy it cooked, just don't serve raw meats).

When serving food, its important to place it in food dishes. You will most likely use multiple dishes, for crabs require many foods available to them 24/7. Crabs, like us, need nutrients such as calcium, protein, carbohydrates, vitamins, and much more. For a through list of nutrition elements, please refer to the back of this packet.

I have had many arguments with fellow crabbers on weather it's OK to feed raw meats. I always support the side that advocates for only serving cooked. Many people say that the bacteria on the raw meat isn't harmful to crabs. While this may be true, you never know if the food has parasites on it. Cooking the food will kill bacteria and kill parasites. Cook your meats!

Decor

Have you ever been bored? Of course you have, so imagine feeling bored 24/7. Hermit crabs, like all animal companions, need some sort of entertainment. Things hermit crabs like to do are climbing, digging, eating, climbing on each other, shell shopping, and waking me up at 2AM. Decor serves as a double, to give the crabs something to do and to make the tank look a lot better. Crabs appreciate many things, such as driftwood logs, moss, flowing water, water pools with air bubbles in them, and elevated locations where they can sit and relax. When decorating your tank please note, anything that is made of pine, cedar, and PVC is bad. Many “newbie” crab owners add log huts to their tanks. These look like logs that are cut in half and hollowed. The decoration I described also has bark on it, and it's made of pine. Do not add one of these to your tank!

My tank contains a waterfall that flows into the freshwater pool, two elevated moss pits, an elevated shell shop, fish netting for them to climb on, and many beautiful pieces of mangrove. You can decorate your setup however you want, but you need to make sure that you include many things for the crabs to climb on. When decorating your tank, please keep in mind that hermit crabs often act like teenagers. This means they have short attention spans and are typically reckless. The more branches and logs you have for them to climb on, the happier they will be. Hermit crabs love flowing water. In most cases, a water feature can help raise your humidity and make your tank more visually attractive.

Driftwood.....< \$15

Other Decor.....< \$10

Total:.....< \$25

(Please keep in mind: these prices are estimated and will most likely be cheaper in your area)

Handling

Many “newbie” hermit crab owners make some huge mistakes when handling their crabs. One gigantic mistake is to bathe your crabs. Bathing a crab is the act of removing it from its tank and placing it in a bowl of water. This is VERY stressful to the crab! Please never bathe your crabs! Another big mistake is when a person takes their crabs out to play too frequently. I will take my oldest crab out once a week and just hold them for five minutes. The most you should hold your crabs are once a week. By now you've probably realized that hermit crabs are not the best pets to socialize with. Ways you can enjoy your crabs are by watching them. My bed is right next to the crab tank and I lay and watch my crabs for hours.

Shells

One of the largest mistakes you can make as a hermit crab owner is to provide painted shells for your crabs. Any shells that are chemically polished, painted, or waxed are not ok for crabs. Shells that are ok for crabs are natural shells and physically polished shells. I also should tell you, natural (pet safe) paint is NOT ok for crabs. The reason being, crabs eat parts of their shells to make them more comfortable. They also eat shells for calcium. Speaking of calcium, a great source of it is ground up shells. Now that you know what shells are acceptable, lets talk about where to buy them. Many people stop at their local hobby shops and buy bulk craft shells. Personally, I use Naples Sea Shell Company, for they have a section on their site dedicated to hermit crab shells. I also love that site is because they tell you how large the openings in the shells are. This makes it one hundred times easier to buy shells for a specific crab. The rule of thumb is 3+ shells per crab. This means if you own 10 crabs, you need 30 shells or more. I currently have 16 crabs and own over 70 shells. When buying shells, buy more than you think you need.

Shells (budget).....< \$30

Total:.....< \$30

(Please keep in mind: these prices are estimated and will most likely be cheaper in your area)

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Cleaning

A great perk of owning hermit crabs is you don't have to clean very often. For the people with large tanks, that is great news. Many crab owners use Isopods (rolly polly bugs) to clean their tanks. Isopods will roam about your tank eating mold, poop, and fungus. The best part is, they breed! You don't have to worry about your Isopods, for they maintain themselves. I only ever clean my tank when I need to make a critical edit to something I have embedded under the substrate. For those of you who have smaller setups, your cleaning schedule will be different. I would also like to mention, poop scooping isn't necessary if you have Isopods.

Lighting

Hermit crabs need to have a regular day and night cycle. This means having some sort of lighting is necessary. I suggest using a full spectrum bulb for the daytime. A full spectrum bulb can be bought at the store for around \$10. If you are cheap (like me) you use compact florescent bulbs. Florescent bulbs emit small amounts of UVB and UVA. I have four of them in my tank and it cost me no money to acquire them (I had them laying around). Weather you choose to use a full spectrum bulb or some compact florescent ones, you need a timer to keep a normal schedule. A timer will turn your lights on and off on a set schedule. I use a digital timer I bought at Ace Hardware for \$15. Using a digital timer will allow you to set different schedules depending on what day it is.

Digital Timer..... < \$15
Light Budget..... < \$10
Total:..... < \$25

(Please keep in mind: these prices are estimated and will most likely be cheaper in your area)

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Shopping List

(Prices are rounded up)

| Item Name: | Quantity: | Price: |
|---------------------|-------------------------|--------------|
| 20 Gallon Tank | 1 | \$30 |
| Tank Lid | 1 | \$10 |
| Eco Earth | 1 (3 pack) | \$10 |
| Sandbox Sand | 2 Bags | \$6 (2 bags) |
| Sphagnum Moss | 1 | \$10 |
| 40 Gallon UTH | 1 | \$30 |
| Glad Containers | 2 Containers | \$3 |
| Instant Ocean | 1 Bag | \$10 |
| Prime Dechlorinator | 1 Bottle | \$7 |
| Driftwood | NA | \$15 |
| Other Decor | NA | \$10 |
| Shells | 3+ Per Crab | \$30 |
| Temp Controller | (Digital One) | \$20 |
| Digital Timer | 1 | \$15 |
| Lights | Florescent or Full Spec | \$10 |
| | | |
| | | |
| | | |
| ----- | ----- Total = | \$216 + Tax |

A 20 gallon tank setup for 2-4 crabs will cost you around \$220

Getting Started With Hermit Crabs

Below is a very through chart of hermit crab nutrition elements. All of these nutrients are essential in a crab's diet. I didn't create the work below, I found it on the LHCOS forums. The text below is not my work!

Key Nutrients

There are many key nutrients needed in a crustacean's diet. Protein is a particularly important nutrient that many crabbers do not offer enough of. It is imperative to get a source of protein in your hermit crab's diet every night (or feeding period).

The key nutrients are listed in alphabetical order.

Astaxanthin

Definition - a strong pigment molecule that is usually found in rich red foods.

Function - enhances color in land hermit crab's exoskeleton and aids in keeping organ systems and bodily functions healthy.

Foods - krill, plankton, red seaweeds, shrimp

Beta Carotene

Definition - an orange and red pigment molecule that is found in brightly-colored foods.

Function - enhances red and orange color in hermit crab's exoskeleton and is processed into Vitamin A in a hermit crab's body

Foods - apricots, bell pepper (red, orange, and yellow), blueberry, broccoli, cantaloupe, carrot, chard, cilantro (raw), collard greens, dandelion greens (raw), lettuce (dark), mango, microalgae, papaya, parsley (raw), passionfruit, peaches, peas, persimmon, pineapple, pumpkin, snap beans (raw), spinach, spirulina, squash, seaweeds, sweet potato

Calcium

Definition - a soft-grey alkaline earth metal (Ca)

Function - aids in exoskeletal health and works as a signal in many cellular functions, including brain function

Foods - amaranth, blackstrap molasses, broccoli, cuttlebone, eggshell, exoskeleton, figs, microalgae, nuts, okra, orange, oyster shell, quinoa, seaweeds, seeds, insects

Carbohydrates

Definition - a biomolecule that is processed into sugar in the bodies of all living things

Function - store and transport short-term energy and make up part of the chitin in the exoskeleton

Foods - fruit (assorted), grains, honey, microalgae, noodles, quinoa, rice, seaweed, vegetables (assorted and especially dried), wheat germ

Cellulose

Definition - a compound making up many tissues and cell walls in plants

Function - provides fiber in diet and also contains many color-enhancing molecules

Foods - fruits, tree bark, tree leaves, vegetables

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Getting Started With Hermit Crabs

Fats (Lipids)

Definition - molecules that store energy and are found in solid (fat) or liquid (oil) forms

Function - used to make cell membranes and dissolve certain vitamins

Foods - almonds, canola oil*, coconut, coconut oil*, egg yolks, meat fat, olive oil*, palm oil*, pumpkin seed oil*, pumpkin seeds, salmon, sunflower seed oil*, sunflower seeds, walnuts

*when picking an oil, cold-pressed oils are the best choice

Other Carotenoids

Definition - molecules that enhance color and reflect different wavelengths of light

Function - enhance color in the hermit crab exoskeleton and aid in bodily functions and keeping organ systems healthy

Foods - apricot, blueberry, carrot, collard greens, egg yolk, guava, kale, mango, pink grapefruit, salmon, shellfish, spinach, squash, sweet potato, tomato

Phytonutrients

Definition - small compounds and molecules that are important in a diet, but too small and too insignificant to research and understand

Function - keeps bodily functions and organ systems healthy

Foods - any nutritional food

Protein

Definition - a compound made up of many smaller amino acids

Function - keeps exoskeleton, muscular, and other bodily systems healthy, and allows the body to process carbohydrates and lipids

Foods - alfalfa hay, broccoli, crab, egg whites, flax seed, freeze-dried bloodworm, freeze-dried plankton, freeze-dried shrimp, crickets, mealworms, game meat, kale, lean beef, lean chicken, lean turkey, lentil, millet, rice, salmon, shrimp, snap peas, soy beans, spinach, tuna, wheat germ

Tannin

Definition - a pigment molecule that is found in fibrous foods

Function - enhances color in land hermit crabs and keeps bodily systems healthy

Foods - roots, tree bark, tree leaves

Vitamins

Definition - a compound that cannot be synthesized by an organism and thus is required by consuming

Function - keeping bodily systems, appearance, and organ systems healthy

Foods - various fruits, vegetables, and other food groups

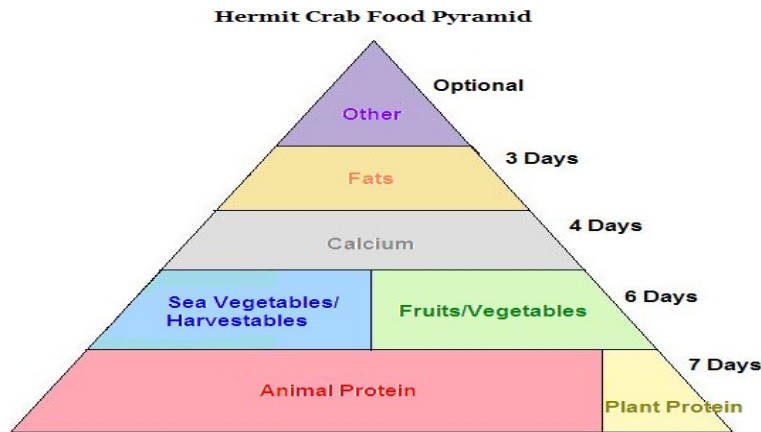
Zeaxanthin

Definition - a carotenoid found in various foods

Function - enhances color of the exoskeleton and also aids in bodily functions

Foods - avocado, bell pepper (orange and red), broccoli, brussel sprouts, carrot, cilantro, collards, corn (yellow), corn meal, dandelion greens, egg yolk, grape leaves, lettuce (romaine), papaya, parsley, peas, raspberry, spirulina

Getting Started With Hermit Crabs



Animal Protein & Plant Protein

This group is most important to a land hermit crab's diet. Foods high in protein should be fed every day so the land hermit crab can access the correct amino acids it requires. Animal proteins are more important than plant proteins, but plant proteins can be fed along with animal proteins.

Foods include: crab, egg whites, freeze-dried bloodworm, freeze-dried plankton, earthworm, freeze-dried shrimp, cricket, mealworm, game meat, lean beef, lean chicken, lean turkey, salmon, shrimp, tuna, alfalfa hay, broccoli, corn, flax seed, kale, lentil, millet, rice, snap peas, soy beans, spinach, wheat germ

Sea Vegetables & Harvestables and Fruits & Vegetables

This group is important to a land hermit crab's diet because it is diverse in many different nutrients. Sea vegetables are high in many necessary minerals and harvestable foods are high in many other nutrients. Fruits and vegetables come along with many different types of vitamins and healthy nutrients. It is important to offer a variety of foods from this level of the food pyramid.

Foods include: apple, avocado, banana, blackberry, blueberry, carrot, celery, cherry, coconut, fig, grape, guava, kiwi, lettuce (dark varieties), mango, orange, peach, pear, pineapple, plum, pomegranate, potato, pumpkin, raspberry, squash, tomato, various other fruits, various other vegetables, algae, kelp, nori, spirulina, wakame, various algae, various seaweeds

Calcium

This group is important in a hermit crab's diet because calcium is an important mineral that helps in exoskeletal health and other bodily functions. Calcium should be fed often and comes in a variety of different forms. Calcium can be fed in dairy forms, although some speculate that crabs do not absorb dairy calcium as well as hard forms. Any greens containing calcium should be quickly cooked in order to disable the oxalic acids, which can prevent calcium absorption. Care should be taken to pick foods with calcium that are also low in oxalic acids and phosphorus.

Foods include: amaranth, beans, blackstrap molasses, broccoli, cuttlebone, dark greens (cooked), eggshell, exoskeleton, figs, microalgae, nuts, okra, orange, oyster shell, quinoa, reptile calcium supplement, seaweeds, seeds, insects

Getting Started With Hermit Crabs

Fats (Lipids)

This group is important in a hermit crab's diet because it can help in molting and also stores energy. Fats are found in plant and animal forms. Fats are not needed in as high amount as protein, which is why when crabs are feeding on an animal protein source it should be lean. There are some beneficial fats and oils in a hermit crab's diet. The two fatty acids that hermit crabs require are n-3 and n-6, which are found in oils and some other sources of fat.

Foods include: almonds, canola oil, coconut, coconut oil, egg yolks, meat fat, olive oil, palm oil, pumpkin seed oil, pumpkin seeds, salmon, sunflower seed oil, sunflower seeds, walnuts

Other

This group is not as important as the other groups, and, in fact, is optional. These foods can be chosen to fed or they can be disregarded. The foods in this group can have beneficial factors and nutrients. This group is very diverse and contains some of the favorite foods of land hermit crabs. Some of these are great healthy treats and others, like vinegar, help with illnesses like post-purchase syndrome (PPS).

Foods include: blackstrap molasses, cuttlebone, earthworm castings, eggshell, honey, mineral supplements, oyster shell, saltwater

Getting Started With Hermit Crabs

Thank you for taking the time to read my care sheet. If you had a positive experience with this care sheet then please share your experience with me through email or Instagram. I am happy to answer any additional questions you have about this care sheet or hermit crabs. My contact info is below.

Instagram: @WingraMax

Facebook: @Max Ise

Website: diyhermit.weebly.com

Email: wingramax.mi@gmail.com

Some good websites to help you:

crabstreetjournal.org

lhcos.org

diyhermit.weebly.com

animallifepets.weebly.com

Happy crabbing!