Fiddler Crabs

Species: *sp.*
Genus: *Uca*
Family: Ocypodidae
Order: Decapoda
Class: Malacostraca
Phylum: Arthropoda
Kingdom: Animalia

Conditions for Customer Ownership

We are a USDA compliant facility and hold all necessary permits to transport our organisms. Each state is assisted by the USDA to determine which organisms can be transported across state lines. Some organisms may require end-user permits. Please contact your local regulatory authorities with questions or concerns. To access permit conditions, click here.

Never purchase living specimens without having a disposition strategy in place. Live specimens should not be released into the wild! Please dispose of any unwanted organisms using the guidelines below.

Primary Hazard Considerations

Wash your hands thoroughly after handling your fiddler crabs, their food, or anything they have touched. Fiddler crabs should not break the skin if they pinch you, but they can give a sharp pinch with their claws. They should be handled as little as possible, and you should wear gloves when you do handle them.

Availability

Fiddler crabs are collected from the wild and are generally available year-round, though seasonal shortages can occur.

Immediate Requirements

Your fiddler crabs will arrive in a waxed paperboard container with moss and/or damp Styrofoam peanuts. The fiddler crabs should be transferred to their new habitat as soon as possible.

Captive Care

Habitat:

- Keep your fiddler crabs in an escape-proof aquarium. Six crabs can live in a 3–5 gallon tank comfortably. Place 1lb. of sand at one end of the aquarium and grade it gradually so that it forms a slope covering ⅔ of the aquarium. Fill the other half with a solution of water and sea salts. You can use spring water, tap water that has been left out for 24–48 hours so the chlorine has evaporated off, or tap water with a dechlorinating agent added to it. To make brackish water (25% sea water), add ¼ cup sea salts to 2 gallons of conditioned water. Mix thoroughly. The specific gravity should be 1.005–1.010. You can measure the specific gravity with a hydrometer. Live or plastic plants, driftwood, and decorations can be added to the environment also. You can include an aquarium filter to the habitat to keep the water clean. Fiddler crabs' optimum temperature is 75–85°F. You can use an aquarium heater to achieve this temperature.

Care:

- In captivity, fiddler crabs keep their scavenger instincts and will feed on anything that sinks to the bottom. Suitable foods are shrimp pellets, blackworms, tadpole pellets, or flake tropical fish food. If there is food leftover in the habitat, net or pipet it out, and feed less next time.
- If you are using an aquarium filter on your tank, you should perform 25–50% water changes 1–2 times per month. If you do not have a filtration system installed, you should perform 100% water changes weekly.

Information

- **Method of reproduction:** Sexual.
- **Determining sex:** Male fiddler crabs have one large claw and one small claw, while female fiddler crabs have symmetrical claws.

Life Cycle

- **Egg:** Carried by the thousands under the abdomen of the female.
- **Zoea:** When the eggs are ready, the mother goes into the water and allows the eggs to hatch into microscopic free-swimming larvae. The early stage larvae are known as zoea.
- **Megalopa:** The larvae live in the open water as part of the plankton. As they grow and go through a number of molt stages. Older larvae are known as megalopa.
- **Crab:** At the end of the final larval stage, the larvae molt into immature crabs. The amount of time spent varies among species from a few weeks to a few months. The crabs return to land and begin to grow; juvenile male and female crabs look alike.

Wild Habitat

- Fiddler crabs are found in muddy marshlands bordering marine bays and surrounding tributaries. They can be found living in communities in burrows just below the high tide mark. These burrows slant down one foot or more and end in a horizontal room. Fiddlers dig holes by packing wet sand between their legs and pressing it into pellets which they remove. Before each high tide the crabs retreat into their burrows, plugging the opening with sand pellets to keep the water out. In the fall, crabs in colder regions burrow and hibernate, only to emerge by the thousands in spring to renew their frenzied activities.

Special Notes

- Fiddler crabs are a lighter color at night than in the daytime. These color changes seem to be related to tidal rhythms, as the crabs are darkest and most active when the tide is low. The color changes are induced by neurosecretory hormones present in the eye stalks. Pigments are contained in chromatophore cells present in the carapace and legs of the crab. These cells, when influenced by the hormone, expand by day causing them to appear darker and contract by night causing them to appear lighter.

Disposition

- We do not recommend releasing any laboratory animal into the wild, and especially not organisms that are not native to the environment.
- Adoption is the preferred disposition for any living animal.

If the fiddler crabs must be euthanized at the end of study, follow one of these procedures:

- Put them into a container or bag and freeze for 48 hours. Place the organism in 70% isopropyl alcohol for 24 hours. Autoclave the organism at 121°C for 15 minutes.
- A deceased specimen should be disposed of as soon as possible. Consult your school's recommended procedures for disposal. In general, dead crabs should be handled as little as possible or with gloves, and wrapped in an opaque plastic bag that is sealed (tied tightly) before being placed in a general garbage container away from students.

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