

THE MONITORING PROGRAM

In 2006, two Chinese Mitten Crabs were reported and confirmed in Chesapeake Bay, occurring at the mouth of the Patapsco River (Baltimore, Maryland). This is the first occurrence of the species reported in Chesapeake Bay and along the entire eastern U.S., from Florida to Maine.

The mitten crab is native to Asia and has invaded several other regions, including California and northern Europe. This crab is listed as "injurious wildlife" by the U.S. federal government, because it has the potential to increase erosion, compromise levees, and impact aquatic vegetation and wildlife.

We have implemented a monitoring and detection program, to determine whether the Chinese Mitten Crab has established a reproductive population in Chesapeake Bay and surrounding tributaries. The crabs reside in freshwater as juveniles and can occur > 50 miles inland, where no native crabs occur. Mature crabs migrate to salt water to reproduce.

We seek your help, in addition to our ongoing field surveys, to determine the status of the mitten crab in the region. Please report any mitten crab sightings to us, along with details (date, specific location, size) and a close-up photograph or specimen if possible. Specimens are best frozen or kept on ice. Please contact us about any new sightings.

Remember, it is illegal to import or transport this species across state boundaries without a permit.

For additional information please contact:

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Or visit us online at:

<http://www.serc.si.edu/>

<http://www.dnr.state.md.us/fisheries/>

<http://www.chesapeakebay.net/marp.htm>



Smithsonian Environmental
Research Center



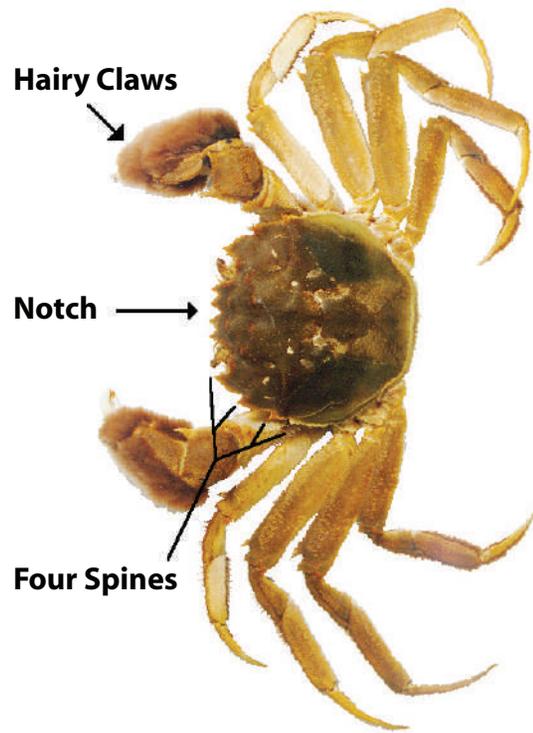
MARYLAND
DEPARTMENT OF
NATURAL RESOURCES



Chinese Mitten Crab Survey



The Smithsonian Environmental Research Center, in cooperation with key partner agencies (Maryland Department of Natural Resources, U.S. Fish and Wildlife Service, and National Oceanographic and Atmospheric Administration), has initiated a program to determine the distribution and abundance of the Chinese Mitten Crab (*Eriocheir sinensis*), an invader, in Chesapeake Bay. Please help by reporting any observed crabs to us.



ADULT CHARACTERISTICS

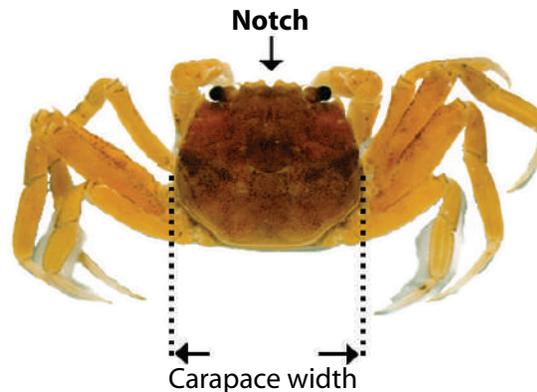
- Hairy claws with white tips, equal in size.
- Notch between the eyes.
- Four lateral carapace spines (4th spine is small).
- Smooth, round carapace or body shape.
- Maximum carapace width (distance across the back) is approximately 100 mm (4 inches).
- Legs over twice as long as the carapace width.
- Light brown to olive green in color.
- Burrows with oval entrances and tunnels usually located between the mean high tide mark and the low tide mark.
- May use burrows made by other crab species and crayfish.

LIFE CYCLE

Adult Chinese Mitten Crabs reproduce in brackish or salt water in winter. Juvenile crabs migrate upstream to freshwater in spring, where they reside for the next two to three years. Mature adults migrate downstream to reproduce and die soon after reproduction.

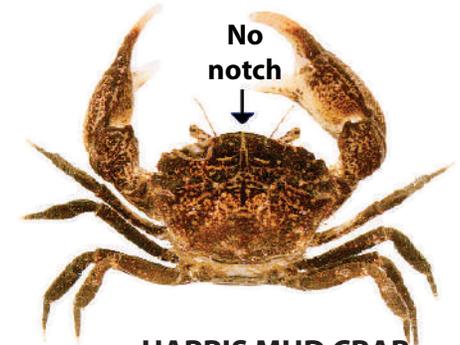
BURROW DESCRIPTION

For protection from predators and to avoid drying out, mitten crabs dig oval-shaped burrows into banks between the mean high tide mark and the low tide mark. They prefer vertical banks often composed of clay soils. The burrows are usually between one to three inches wide, up to eight inches deep, and slope gently downward. Burrows usually have one or two entrances.



JUVENILE CHARACTERISTICS

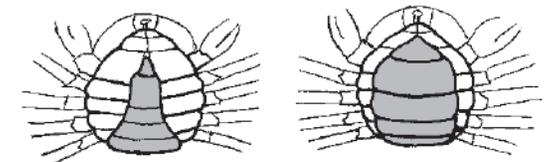
- Notch between the eyes.
- Claws may not be hairy if carapace width is less than 20 mm (3/4 inch).
- Claws are hairy by 25 mm (1 inch) carapace width.
- Other characteristics are the same as adults.



HARRIS MUD CRAB CHARACTERISTICS

Small mitten crabs may be confused with the Harris Mud Crab. The species looks similar and burrows into the same areas of the bank.

- No notch between the eyes.
- Non-hairy, white-tipped claws.
- Ridges on back.
- Black and brown color.
- Maximum carapace width is 19 mm (3/4 inch).
- Small burrows (1 1/2 inches wide) with round entrance.



Male

Female

HOW TO SEX CRABS

The sex of a crab is determined by the width of its abdomen (shaded area) which curls around the crab's underside. The male crab has a narrow, triangular abdomen, while the female has a much broader abdomen.

HOW TO MEASURE CRABS

The size of a crab is determined by measuring its carapace (back) width. The carapace width is the distance across the crab's back at the widest point.