Chinese mitten Crab (*Eriocheir sinensis*)

CURRENT STATUS:
On June 23, 2007 a mature female mitten crab was captured in a commercial crab pot off Kent Point in the Maryland portion of Chesapeake Bay. This is the fourth mitten crab captured in the Bay in the last 3 years, and the first mature female. To date, no mitten crabs have been confirmed in upstream, freshwater habitats where they spend the bulk of their lives, burrowing in tributary banks. In late May 2007, four mature male mitten crabs were captured in commercial crab pots in Delaware Bay, and one mature male was reported from a commercial crab pot in the Hudson River, New York. There are several possible transfer mechanisms that could result in the delivery of these crabs to local waters, without the species becoming established. However, due to the documented ability of this species to invade and to establish itself in new areas, Maryland Department of Natural Resources (MD DNR), the Smithsonian Environmental Research Center (SERC), the US Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) have established a joint effort to investigate the status of this species.
BACKGROUND:
The first Chinese mitten crab documented in Chesapeake Bay was collected June 9, 2006 at the mouth of the Patapsco River, Maryland by a commercial waterman fishing crab pots. This was the first confirmed report of a Chinese Mitten Crab in the Eastern United States. The species is native to East Asia, and is a potential invasive that could have negative ecological impacts. The Chinese mitten crab occurs in both freshwater and saltwater. It is catadromous, migrating from freshwater rivers and tributaries to reproduce in salt water. Young crabs spend 2-5 years in freshwater tributaries and can extend over 50 miles inland, potentially above fall lines. Mature male and female crabs migrate downstream to mate and spawn in salt water estuaries.

Under the Federal Lacey Act, importation and interstate transport of this animal is prohibited.

PLANNED RESPONSE:
MD DNR and partner agencies are taking these encounters seriously. This watch statement has been circulated to federal, state, county, municipal and private agencies and/or organizations that are conducting sampling programs in the Chesapeake Bay watershed and potential mitten crab habitat. MD DNR is also networking with commercial watermen, fish passage monitoring programs, and with power companies that monitor species captured on cooling water intake screens. This broad based monitoring is the first step to assessing if additional mitten crabs are present in the Bay habitat.

HOW TO IDENTIFY A MITTEN CRAB

- Only crab in fresh waters of North America
- Claws equal in size with white tips and “hair”.
- If you find a crab without hair on the claws, it is NOT likely to be a mitten crab.
- Carapace up to 4 inches wide; light brown to olive green in color.
- No swimming legs. This crab has eight sharp-tipped walking legs.

CORRECTLY IDENTIFYING MITTEN CRABS
There is another species of crab found in Maryland, which has been mistakenly identified as a Mitten Crab.
Small mitten crabs may be confused with the Harris mud crab, because of their similar size and appearance.
<table>
<thead>
<tr>
<th>Harris Mud Crab Characteristics</th>
<th>Juvenile Mitten Crab Characteristics</th>
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<tbody>
<tr>
<td>• no notch between the eyes</td>
<td>• notch between the eyes</td>
</tr>
<tr>
<td>• non-hairy, white-tipped claws</td>
<td>• claws may not be hairy if carapace width is less than 20</td>
</tr>
<tr>
<td>• ridges on back</td>
<td>mm (¾ inch)</td>
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<tr>
<td>• dull greenish-brown color</td>
<td>• claws are hairy by 25 mm (1 inch) carapace width</td>
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<tr>
<td>• maximum carapace width is 19 mm (¾ inch)</td>
<td>• four lateral carapace spines (fourth spine is small)</td>
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<tr>
<td></td>
<td>• smooth, round carapace or body shape</td>
</tr>
<tr>
<td></td>
<td>• legs over twice as long as the carapace width</td>
</tr>
<tr>
<td></td>
<td>• light brown color</td>
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</tbody>
</table>

Identification photos courtesy of California Department of Fish and Game

**WHAT TO DO IF YOU FIND A MITTEN CRAB**

- Do not throw it back alive!
- Freeze the animal, keep on ice, or preserve it in rubbing alcohol, as a last resort.
- Note the precise location where the animal was found.
- If possible, take a close-up photo, as above.
- Photos can be emailed to SERCMittenCrab@si.edu for preliminary identification. Please include your contact information with photo.
- If you cannot take a photo, contact the Mitten Crab Hotline (443-482-2222).
REMEMBER THE LAW!
Never transport a live Mitten crab except to deliver to proper authorities.
Mitten crab specimens are needed to confirm sightings, so please follow the instructions above, if you find a mitten crab.

To learn more about mitten crabs see:
http://www.serc.si.edu/labs/marine_invasions/news/mitten_crab.jsp
http://www.wsg.washington.edu/outreach/mas/nis/mittencrab.html
https://mittencrab.nisbase.org/pages/ident