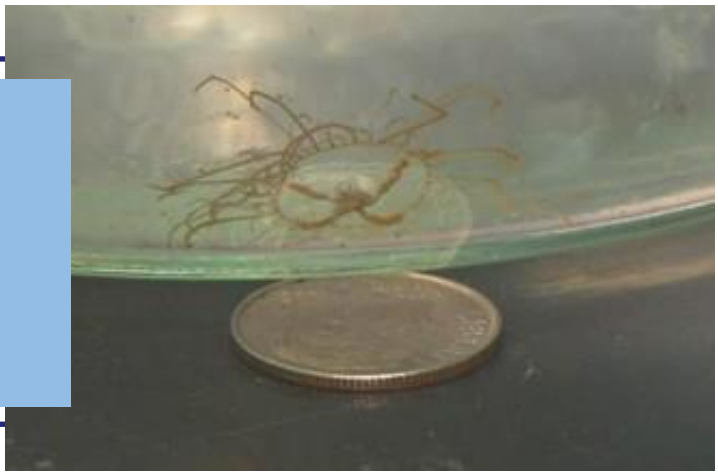
CLINGING Jellyfish



WHAT IS IT?

The Clinging Jellyfish (*Gonionemus vertens*) is a small hydrozoan jellyfish that grows to about 15 - 25 mm (1 inch) in diameter and can be found in bay and estuarine waters. The body of the adult (medusa) is mostly transparent in appearance with a single distinctive reddish-orange to yellow cross. They have 60 - 80 alternating short and long tentacles that contain the nematocysts or stinging cells.

WHERE ARE THEY FOUND?

Clinging jellyfish are native to the Pacific Ocean. They were introduced to the eastern Atlantic Coast as early as 1894 in Woods Hole, Massachusetts, but can be found from Maine to New Jersey as well other areas around the world. Clinging jellyfish thrive in temperate regions, specifically in sheltered shallow bay and estuarine waters where tides are not strong enough to dislodge them. They are dependent on habitats containing dense eelgrass beds and seaweeds, areas where small marine animals (zooplankton and copepods) are abundant. The adults prefer to cling to vegetation and algae during the day, however become active in the water column if disturbed or after sunset. They are not typically found in coastal ocean waters or bathing beaches.

WHEN DO THEY APPEAR IN NEW JERSEY WATERS?

As with other jellyfish, clinging jellyfish begin to bloom when water temperatures and food sources become favorable. For New Jersey, blooms begin about mid-May and adults can observed until early August (or until bay water temperatures reach or exceed 82^{o}F). Although they have not been previously reported in New Jersey waters (prior to 2016), their presence here may be a recent introduction, or they may have gone unnoticed in the past.

ARE THERE AREAS THAT I SHOULD AVOID?

This jellyfish is considered to be an erratic species, meaning that it is not often densely populated. Additionally, they are not likely to be abundant in areas heavily used by swimmers (e.g. beaches), but could affect casual waders and people gathering shellfish in eelgrass beds. They are very sensitive to any disturbance, which causes them to detach and quickly swim to the surface; potentially making contact with the offender. Anyone wading through these areas should take precautions, such as wearing waders and long-sleeved clothing to protect themselves.

WHAT SHOULD I DO IF STUNG?

The sting of the clinging jellyfish can be very potent and produce severe pain and other localized symptoms. However, reactions may vary based on an individual's sensitivity to the toxin. According to recent literature, no fatalities have been documented for this species. If stung by this jellyfish:

- **Rinse the area with saltwater and remove any remaining tentacle materials using gloves, a plastic card or a thick towel.**
- **If symptoms persist or pain increases instead of subsiding, seek prompt medical attention.**

IF YOU ENCOUNTER A CLINGING JELLYFISH, DO NOT TOUCH IT: Avoid contact and do not collect it. If you see one, please send an email to our research team with specific location (GPS coordinates, if possible) and an image to **bolognap@montclair.edu** and/or **joseph.bilinski@dep.nj.gov**.

ADDITIONAL RESOURCES:

CABI - (2016). *Gonionemus vertens*. **www.cabi.org/isc/datasheet/109138**

Fenner, P.J. (2005). Venomous jellyfish of the world. South Pacific Underwater Medicine Society (SPUMS) Journal. Volume 35 No. 3 September 2005: 131-138. **archive.rubicon-foundation.org**

Fofonoff, P.W., G.M. Ruiz, B. Steves and J.T. Carlton (2003). National Exotic Marine and Estuarine Species Information System. **invasions.si.edu/nemesis/**

Gaynor, J.J., P.A.X. Bologna, D. Restaino and C.L. Barry (2016). First occurrence of the invasive hydrozoan *Gonionemus vertens* A. Agassiz, 1862 (Cnidaria: Hydrozoa) in New Jersey, USA. BioInvasions Records (2016) Volume 5, Issue 4: 233–237

Govindarajan, A.F., M.R. Carman, M.R. Khaidarov, A. Semenchenko and J.P. Wares (2018). Mitochondrial diversity in *Gonionemus* (Trachylina:Hydrozoa) and its implications for understanding the origins of clinging jellyfish in the Northwest Atlantic Ocean. PeerJ, 19 pp. **http://dx.doi.org/10.7717/peerj.3205**

Isbister, G. K. (2015). Trauma and Envenomations from Marine Fauna. In: Access Emergency Medicine, Copyright © McGraw-Hill Global Education Holdings, LLC. 25 pp. at **http://accessemergencymedicine.mhmedical.com.ezproxy.uky.edu/content.aspx?bookid=693&sectionid=45915554**

Lakkis, N.A., G. J. Maalouf and D. M. Mahmassani (2015). Jellyfish Stings: A Practical Approach. Wilderness & Environmental Medicine, In Press (2015). 8 pp.

Montgomery, L., J. Seys and J. Mees (2016). To Pee, or Not to Pee: A Review on Envenomation and Treatment in European Jellyfish Species Marine Drugs (2016), 14, 127: 21 pp

Mysterious Jellyfish Makes a Comeback: Rise in toxic stings has scientists on the alert. **www.whoi.edu/page.do?pid=7167&tid=3622&cid=185270#sthash.LEzi7wPa.dpuf**

NJDEP - NJ GeoWeb (2019). NJ Clinging Jellyfish Information: Interactive GIS Map. **https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=7ea0d732d8a64b0da9cc2aff7237b475**

Schuchert, P. (2016). *Gonionemus vertens* A. Agassiz, 1862. In: Schuchert, P. (2016). World Hydrozoa database. Accessed through: World Register of Marine Species at **www.marinespecies.org/aphia.php? p=taxdetails&id=117768** on 2016-06-13WoRMS (World Register of Marine Species) Database. *Gonionemus vertens* (A. Agassiz, 1862).