

Mini Research Note on *Unio crassus* Reproduction

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Unio crassus, the thick-shelled river mussel, exhibits a complex reproductive cycle typical of *Unionidae*, involving a parasitic larval stage known as the glochidium. After internal fertilization, females brood the developing larvae within their gill chambers until they are released into the water column. These glochidia must attach to the gills or fins of suitable host fish to complete their metamorphosis into juvenile mussels. In Central Europe, native cyprinid species such as the chub (*Squalius cephalus*) and the minnow (*Phoxinus phoxinus*) serve as primary hosts [Taeubert et al., 2012b,a]. Successful attachment and encapsulation on these hosts are crucial for larval survival and dispersal, as the parasitic phase enables *U. crassus* to overcome its otherwise limited mobility and maintain gene flow among fragmented river populations.



Figure 1: *Unio crassus* realeasing glochidia

References

- Jens-Eike Taeubert, Bernhard Gum, and Juergen Geist. Host-specificity of the endangered thick-shelled river mussel (*unio crassus*, philipsson 1788) and implications for conservation. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 22(1):36–46, 2012a. doi: <https://doi.org/10.1002/aqc.1245>. URL <https://onlinelibrary.wiley.com/doi/abs/10.1002/aqc.1245>.
- Jens-Eike Taeubert, Ana Maria Posada Martinez, Bernhard Gum, and Juergen Geist. The relationship between endangered thick-shelled river mussel (*unio crassus*) and its host fishes. *Biological Conservation*, 155:94–103, 2012b. ISSN 0006-3207. doi: <https://doi.org/10.1016/j.biocon.2012.06.005>. URL <https://www.sciencedirect.com/science/article/pii/S0006320712002741>.