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ORCID: 0000-0003-2000-532X

Manuscripts in preparation

Govindasamy, N., Rauter, G., Seidel, F., Burkhardt-Holm, P., Hirsch, E. P. & Wiegleb, J.. Swimming at the bottom- A hydraulic advantage for benthic fish (*Neogobius melanostomus* Pallas, 1814) in flowing water?, in preparation.

Publications in 'peer reviewed' international journals

Wiegleb, J., Hirsch, P. E., Seidel, F., Rauter, G. & Burkhardt-Holm, P. (2023). Round goby [*Neogobius melanostomus* (Pallas, 1814)], gudgeon (*Gobio gobio* L.) and bullhead (*Cottus gobio* L.) show distinct swimming patterns in a vertical slot fish pass, *Frontiers in Environmental Science*, 11, 1156248
<https://doi.org/10.3389/fenvs.2023.1156248>

Wiegleb, J., Hirsch, P. E., Seidel, F., Rauter, G. & Burkhardt-Holm, P. (2022). Impact of hydraulic forces on the passage of round goby (*Neogobius melanostomus*), gudgeon (*Gobio gobio*) and bullhead (*Cottus gobio*) in a vertical slot fish pass, *Ecology of Freshwater Fish*, 1-15 <https://doi.org/10.1111/eff.12696>

Wiegleb, J., Hirsch, P. E., Seidel, F., Rauter, G. & Burkhardt-Holm, P. (2022). Flow, force, behaviour: assessment of a prototype hydraulic barrier for invasive fish, *Hydrobiologia*, 849, 1001-1019
<https://doi.org/10.1007/s10750-021-04762-z>

Egger, B., Wiegleb, J., Seidel, F., Burkhardt-Holm, P., & Emanuel Hirsch, P. (2021). Comparative swimming performance and behaviour of three benthic fish species: The invasive round goby (*Neogobius melanostomus*), the native bullhead (*Cottus gobio*), and the native gudgeon (*Gobio gobio*). *Ecology of Freshwater Fish*, 30(3), 391-405. <https://doi.org/10.1111/eff.12592>

Wiegleb, J., Hirsch, P. E., Egger, B., Seidel, F., & Burkhardt-Holm, P. (2020). Flow field-induced drag forces and swimming behavior of three benthic fish species. *Limnologia*, 84, 125812.
<https://doi.org/10.1016/j.limno.2020.125812>

Lutz, E., Hirsch, P. E., Bussmann, K., Wiegleb, J., Jermann, H.-P., Muller, R., ... Adrian-Kalchauer, I. (2020). Predation on native fish eggs by invasive round goby revealed by species-specific gut content DNA analyses. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 30(8), 1566-1577.
<https://doi.org/10.1002/aqc.3409>

Wiegleb, J., Kotterba, P., Hammer, C., & Oesterwind, D. (2018). Predation of the round goby (*Neogobius melanostomus* Pallas, 1814) on Atlantic herring eggs in the Western Baltic Sea. *Marine Biology Research*, 14(9–10), 989-1003. <https://doi.org/10.1080/17451000.2019.1577977>

Contributions to conferences, presentations, and posters

Poster Wiegleb, J. & Kemp, P. (2023) Lessons from a gummy fish: How do fish modulate their swimming trajectories when swimming through critical flow? (Fisheries Society of the British Isles (FSBI) Symposium 2023 in Colchester, UK).
<http://dx.doi.org/10.13140/RG.2.2.24125.64480>

Poster Wiegleb, J., Hirsch, P. E., Seidel, F., Rauter, G. & Burkhardt-Holm, P. (2022). Swimming competition! Who beats the flow in a hydraulic barrier for invasive fish? (International Congress of Ecology 2022 in Geneva, Switzerland).
<http://dx.doi.org/10.13140/RG.2.2.13227.31520>
This poster won the second price of the 'best poster' competition.

- Presentation Wiegleb, J. (2022). Holistic management of the invasive round goby in Switzerland (ICES workshop WKSTARGATE to explore the potential for economic use of round goby and sticklebacks in the Baltic Sea in Copenhagen, Denmark)
- Presentation Wiegleb, J., Hirsch, P. E., Seidel, F. & Burkhardt-Holm, P. (2020). 3D-Forces in current experienced by the round goby and two native benthic fish species during fish pass passage (Goby meeting in Starnberg, Germany)
- Poster Wiegleb, J., Hirsch, P. E. & Burkhardt-Holm, P. (2018). Do round gobies overcome strong currents in fish passes? –Application of 3D-printed fish (Goby meeting in Chioggia, Italy)
- Poster Wiegleb, J., Oesterwind, D., Kotterba, P. & von Nordheim, L. (2017). Trophic interactions of invasive round goby (*Neogobius melanostomus*) and Baltic herring eggs (Bonus Symposium in Thallinn) <http://dx.doi.org/10.13140/RG.2.2.27651.58408>
- Presentation Oesterwind, D., Bock, C., Förster, A., Gabel, M., Henseler, C., Kotterba, P., Menge, M., Myts, D., Winkler, H., Wiegleb, J. (2017). Integration of the invasive round goby (*Neogobius melanostomus*) into the coastal ecosystem of the Western Baltic Sea (Conference BONUS Symposium in Thallinn)

Scientific Reports

ICES. 2022. Workshop on Stickleback and Round Goby in the Baltic Sea (WKSTARGATE). ICES Scientific Reports. 4:77. 56 pp. <https://doi.org/10.17895/ices.pub.21345291>

Outreach activities

Wiegleb, J. (2019). Schwarzmundgrundeln in der Schweiz. *Regio Basiliensis*, 60(2), 89-96.

Round goby Apéro: Stakeholder-interaction event of the round goby-research group of the Program MGU, University of Basel, Switzerland, November 2018, 2019, 2020.