### Department of

### **Biology and Ecology of Fishes**



#### Dr. Christian Wolter

Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB)

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#### Research group

Fish Ecology; River rehabilitation

#### Main research interests

Process-Based Fish Assemblages Dynamics in Large Rivers, Resilience of Fish Communities River Rehabilitation and Management, Fish-Based Environmental Assessment, Environmental History

Fisheries Science and Fish Production, Humboldt-Universität zu Berlin

Education	1999

1986-1991

PhD, Humboldt-Universität zu Berlin

**Professional** Since 2000 appointments Since 1992

1992 Research Assistant, IGB

Since 1992 1991

Research Assistant, Institute for Inland Fisheries, Berlin

Five key publications (last five years)

- Friberg N, Angelopoulos NV, Buijse AD, Cowx IG, Kail J, Moe TF, Moir HH, O'Hare MT, Verdonschot PFM, Wolter C (2016) Effective River Restoration in the 21st Century: From Trial and Error to Novel Evidence-Based Approaches. Advances in Ecological Research 55: 535-611. DOI: 10.1016/bs.aecr.2016.08.010
- Lorenz S, Martinez-Fernández V, Alonso C, Mosselman E, García de Jalón D, González del Tánago M, Belletti B, Hendriks D, Wolter C (2016) Fuzzy cognitive mapping for predicting hydromorphological responses to multiple pressures in rivers. Journal of Applied Ecology 53: 559-566. DOI: 10.1111/1365-2664.12569
- Radinger J, Essl F, Hölker F, Horký P, Slavík O, Wolter C (2017) The future distribution of river fish: the complex interplay of climate and land use changes, species dispersal and movement barriers. Global Change Biology 23: 4970-4986. DOI: 10.1111/gcb.13760
- Radinger J, Hölker F, Horký P, Slavík O, Dendoncker N, Wolter C (2016) Synergistic and antagonistic interactions of future land use and climate change on river fish assemblages. Global Change Biology 22: 1505-1522. DOI: 10.1111/gcb.13183
- Zajicek P, Radinger J, Wolter C (2018) Disentangling multiple pressures on fish assemblages in large rivers. Science of the Total Environment 627: 1093-1105. DOI: 10.1016/j.scitotenv.2018.01.307

# Externally funded research projects (selection, last five years)

- FIThydro Fishfriendly Innovative Technologies for Hydropower (2016-2020), EU H2020
- Baggersee: Improving ecosystem services generated by gravel pit lakes through good managerial practice (2016-2022), BMBF
- Interdisciplinary Research Network 'Good Ecological Potential of Urban Waters' (2016-2019), Berlin Senate for Economics, Technology and Research
- MARS Managing Aquatic ecosystems and water Resources under multiple Stress (2014-2018), EU FP7
- REFORM REstoring rivers FOR effective catchment Management (2011-2015), EU FP7

## Current teaching and supervision

#### Lectures

• Fish Conservation, Humboldt-Universität zu Berlin

#### **Post-docs**

- Jörg Freyhof
- Steffen Bader

#### **Graduate students**

- Petr Zajicek
- Ruben van Treeck

#### Supervision

BSc (6), MSc (37, 2 ongoing), PhD (8, 2 ongoing), Post-docs (17, 2 ongoing)

### Current services and memberships

#### **Editorial boards**

- Journal of Applied Ichthyology (EiC)
- Limnologica

#### Scientific advisory boards and committees

- Institute of Inland Fisheries Potsdam-Sacrow
- Fisheries Advisory Board Berlin

#### **Other functions**

- President International Society for River Science ISRS
- Speaker IGB's Cross-cutting Research Domain Human-Aquatic Ecosystem Interaction
- Deputy Head Department