List of Publications
Johannes Radinger

Submitted

2021 van Treeck R., **Radinger J.**, Smialek N., Pander J., Geist J., Mueller M., Wolter C. (submitted) Evaluation of a novel tool to assess hydropower hazards for European fish populations.

Radinger J., van Treeck R., Wolter C. (submitted) Evident but context-dependent mortality of fish passing hydroelectric turbines.

Radinger J., van Treeck R., Wolter C. (submitted) Data and analyses: Evident but context-dependent mortality of fish passing hydroelectric turbines. *zenodo.org*. DOI: 10.5281/zenodo.4010602

Cano-Barbacil C., **Radinger J.**, García-Berthou E. (submitted) The importance of seawater tolerance and native status in mediating the distribution of inland fishes.

Cano-Barbacil C., **Radinger J.**, Grenouillet G., García-Berthou E. (submitted) Phylogenetic signal and the evolutionary relationship among traits and elevational distribution of inland fish.

Peer-reviewed Scientific Publications

2021 van Treeck R., **Radinger J.**, Noble R. A. A., Geiger F., Wolter C. (2021) The European Fish Hazard Index – An assessment tool for screening hazard of hydropower plants for fish. *Sustainable Energy Technologies and Assessments*. 43:100903. DOI: 10.1016/j.seta.2020.100903

2020 **Radinger J.**, García-Berthou E. (2020) The role of connectivity in the interplay between climate change and the spread of alien fish in a large Mediterranean river. *Global Change Biology*. 26:6383-6398. DOI: 10.1111/gcb.15320

Herrera-R G. A., Oberdorff T., Anderson E. P., Brosse S., Carvajal-Vallejos F. M., Frederico R. G., Hidalgo M., Jézéquel C., Maldonado M., Maldonado-Ocampo J. A., Ortega H., **Radinger J.**, Torrente-Vilara G., Zuanon J., Tedesco P. (2020) The combined effects of climate change and fragmentation on the distribution of Andean Amazon fishes. *Global Change Biology*. 26:5509–5523. DOI: 10.1111/gcb.15285

Cano-Barbacil C., **Radinger J.**, Argudo M., Rubio-Gracia F., Vila-Gispert A., García-Berthou E. (2020) Key factors explaining critical swimming speed in freshwater fish: a review and statistical analysis for Iberian species. *Scientific Reports*. 10:18947. DOI: 10.1038/s41598-020-75974-x

Schmidt H., **Radinger J.**, Teschlade D., Stoll S. (2020) The role of spatial units in modelling freshwater fish distributions: Comparing a subcatchment and river network approach using MaxEnt. *Ecologcial Modelling*. 65:108937. DOI: 10.1016/j.ecolmodel.2020.108937

Cano-Barbacil C., **Radinger J.**, García-Berthou E. (2020) Reliability analysis of fish traits reveals discrepancies among databases. *Freshwater Biology*. 65:863–877. DOI: 10.1111/fwb.13469

2019 **Radinger J.**, Britton J. R., Carlson S. M., Magurran A. E., Alcaraz-Hernández J. D., Almodóvar A., Benejam L., Fernández-Delgado C., Nicola, G. G., Oliva-Paterna F. J., Torralva M., García-Berthou E. (2019) Effective monitoring of freshwater fish. *Fish and Fisheries*. 20:729–747. DOI: 10.1111/faf.12373

Riepe C., Meyerhoff J., Fujitani M., Aas O., **Radinger J.** Kochalski S., Arlinghaus R. (2019) Managing river fish biodiversity generates substantial economic benefits in four European countries. *Environmental Management*. 63:759–776. DOI: 10.1007/s00267-019-01160-z

Radinger J., Alcaraz-Hernández J. D., García-Berthou E. (2019) Environmental filtering governs the spatial distribution of alien fishes in a large, human-impacted Mediterranean river. *Diversity and Distributions*. 25:701-714. DOI: 10.1111/ddi.12895

Jarić I., Lennox R. J., Kalinkat G., Cvijanović G., **Radinger J.** (2019) Susceptibility of European freshwater fish to climate change: Species profiling based on life-history and environmental characteristics. *Global Change Biology*. 25:448–458. DOI: 10.1111/gcb.14518

2018 Teschlade D., Niemann A., Hering D., **Radinger J.** (2018) Entwicklung eines GIS-basierten Modellansatzes zur Priorisierung von Querbauwerken bei der Umsetzung der Wasserrahmenrichtlinie. *KW - Korrespondenz Wasserwirtschaft*. 11:739-746. DOI: 10.3243/kwe2018.12.002

Radinger J., Alcaraz-Hernández J. D., García-Berthou E. (2018) Environmental and spatial correlates of hydrologic alteration in a large Mediterranean river catchment. *Science of the Total Environment*. 639:1138–1147. DOI: 10.1016/j.scitotenv.2018.05.227

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

Radinger J., Hölker F., Horký P., Slavík O., Wolter C. (2018) Improved river continuity facilitates fishes' abilities to track future environmental changes. *Journal of Environmental Management*. 208:169-179. DOI: 10.1016/j.jenvman.2017.12.011

Knopf K., Buschmann K., Hansel M., **Radinger J.**, Kloas W. (2018) Flash photography does not induce stress in the Ram cichlid *Mikrogeophagus ramirezi* (Myers & Harry, 1948) in aquaria. *Journal of Applied Ichthyology* . (2018). DOI: 10.1111/jai.13673

2017 **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., Wolter C. (2017) Assessing how uncertainty and stochasticity affect the dispersal of fish in river networks. *Ecological Modelling*. 359:220–228. DOI: 10.1016/j.ecolmodel.2017.05.029

2016 **Radinger J.**, Kail J., Wolter C. (2016) Differences among expert judgments of fish habitat suitability and implications for river management. *River Research and Applications*. 33:538-547. DOI: 10.1002/rra.3109

Cobo Labarca C., **Radinger J.**, Schöning V., Ariav R., Jung R., Thompson K., Kloas W., Knopf K. (2017) Application of low-frequency sonophoresis and reduction of antibiotics in aquatic systems. *Journal of Fish Diseases*. 40:1635-1643. DOI: 10.1111/jfd.12631

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

2015 **Radinger J.**, Wolter C., Kail J. (2015) Spatial Scaling of Environmental Variables Improves Species-Habitat Models of Fishes in a Small, Sand-bed Lowland River *PlosOne*. 10(11):e0142813. DOI: 10.1371/journal.pone.0142813

Guse B., Kail J., **Radinger J.**, Schröder M., Kiesel J., Hering D., Wolter C., Fohrer N. (2015) Eco-hydrologic model cascades: Simulating land use and climate change impacts on hydrology, hydraulics and habitats for fish and macroinvertebrates. *Science of the Total Environment*. 533:542–556. DOI: 10.1016/j.scitotenv.2015.05.078

Kail J., Kiesel J., Guse B., **Radinger J.**, Schröder M., Kleinhans M., Schuurman F., Fohrer N., Hering D., Wolter C. (2015) From hydrology to species communities – an integrated modelling framework to assess the effect of different pressures on abiotic habitat conditions and biota of rivers. *PlosOne* 10(6):e0130228. DOI: 10.1371/journal.pone.0130228

Radinger J., Wolter C. (2015) Disentangling the effects of habitat suitability, dispersal and fragmentation on distribution of river fishes. *Ecological Applications*. 25:914–927. DOI: 10.1890/14-0422.1

2014 **Radinger J.**, Kail J., Wolter C. (2014) FIDIMO – a free and open source GIS based dispersal model for riverine fish. *Ecological Informatics*. 24:238–247. DOI: 10.1016/j.ecoinf.2013.06.002

Radinger J., Wolter C. (2014) Dispersal patterns and abilities of freshwater fishes. *Fish and Fisheries*. 15:456–473. DOI: 10.1111/faf.12028

Other Scientific Publications

2021 Cano-Barbacil C., **Radinger J.**, García-Berthou E. (2021) Conociendo los peces continentales ibéricos. *Mètode*. 108:37ff.

2020 Wolter C., Bernotat D., Gessner J., Brüning A., Lackemann J., **Radinger J.** (2020) Fachplanerische Bewertung der Mortalität von Fischen an Wasserkraftanlagen. *BfN-Skripten*. 561, Bonn, Germany, 2020, 213 pp. DOI: 10.19217/skr561

Radinger J. (2020) Unsere Fische – wer is morgen (noch) da? *Aqua Viva - Die Zeitschrift für Gewässerschutz*. 62:14–17.

2019 **Radinger J.**, Britton J. R., Carlson S. M., Magurran A. E., Alcaraz-Hernández J. D., Almodóvar A., Benejam L., Fernández-Delgado C., Nicola, G. G., Oliva-Paterna F. J., Torralva M., García-Berthou E. (2019) Preprint – Effective monitoring of freshwater fish. *Zenodo*. DOI: 10.5281/zenodo.1480407

2016 **Radinger J.**, Hölker F., Wolter C. (2016) FISHCON: Biodiversitäts-Szenarien für fragmentierte Landschaften: zukünftige Fischartenvielfalt als Funktion des Gewässernetzwerkes *Schlussbericht BiodivERsA Projekt FISHCON.*

2015 **Radinger J.** (2015) Source populations in the context of dispersal modelling. *Journal of Brief Ideas*. DOI: 10.5281/zenodo.19097

2014 Kail J., **Radinger J.**, Wolter C. (2014) Entwicklung eines integrierten Modells zur Prognose der langfristigen Entwicklung abiotischer Rahmenbedingungen und Lebensgemeinschaften für Gewässermanagement und Klimafolgenforschung. *Schlussbericht IWRMnet Projekt IMPACT.* DOI: 10.2314/GBV:82562777X

2013 **Radinger J.** (2013) Fische zählen 2.0. *IGB Jahresforschungsbericht 2013*.

2011 **Radinger J.**, et al. (2011) FIDIMO – A dispersal model for fish from the IMPACT project *IWRM-Net SCP newsletter.* Issue No. 1.

Selected Scientific Conferences and Talks

Radinger J., (2020) Fische in der Schweiz – gestern, heute, morgen ***Invited talk**, FIBER-Seminar (Schweizer Fischereiberatungsstelle), Olten, Switzerland, January 25, 2020.*

Radinger J. (2019). Modelling fish in large European river systems in light of global change. ***Invited talk**, Seminar, University Duisburg-Essen, Essen, Germany, October 21, 2019.*

Radinger J. (2019). Patterns and processes of fish in river networks – Two case studies: Elbe River and Ebro River. *Seminar, Catalan Institute for Water Research (ICRA), Girona, Spain, March 21, 2019.*

Radinger J., Alcaraz-Hernández J. D., Cano-Barbacil C., García-Berthou E. (2019). Environmental filtering governs the success of alien fishes in a large, human-impacted Mediterranean river. *Meeting of the Iberian Ecological Society (SIBECOL), Barcelona, February 2019.*

Radinger J., Wolter C., García-Berthou E. (2017) The interacting effects of connectivity and global change on fishes in river networks. *5th Biennial ISRS Symposium, Hamilton, New Zealand, November 19-24, 2017.*

Radinger J., Dendoncker N., Essl F., Hölker F., Horký P., Slavík O., Wolter C. (2017) The future distribution and diversity of river fish: the complex interplay of climate and land use changes and species dispersal. *Macroecology in Space and Time 2017, 10th Annual Meeting of the Specialist Group on Macroecology of the Ecological Society of Germany Austria and Switzerland, Vienna, Austria, April 19-21, 2017.*

Radinger J., Kail J., Wolter C. (2017) Differences among expert judgements of fish habitat suitability – a case study for the Minnow, *Phoxinus phoxinus. EcoMeetIng 2017, Hannover, Germany, March 9-10, 2017.*

Radinger J. (2015) Differences among experts' perceptions of fish habitat suitability and its implications for river management. *SIL Austria Meeting, Limnological research in and around the European Alps – a common effort for a common future, Illmitz, Austria, October 14-16, 2015.*

Radinger J., Hölker F., Wolter C. (2015). Interaction effects of future land use and climate change on river fish assemblages, habitat shifts and related dispersal. *4th Biennial ISRS Symposium, Connectivity, La Crosse, Wisconsin, USA, August 23-28, 2015.*

Radinger J. (2015). Modelling fish dispersal in catchments affected by multiple anthropogenic pressures. ***Invited talk**, University Duisburg-Essen, Essen, Germany, August 17, 2015.*

Radinger J., Wolter C. (2015). Disentangling the effects of habitat suitability, dispersal and fragmentation on the distribution of river fishes. *EcoMeetIng 2015, Berlin, Germany, February 26-27, 2015.*

Radinger J. (2014). Modelling fish dispersal in catchments affected by multiple anthropogenic pressures. ***Invited talk**, Institute of Hydrobiology and Aquatic Ecosystem Management, University of Natural Resources and Life Sciences (BOKU) Vienna, Austria, June 4, 2014*

Radinger J. (2014). FIDIMO (Fish Dispersal Model) – Entwicklung eines Modells zur Prognose der Ausbreitung von Fischen in Fließgewässern. *EcoMeetIng 2014, Innsbruck, Austria, February 20-21, 2014.*

Radinger, J. (2014) Quantification of river fish dispersal and its application in GIS modelling. *SIL Austria Meeting, Alpine Limnology, Lunz, Austria, February 12-14, 2014.*

Radinger J., Wolter C., Kail J. (2013) Quantification of river fish dispersal and its application in geospatial modelling.*3rd Biennial ISRS Symposium, Achieving Healthy and Viable Rivers, Beijing, China, August 5-9, 2013.*

Radinger J., Wolter C., Kail J. (2013) Modelling the re-colonization potential of fish in a lowland sand-bed river. *Symposium for European Freshwater Sciences (SEFS), Münster, Germany, July 1-5, 2013.*

Radinger J., Kail J., Wolter C. (2012) FIDIMO – Modelling fish dispersal in river networks with GIS. *8th International Conference on Ecological Informatics, Brasilia, Brazil, December 3-7, 2012.*

Radinger J., Kail J., Wolter C. (2012) FIDIMO – Entwicklung eines Modells zur Prognose der Ausbreitung von Fischen in Fließgewässern. *Jahrestagung 2012 der Deutschen Gesellschaft für Limnologie (DGL), Koblenz, Germany, September 24-28, 2012.*

Radinger J., Kail J., Wolter C. (2012) IMPACT – Developing an integrated model to abiotic habitat conditions and biota of rivers. *2nd Italian Conference on River Restoration, WaterDISS workshop, Bolzano, Italy, November 5, 2012.*

Radinger J., Kail J., Wolter C. (2012) Modelling fish dispersal in river networks – Application of FOSS in river ecology. *Free and Open Source Software for Geospatial in Central and East Europe (FOSS4G-CEE), Prague, Czech Republic, May 21-23, 2012.*

Radinger J., Kail J., Wolter C. (2011) Modelling fish dispersal in river networks with open source GIS. Poster (best poster award), *2nd Biennial Symposium of the International Society for River Science, Berlin, Germany, August 8-12, 2011.*

Radinger J. (2010) The influence of flow velocity and substrate composition on the benthic fauna in the lower reaches of River Erlauf. *Fresh Blood for Freshwater Meeting, Lunz, Austria, July 2010.*