

## ARTICLES SCIENTIFIQUES PEER REVIEW

ABONYI A., PILECKY M., RASCONI S., PTACNIK R., KAINZ M. (2023-05-03). Chytrids alleviate the harmful effect of heat and cyanobacteria diet on *Daphnia* via PUFA-upgrading. *Journal of Plankton Research*, 45 (3), 454-466, 10.1093/plankt/fbad012, <https://hal.inrae.fr/hal-04152874>

BANJAN M., CHRISTIAN C., PIERRE S., JOMARD H., MANON B., FRANCOIS D., ANNE-LISE D., JEAN-PHILIPPE J., ERWAN M., BERNARD F., EMMANUEL M., FINDLING N., PHILIPPE A., JULIEN D., VINCENT B., SYLVAIN C. (2023-02). Did the Younger Dryas to Holocene climate transition favour high seismicity rates in the north?western Alps?. *Sedimentology*, 70 (2), 538-568, 10.1111/sed.13050, <https://hal.inrae.fr/hal-04032433>

BAKER L.-A., BEAUGER A., KOLOVI S., VOLDOIRE O., ALLAIN E., BRETON V., CHARDON P., MIALLIER D., BAILLY C., MONTAVON G., BOUCHEZ A., RIMET F., CHARDON C., VASSELON V., ECTOR L., WETZEL C., BIRON D. (2023). Diatom DNA metabarcoding to assess the effect of natural radioactivity in mineral springs on ASV of benthic diatom communities. *Science of the Total Environment*, 873, 162270, 10.1016/j.scitotenv.2023.162270, <https://hal.inrae.fr/hal-04033005>

BLANCHET S., FARGEOT L., RAFFARD A. (2023). Phylogenetically conserved candidate genes unify biodiversity–ecosystem function relationships and eco?evolutionary dynamics across biological scales. *Molecular Ecology*, , 10.1111/mec.17043, <https://hal.inrae.fr/hal-04128234>

BOUCHALI R., MARJOLET L., MONDAMERT L., CHONOVA T., RIBUN S., LAURENT E., BOUCHEZ A., LABANOWSKI J., COURNOYER B. (2023-04). Evidence of Bacterial Community Coalescence between Freshwater and Discharged tpm-Harboring Bacterial Taxa from Hospital and Domestic Wastewater Treatment Plants among Epilithic Biofilms. *Microorganisms*, 11 (4), 922, 10.3390/microorganisms11040922, <https://hal.inrae.fr/hal-04154873>

BOURINET F., ANNEVILLE O., DROUINEAU H., GOULON C., GUILLARD J., RICHARD A. (2023-02-08). Synchrony in whitefish stock dynamics: disentangling the effects of local drivers and climate. *Journal of Limnology*, 82 (1), 2134, 10.4081/jlimnol.2023.2134, <https://hal.inrae.fr/hal-04158364>

BORREGO-RAMOS M., RIMET F., BECARES E., BLANCO S. (2023-10). Environmental drivers of genetic variability in common diatom genera: Implications for shallow lake biomonitoring. *Ecological Indicators*, 154, 110898, 10.1016/j.ecolind.2023.110898, <https://hal.inrae.fr/hal-04212605>

BOSSON J., HUSS M., CAUVY-FRAUNIE S., CLEMENT J., COSTES G., FISCHER M., POULENARD J., ARTHAUD F. (2023-08-17). Future emergence of new ecosystems caused by glacial retreat. *Nature*, 620 (7974), 562-569, 10.1038/s41586-023-06302-2, <https://hal.inrae.fr/hal-04221856>

CANINO A., LEMONNIER C., ALRIC B., BOUCHEZ A., DOMAIZON I., LAPLACE-TREYTURE C., RIMET F. (2023). Which barcode to decipher freshwater microalgal assemblages? Tests on mock communities. *International Journal of Limnology*, 59, 8, 10.1051/limn/2023008, <https://hal.inrae.fr/hal-04210529>

CHANGEUX T., BOISNEAU P., STOLZENBERG N., GOULON C. (2023). A long term overview of freshwater fisheries in France. *Reviews in Fish Biology and Fisheries*, <https://doi.org/10.1007/s11160-023-09803-5>, 10.1007/s11160-023-09803-5, <https://hal.inrae.fr/hal-04244953>

CHONOVA, T., RIMET, F., BOUCHEZ, A., KAHLERT, M., SCHNEIDER, S.C., BAILET, B., EULIN-GARRIGUE, A., GASSIOLE, G., MONNIER, O., OUATTARA, A., REY, S., RHONÉ, M., KECK, F. (2023) Revisiting global diversity and biogeography of freshwater diatoms: New insights from molecular data. *Environmental DNA* n/a. <https://doi.org/10.1002/edn3.475>

DESGUE-ITIER O., MELO VIEIRA SOARES L., ANNEVILLE O., BOUFFARD D., CHANUDET V., DANIS P. A., DOMAIZON I., GUILLARD J., MAZURE T., SHARAF N., SOULIGNAC F., TRAN KHAC V., VINCON-LEITE B., JENNY J.-P. (2023). Past and future climate change effects on the thermal regime and oxygen solubility of four peri-alpine lakes. *Hydrology and Earth System Sciences*, 27 (3), 837-859, 10.5194/hess-27-837-2023, <https://hal.inrae.fr/hal-04179072>

DORE H., GUYET U., LECONTE J., FARRANT G., ALRIC B., RATIN M., OSTROWSKI M., FERRIEUX M., BRILLET-GUEGUEN L., HOEBEKE M., SILTANEN J., LE CORGUILLE G., CORRE E., WINCKER P., SCANLAN D., EVEILLARD D., PARTENSKY F., GARCZAREK L. (2023-07-15). Differential global distribution of marine picocyanobacteria gene clusters reveals distinct niche-related adaptive strategies. *ISME Journal*, 17 (5), 720-732, 10.1038/s41396-023-01386-0, <https://hal.inrae.fr/hal-04238382>

ETIENNE D., GEORGES-LEROY M., LAPLAIGE C., WALTER-SIMONNET A.-V., RUFFALDI P., DAMBRINE E. (2023-07-01). Morphometry, distribution and Holocene dating of closed depressions, called mardelles, in northeastern France. *Quaternaire*, (vol. 34/2), 123-134, 10.4000/quaternaire.17809, <https://hal.inrae.fr/hal-04182446>

FEHLINGER L., MISTELI B., MORANT D., JUVIGNY-KHENAFOU N., CUNILLERA-MONTCUSI D., CHAGUACEDA F., STAMENKOVIĆ O., FAHY J., KOLA V., HALABOWSKI D., NASH L., JAKOBSSON E., NAVA V., TIROZZI P., CORDERO P. U., MOCQ J., SANTAMANS A. C., ZAMORA J. M., MARLE P., CHONOVA T., BONACINA L., MATHIEU-RESUGE M., SUAREZ E., OSAKPOLOR S., TIMONER P., EVTIMOVA V., NITA D., CARREIRA B., TAPOLCZAI K., MARTELO J., GERBER R., DINU V., HENRIQUES J., SELMECZY G., RIMCHESKA B. (2023). The ecological role of permanent ponds in Europe: a review of dietary linkages to terrestrial ecosystems via emerging insects. *Inland Waters*, 10.1080/20442041.2022.2111180, <https://hal.inrae.fr/hal-03923131>

FONTANILLES A., WEZEL A., ROUIFIED S., GUERIN M., VANACKER M., ARTHAUD F., ROBIN J. (2023-06-05). Disturbance and resilience of aquatic plant communities in fish ponds after temporary dry periods. *Aquatic Ecology*, 10.1007/s10452-023-10032-y, <https://hal.inrae.fr/hal-04119252>

FROSSARD V., SABATIER P., BRUEL R., VAGNON C., TISSOT N., CURT-GRAND-GAUDIN N., PERGA M.-E. (2023-07). Intense touristic activities exceed climate change to shape aquatic communities in a mountain lake. *Aquatic Sciences - Research Across Boundaries*, 85 (3), 71, 10.1007/s00027-023-00968-6, <https://hal.inrae.fr/hal-04213885>

FROSSARD V., VAGNON C., COTTIN N., PIN M., SANTOUL F., NAFFRECHOUX E. (2023-12). The biological invasion of an apex predator (*Silurus glanis*) amplifies PCB transfer in a large lake food web. *Science of the Total Environment*, 902, 166037, 10.1016/j.scitotenv.2023.166037, <https://hal.inrae.fr/hal-04247441>

FROSSARD V., VAGNON C., JACQUET S. (2023). Seasonal variations of the trophic niche width of *Hemimysis anomala* in Lake Geneva. *Hydrobiologia*, 10.1007/s10750-023-05334-z, <https://hal.inrae.fr/hal-04213551>

GIGUET-COVEX C., BAJARD M., CHEN W., WALSH K., REY P.-J., MESSENGER E., ETIENNE D., SABATIER P., FICETOLA F., ARNAUD F., POULENARD J. (2023) Long-term trajectories of mountain agro-ecosystems in the North-Western Alps. *Regional Environmental Change*, 23:58. <https://doi.org/10.1007/s10113-023-02030-5>

HAVAS R., THOMAZO C., INIESTO M., JEZEQUEL D., MOREIRA D., TAVERA R., CAUMARTIN J., MULLER E., LOPEZ-GARCIA P., BENZERARA K. (2023). The hidden role of dissolved organic carbon in the biogeochemical cycle of carbon in modern redox-stratified lakes. *Biogeosciences*, 20 (12), 2405-2424, 10.5194/bg-20-2405-2023, <https://hal.inrae.fr/hal-04182498>

HEMMING D.L., ANNEVILLE O., AONO Y., CRIMMINS T., ESTRELLA N., MENZEL A., MREKAJ I., O'KEEFE J., PARK T., RICHARDSON A.D., ROZKOSNY J., RUTISHAUSER T., SPARKS T.H., THACKERAY S.J., VAN VLIET A.J.H., WEST F. 2023. Phenology of primary producers [in "State of the Climate in 2022"]. *Bull. Amer.*

Meteor. Soc., 104 (9), Si–S501 <https://doi.org/10.1175/2023BAMSSStateoftheClimate.1>. Blunden, J., T. Boyer, and E. Bartow-Gillies, Eds.

HERVE A., DOMAIZON I., BAUDOIN J.-M., DEJEAN T., GIBERT P., VALENTINI A., LOGEZ M. (2023-07-27). Do temperature and population size structure influence the quantity of fish eDNA in water?. *Frontiers in Environmental Science*, 11, 10.3389/fenvs.2023.1193393, <https://hal.inrae.fr/hal-04177222>

IBANEZ S., FOULQUIER A., BRUN C., COLACE M.-P., PITON G., BERNARD L., GALLET C., CLEMENT J.-C. (2023-01-23). The contrasted impacts of grasshoppers on soil microbial activities in function of primary production and herbivore diet. *Peer Community in Ecology*, 3, e12, 10.24072/pcjournal.229, <https://hal.inrae.fr/hal-03988756>

JASSEY V. E., PETCHEY O., BINET P., BUTTLER A., CHIAPUSIO G., DELARUE F., LAGGOUN-DEFARGE F., GILBERT D., MITCHELL E. A., BAREL J. (2023-09). Food web structure and energy flux dynamics, but not taxonomic richness, influence microbial ecosystem functions in a Sphagnum-dominated peatland. *European Journal of Soil Biology*, 118, 103532, 10.1016/j.ejsobi.2023.103532, <https://hal.inrae.fr/insu-04182721>

JACQUET S. (2023). Are warm temperatures the key factor to prevent winter swarms of *Hemimysis anomala* in peri-alpine lakes? *Knowledge and Management of Aquatic Ecosystems*, (424), 14, 10.1051/kmae/2023008, <https://hal.inrae.fr/hal-04116729>

KOCHOSKA, H., C. CHARDON, T. CHONOVA, F. KECK, L. KERMARREC, F. LARRAS, E. LEFRANCOIS, S. F. RIVERA, K. TAPOLCZAI, V. VASSELON, Z. LEVKOV, & F. RIMET (2023) Filling reference libraries with diatom environmental sequences: strengths and weaknesses. *Diatom Research Taylor & Francis* 0: 1–25. <https://doi.org/10.1080/0269249X.2023.2237977>

LECLERC C., REYNAUD N., DANIS P., MOATAR F., DAUFRESNE M., ARGILLIER C., USSEGLIO-POLATERA P., VERNEAUX V., DEDIEU N., FROSSARD V., SENTIS A. (2023). Temperature, productivity, and habitat characteristics collectively drive lake food web structure. *Global Change Biology*, , 1-16, 10.1111/gcb.16642, <https://hal.inrae.fr/hal-04049952>

LE QUINIO A., DE OLIVEIRA E., GIRARD A., GUILLARD J., ROUSSEL J.-M., ZAOUI F., MARTIGNAC F. (2023-02-24). Automatic detection, identification and counting of anguilliform fish using in situ acoustic camera data: Development of a cross-camera morphological analysis approach. *PLoS ONE*, 18 (2), e0273588, 10.1371/journal.pone.0273588, <https://hal.inrae.fr/hal-04005765>

MARCHAL L., GATEUILLE D., NAFFRECHOUX E., DELINE P., BAUDIN F., CLEMENT J.-C., POULENARD J. (2023-12). Polycyclic aromatic hydrocarbon dynamics in soils along proglacial chronosequences in the Alps. *Science of the Total Environment*, 902, 165998, 10.1016/j.scitotenv.2023.165998, <https://hal.inrae.fr/hal-04193510>

MONNIER O., GASSIOLE G., RIMET F. (2023) *Geissleria tahitiensis* sp. nov. (Cymbellaceae, Bacillariophyceae), a common diatom in Society Islands rivers. *Notulae Algarum*, 286: 1-5.

MULLER E., RAPIN W., CAUMARTIN J., JEZEQUEL D., DE WEVER A., THOMAZO C., HAVAS R., LOPEZ-GARCIA P., MOREIRA D., TAVERA R., BENZERARA K. (2023). Diagenetic formation of stevensite by replacement of diatom frustules in the sediments of the alkaline Lake Alchichica (Mexico). *Sedimentology*, 70 (4), 1013-1038, 10.1111/sed.13069, <https://hal.inrae.fr/hal-04051587>

PAUL A., HISSLER C., FLORIO A., DIDIER S., POLLIER B., VAN DER HEIJDEN G., DAMBRINE E., RANGER J., ZELLER B., LEGOUT A. (2023-08). Douglas-fir plantations impact stream and groundwater chemistry in western Europe: Insights from three case studies in France and Luxembourg. *Environmental Pollution*, 336 (122477), 10.1016/j.envpol.2023.122477, <https://hal.inrae.fr/hal-04195465>

PERGA M., MINAUDO C., DODA T., ARTHAUD F., BERIA H., CHMIEL H., ESCOFFIER N., LAMBERT T., NAPOLLEONI R., OBRADOR B., PEROLO P., RUEGG J., ULLOA H., BOUFFARD D. (2023-06). Near-bed stratification controls bottom hypoxia in ice-covered alpine lakes. *Limnology and Oceanography*, 68 (6), 1232-1246, 10.1002/lno.12341, <https://hal.inrae.fr/hal-04222315>

PRUNIER J., CHEVALIER M., RAFFARD A., LOOT G., POULET N., BLANCHET S. (2023-12). Genetic erosion reduces biomass temporal stability in wild fish populations. *Nature Communications*, 14 (1), 4362, 10.1038/s41467-023-40104-4, <https://hal.inrae.fr/hal-04247239>

REALIS-DOYELLE E., COTTIN N., DAUFRESNE M., NAFFRECHOUX E., REYNAUD S., GUILLARD J., GUILLARD J. (2023-02). Evolution of pace-of-life syndrome under conditions of maternal PCB contamination and global warming in early life stages of cold stenothermic fish (Arctic char). *Aquatic Toxicology*, 255, 106396, 10.1016/j.aquatox.2023.106396, <https://hal.inrae.fr/hal-04051580>

RIMET F., PINSEEL E., BOUCHEZ A., JAPOSHVILI B., MUMLADZE L. (2023-05). Diatom endemism and taxonomic turnover: Assessment in high-altitude alpine lakes covering a large geographical range. *Science of the Total Environment*, 871, 161970, 10.1016/j.scitotenv.2023.161970, <https://hal.inrae.fr/hal-04247525>

RIVERA S., VASSELON V., BOUCHEZ A., RIMET F. (2023-05). eDNA metabarcoding from aquatic biofilms allows studying spatial and temporal fluctuations of fish communities from Lake Geneva. *Environmental DNA*, 5 (3), 570-581, 10.1002/edn3.413, <https://hal.inrae.fr/hal-04213758>

SERGE M. A., et al. (2023) Testing the Effect of Relative Pollen Productivity on the REVEALS Model: A Validated Reconstruction of Europe-Wide Holocene Vegetation. *Land*, 12, 986. <https://doi.org/10.3390/land12050986>.

VAGNON C., POMERANZ J., LOHEAC B., VALLAT M., GUILLARD J., RAYMOND J., SENTIS A., FROSSARD V. (2023). Changes in vertical and horizontal diversities mediated by the size structure of introduced fish collectively shape food web stability. *Ecology Letters*, 10.1111/ele.14290, <https://hal.inrae.fr/hal-04182457>

VAUTIER M., CHARDON C., GOULONA C., GUILLARD J., DOMAIZON I. (2023-08). A quantitative eDNA-based approach to monitor fish spawning in lakes: Application to European perch and whitefish. *Fisheries Research*, 264, 106708, 10.1016/j.fishres.2023.106708, <https://hal.inrae.fr/hal-04247589>

HAFEEZ F., CLEMENT J., BERNARD L., POLY F., POMMIER T. (2023-07). Early spring snowmelt and summer droughts strongly impair the resilience of bacterial community and N cycling functions in a subalpine grassland ecosystem. *Oikos*, 2023 (7), 10.1111/oik.09836, <https://hal.inrae.fr/hal-04152883>

#### **DATA-PAPER**

TRAN-KHAC V., QUETIN P., ESPINAT L., CREPIN L., COUSIN C., PERNEY P., HUSTACHE J.-C., CHIAPUSIO G., DOMAIZON I., RASCONI S. (2023-08). Physico-chemical and high frequency monitoring dataset from mesocosm experiments simulating extreme climate events in lakes. *Data in Brief*, 49, 109302, 10.1016/j.dib.2023.109302, <https://hal.inrae.fr/hal-04183185>

#### **OUVRAGES**

ERIC CAPO, CÉCILIA BAROUILLET, JOHN P. SMOL. Tracking Environmental Change Using Lake Sediments Volume 6: Sedimentary DNA. 437 p. Ed. Springer. Series : Developments in Paleoenvironmental Research. eBook ISBN 978-3-031-43799-1 Published: 19 December 2023

DORIOZ J. M., ANNEVILLE O., DOMAIZON I., GOULON C., GUILLARD J., JACQUET S., MONTUELLE B., RASCONI S., TRAN KHAC V., JENNY J.-P. (2023-03-01). Les grands lacs à l'épreuve de l'anthropocène. <https://hal.inrae.fr/hal-04017677>

JACQUET S., BAUDOIX A.-C., DESDEVISES Y., GUYADER S. (2023-03-01). LES VIRUS MARINS. SIMPLÉS PARASITES OU ACTEURS MAJEURS DES ÉCOSYSTÈMES AQUATIQUES ? Quae, <https://hal.inrae.fr/hal-04017648>

#### **CHAPITRES D'OUVRAGE**

BAROUILLET, C., DOMAIZON, I., CAPO, E. (2023). Protist DNA from Lake Sediments. In: Capo, E., Barouillet, C., Smol, J.P. (eds) Tracking Environmental Change Using Lake Sediments. Developments in Paleoenvironmental Research, vol 21. Springer, Cham. [https://doi.org/10.1007/978-3-031-43799-1\\_6](https://doi.org/10.1007/978-3-031-43799-1_6)

GIGUET-COVEX C., S. JELAVIĆ, A. FOUCHER, M. A. MORLOCK, S. A. WOOD, F. AUGUSTIJNS, I. DOMAIZON, L. GIELLY & E. CAPO (2023). The Sources and Fates of Lake Sedimentary DNA. In: Capo, E., Barouillet, C., Smol, J.P. (eds) Tracking Environmental Change Using Lake Sediments. Developments in Paleoenvironmental Research, vol 21. Springer, Cham. [https://doi.org/10.1007/978-3-031-43799-1\\_2](https://doi.org/10.1007/978-3-031-43799-1_2)

#### **AUTRES ARTICLES**

GUILLARD J., BAUDOIN J.-M., GOULON C. (2023-01-29). Optimisation d'une méthode non intrusive de l'étude des populations de poissons en lac : l'hydro-acoustique. Sciences Eaux & Territoires, (42), 49-54, 10.20870/Revue-SET.2023.42.7296, <https://hal.inrae.fr/hal-04019751>

JACQUET S. (2023). My first year as Editor-in-Chief of IJL. Annales de Limnologie - International Journal of Limnology, 59, E1, 10.1051/limn/2023003, <https://hal.inrae.fr/hal-04017694>

JACQUET S. (2023-03-01). André Delebecque : Le pionnier de la limnologie comparative, contemporain de François-Alphonse Forel. Mémoires et documents publiés par l'Académie chablaisienne, LXXV, 5-13, <https://hal.inrae.fr/hal-04116733>

JACQUET S. 2023. Les lacs français d'André Delebecque. Nature & Patrimoine des Pays de Savoie n°69 :21-23