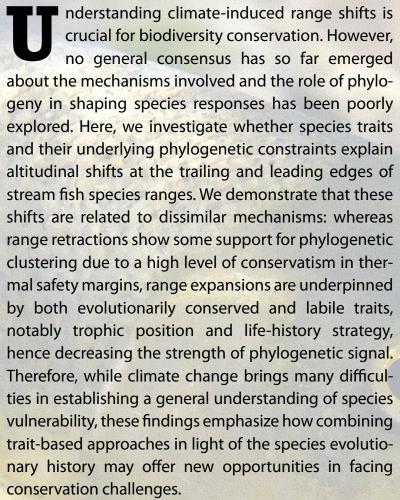
Species traits and phylogenetic conservatism of climate-induced range shifts in stream fishes





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The intrinsic characteristics of freshwater fish and their evolutionary history determine their vulnerability to recent climate change (here barbel Barbus barbus).





In the near future, biodiversity patterns could be greatly modified owing to the spatially selective reshuffling of communities with species displaying specific combinations of traits and evolutionary history. Whether the biological impacts of climate change will ultimately depend on the complex interplay of species responses thus deserves urgent attention. Only with improved understanding of the potential impacts of species range shifts on biological interactions and their consequences on ecosystem functioning will researchers be able to quantify the ecological threat posed by future climate change.