

Appendix. Additional informations on study site, sampling protocol and statistical analysis.

Figure A1 - Daily variations of the elevation of Serre-Ponçon reservoir between 2017 and 2022 (Data from EDF).

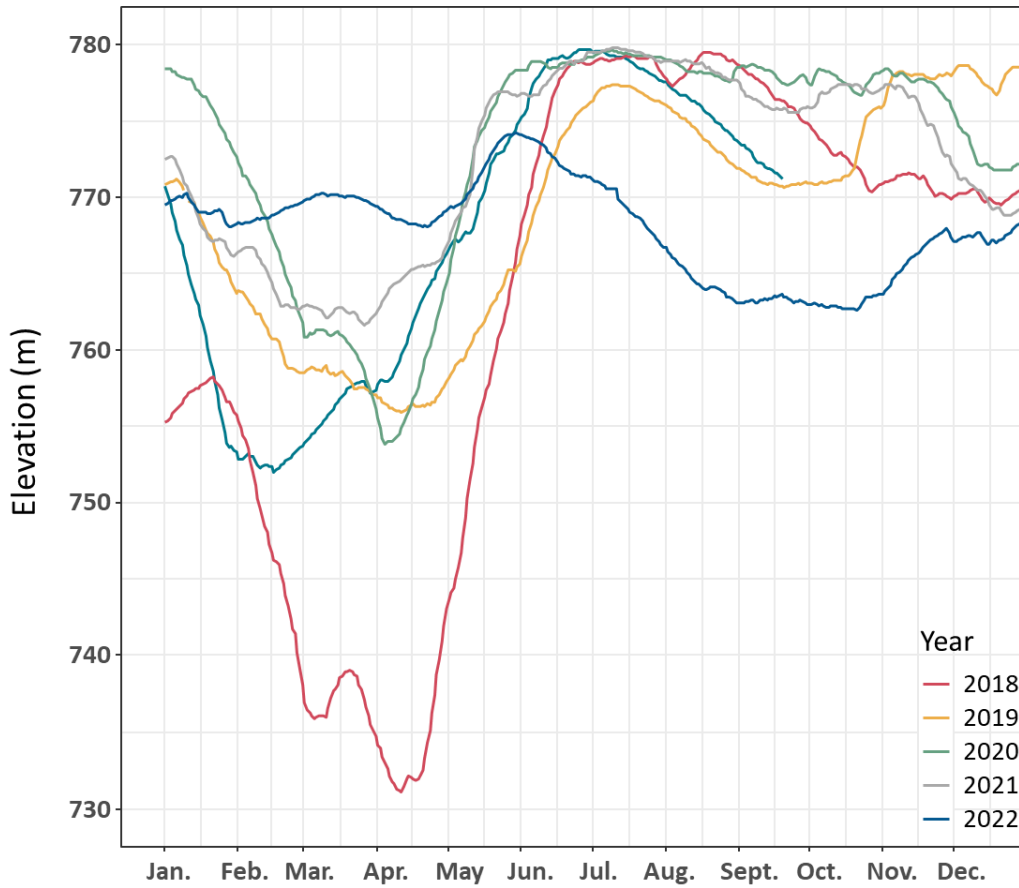


Figure A2 - Fitness of generalised linear models (GLM) by DHARMA package. A – Juvenile abundance for visual census sampling ; B – Juvenile species richness for visual census sampling ; C – Juvenile abundance for fish trap sampling ; D – Juvenile species richness for fish trap sampling ; E – Adult abundance for visual census sampling ; F – Adult species richness for visual census sampling ; G – Adult abundance for fish trap sampling ; H – Adult species richness for fish trap sampling.

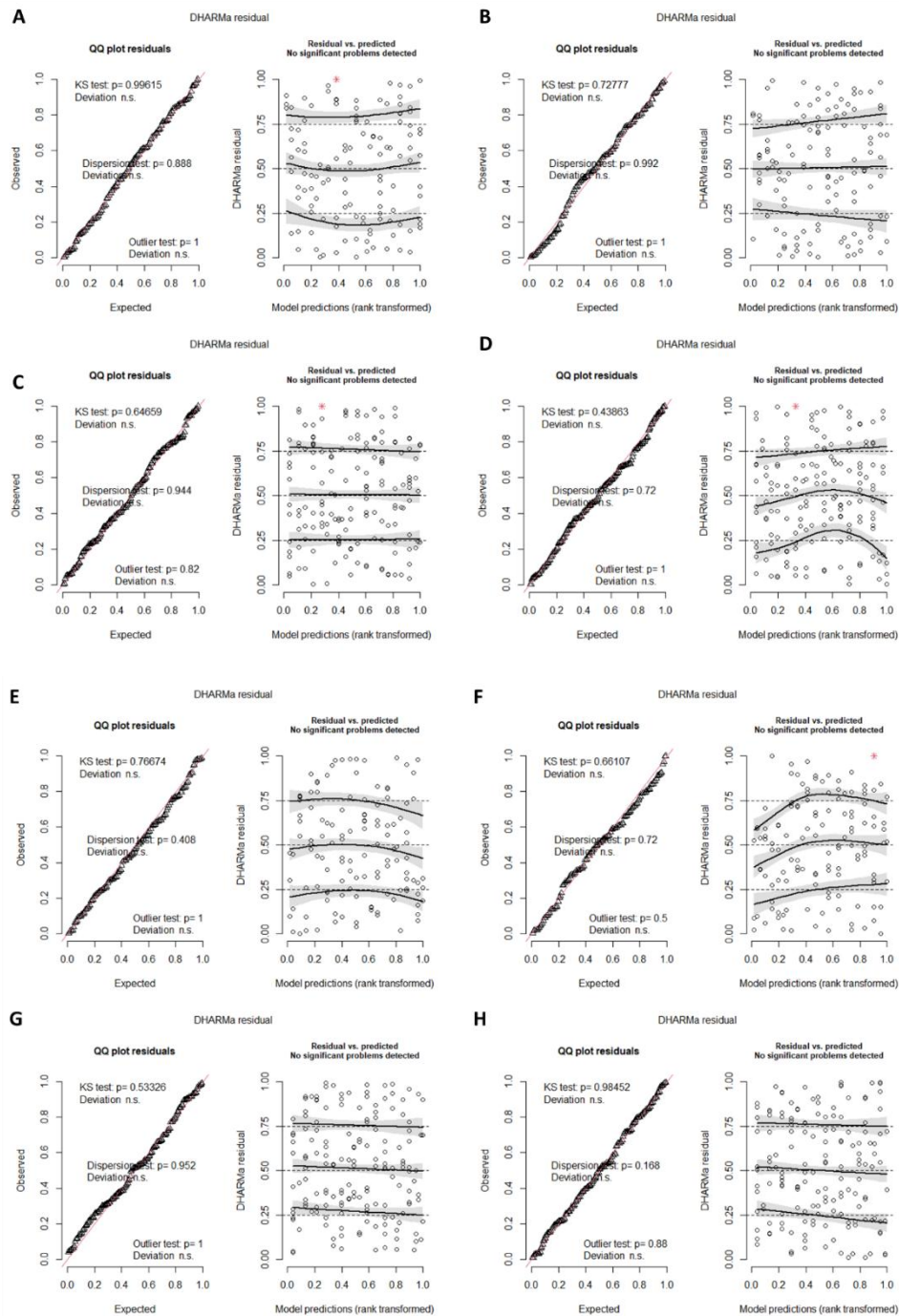


Table A1 - Overview of samplings carried out by method and season year.

Sampling method		
Season	Visual census	Fish traps
Spring 2019	1 date - 9 stations	4 dates - 9 stations
Summer 2019	3 dates - 9 stations	4 dates - 9 stations
Spring 2020	2 dates - 9 stations	2 dates - 9 stations
Summer 2020	3 dates - 9 stations	2 dates - 9 stations
Spring 2021	2 dates - 9 stations	3 dates - 9 stations
Summer 2021	1 date - 9 stations	1 date - 9 stations
Spring 2022	1 date - 9 stations	1 date - 6 stations *
Summer 2022	1 date - 9 stations	1 date - 9 stations
Total of samplings	126	1272

* The FLOLIZ n°2 has not been sampled to protect a brood of birds. The control stations DCS2 and NCS2 were not sampled neither.

Table A2 - Summary of estimated maturity size (total length) for different fishes in Serre-Ponçon reservoir or in similar environments based on literature.

Species (scientific name)	Estimated maturity size	Source
Bleak (<i>Alburnus alburnus</i>)	90 mm	Chappaz <i>et al.</i> , 1987 / Field data / Fishbase.org *
Blenny (<i>Salaria fluviatilis</i>)	40 mm	Field data / Keith <i>et al.</i> , 2011 / Fishbase.org *
Pike (<i>Esox lucius</i>)	500 mm	Treer <i>et al.</i> , 1998 ; Keith <i>et al.</i> , 2011 / Fishbase.org *
Chub (<i>Squalius cephalus</i>)	200 mm	Sasi and Ozay, 2017 / Fishbase.org *
Roach (<i>Rutilus rutilus</i>)	100 mm	Treasurer, 1981 / Fishbase.org *
Gudgeon (<i>Gobio gobio</i>)	90 mm	Field data / Fishbase.org * / Mann, 1980
Perch (<i>Perca fluviatilis</i>)	130 mm	Field data / Chappaz <i>et al.</i> , 1989 / Keith <i>et al.</i> , 2011
Nase (<i>Chondrostoma toxostoma</i>)	200 mm	Keith <i>et al.</i> , 2011 / Fishbase.org *

* Froese, R. and D. Pauly. Editors. 2023. FishBase. World Wide Web electronic publication. www.fishbase.org.

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