

Supplementary material

Assessing water diversion impacts on the fish community size structure in headwater stream stretches.

Hydrobiologia

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Online resource 4. Details on the candidate models after stepwise selection procedure for all size-based metrics. Models are ranked based on AIC values.

Size-based metric	Candidate models	Main predictors	AIC
Length average	Best model	Altitude + Water diversion impact	80.54
	Model 2	Altitude + Mean depth + Water diversion impact	81.96
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	83.27
Length median	Best model	Altitude + Water diversion impact	84.25
	Model 2	Altitude + Mean depth + Water diversion impact	85.87
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	87.39
Max. length	Best model	Altitude + Mean depth	104.79
	Model 2	Altitude + Mean depth + Water diversion impact	106.33
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	108.22
Size spectrum slope	Best model	Altitude	104.61
	Model 3	Altitude + Mean depth	105.48
	Model 2	Altitude + Stream order + Mean depth	107.04
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	108.79
Size spectrum intercept	Best model	Intercept only	103.65
	Model 4	Water diversion impact	105.36

	Model 3	Stream order + Water diversion impact	107.31
	Model 2	Altitude + Stream order + Water diversion impact	109.3
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	111.3
Size spectrum R ²	Best model	Altitude + Water diversion impact	96.27
	Model 2	Altitude + Mean depth + Water diversion impact	97.65
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	99.62
Size diversity	Best model	Water diversion impact	103.41
	Model 3	Stream order + Water diversion impact	104.97
	Model 2	Stream order + Mean depth + Water diversion impact	106.32
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	108.23
Size evenness	Best model	Intercept only	103.11
	Model 4	Water diversion impact	104.31
	Model 3	Stream order + Water diversion impact	105.77
	Model 2	Altitude + Stream order + Water diversion impact	107.64
	Full model	Altitude + Stream order + Mean depth + Water diversion impact	109.61