

Table

Table 1: Estimated parameters of linear regression models explaining fish species richness in the Hokkaido (Japan) and the Midwest (US) regions. The 95% confidence intervals are shown in parenthesis. Dependent variables were log-10 transformed. Climate and land use variables (air temperature, precipitation, logit fraction of forest, dam density) are deviations from the regional averages and were standardized to a mean of zero and a standard deviation of one prior to the analysis.

	<i>Dependent variable:</i>		
	α diversity	β diversity	γ diversity
\log_{10} Watershed area	0.07*** (0.02, 0.11)	0.10*** (0.04, 0.15)	0.16*** (0.12, 0.21)
\log_{10} Branching probability	-0.26 (-0.84, 0.32)	0.92** (0.22, 1.63)	0.66** (0.05, 1.27)
Region (Midwest vs. Hokkaido)	0.45*** (0.40, 0.50)	-0.09*** (-0.15, -0.04)	0.35*** (0.30, 0.41)
Air temperature	0.10*** (0.07, 0.13)	-0.09*** (-0.12, -0.05)	0.01 (-0.02, 0.04)
Precipitation	-0.04*** (-0.06, -0.01)	0.07*** (0.04, 0.10)	0.03** (0.003, 0.06)
Logit fraction of forest	-0.004 (-0.03, 0.02)	-0.01 (-0.04, 0.01)	-0.02 (-0.04, 0.01)
Dam density	0.01 (-0.01, 0.02)	-0.01 (-0.03, 0.02)	-0.001 (-0.02, 0.02)
Intercept	0.31** (0.01, 0.60)	0.82*** (0.46, 1.18)	1.13*** (0.82, 1.44)
R^2	0.80	0.27	0.78
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	