

Supplementary information to the paper:

Effects of surrounding landscape on the performance of *Solidago canadensis* L. and plant functional diversity on heavily invaded post-agricultural wastelands

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Biological Invasions

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Online Resource 7 Final generalised additive models testing for effects of landscape predictors in different spatial scales (buffer sizes), and *S. canadensis* percentage cover on functional diversity metrics in studied wastelands. Predictors in particular spatial scales were selected based on AICc values of preliminary single factor linear models. Abbreviations: Agri – contribution of agricultural areas, Settl – contribution of settlements, Riv – river net length in areas surrounding study plots, Sol.cov – percentage cover of *Solidago canadensis*. Numbers after hard spaces () included in predictor names are different buffers (100, 500 and, 1000 m). Colon (:) between predictors is interaction term

Response variable	Model parameters			
functional richness	Parametric coefficients:	Estimate	SE	P
	(Intercept)	0.076	0.015	<0.001
	Approximate significance of	Estimated df	Reference df	P
	smooth terms:			
	Agri_100	0.836	1.053	0.029
	Agri_100:Sol.cover	1.499	1.499	<0.001
	Settl_100	0.482	0.482	0.023
	Settl_100:Sol.cover	1.499	1.499	<0.001
	Sol.cover	0.914	0.914	<0.001
functional evenness	Parametric coefficients:	Estimate	SE	P
	(Intercept)	0.043	0.004	<0.001
	Approximate significance of	Estimated df	Reference df	P
	smooth terms:			
	Agri_1000	1.000	1.000	0.311
	Agri_1000:Sol.cover	1.333	1.333	<0.001
	Riv_1000	1.000	1.000	0.678
	Riv_1000:Sol.cover	1.333	1.333	<0.001
	Settl_1000	1.000	1.000	0.750
	Settl_1000:Sol.cover	1.333	1.333	<0.001
	Sol.cover	0.919	0.919	<0.001
functional dispersion	Parametric coefficients:	Estimate	SE	P
	(Intercept)	0.032	0.002	<0.001
	Approximate significance of	Estimated df	Reference df	P
	smooth terms:			
	Agri_1000:Sol.cover	3.027	3.694	<0.001
	Riv_500	1.105	1.150	0.385
	Riv_500:Sol.cover	2.112	2.434	0.489
	Settl_1000	2.000	2.000	<0.001

	Sol.cover	1.602	1.813	<0.001
functional	Parametric coefficients:	Estimate	<i>SE</i>	<i>P</i>
divergence	(Intercept)	0.070	0.004	<0.001
	Approximate significance of	Estimated <i>df</i>	Reference <i>df</i>	<i>P</i>
	smooth terms:			
	Agri_100	1.000	1.000	0.427
	Agri_100:Sol.cover	1.500	1.500	<0.001
	Settl_100	1.000	1.000	0.410
	Settl_100:Sol.cover	1.500	1.500	<0.001
	Sol.cover	1.153	1.335	<0.001