

SUPPLEMENTARY MATERIAL 2. Component matrix showing the habitat variables organized by their variable loadings on 3 principal components (PC1–PC4) derived from a rotated principal component analysis (PCA) using a Varimax rotation. Shading shows which variables load on components. Principal components (PCs) are interpreted based on the pattern of variable loadings and variable sign (\pm). Amount of variance explained by each PC is reported, with all PCs explaining 79.8% of variance among sites ($n = 18$) in 3 riparian forest types along the lower San Pedro River, Arizona, USA. Data were collected for habitat variables during May, June, and July of 2018.

Variable	Gradient of riparian vegetation (PC1)	Distance to disturbance (PC2)	Vegetation cover (PC3)	Proportion of nonnative (PC4)
Distance to river (km)	0.877	0.047	0.127	-0.005
Proportion of <i>Prosopis/Acacia</i>	0.865	-0.072	0.020	-0.427
Proportion of <i>Populus/Salix</i>	-0.699	0.208	0.389	-0.445
Distance to upper Sonoran Desert (km)	-0.481	0.388	-0.235	0.311
Distance to road (km)	-0.059	-0.879	0.104	-0.106
Distance to development (km)	0.287	-0.709	-0.014	0.196
NDVI	0.259	0.627	0.533	0.438
Canopy cover (%)	-0.155	0.086	0.883	-0.264
Distance to agriculture field (km)	-0.327	0.359	-0.683	-0.035
Proportion of nonnative vegetation	-0.193	0.017	-0.138	0.916
Percent of variance explained	25.587	20.061	17.839	16.273
Cumulative percent variance explained	25.587	45.648	63.487	79.760