Table S3 Mean correlation between and credible intervals for isolation models.

	Isolation-by-resistance\ Circuitscape vs				Least-cost distance vs	
Model/Resistance Surface	UNIFORM	GEOG	logGEOG		GEOG	Isolation- by resistance
Correlation of Uniform/Isolation by distance Models						
UNIFORM		0.97 (0.902, 0.993)	0.903 (0.868, 0.937)		0.998 (0.997, 0.999)	
GEOG			0.809 (0.653, 0.927)			
logGEOG					0.807 (0.638, 0.926)	
Generic Treecover Models						
TREE_25_10	0.477 (0.088, 0.791)	0.474 (0.095, 0.784)	0.425 (0.051, 0.734)		0.927 (0.889, 0.958)	0.571
TREE_25_100	0.327 (0.012, 0.697)	0.331 (0.012, 0.702)	0.294 (0.006, 0.632)		0.881 (0.822, 0.929)	0.419
TREE_25_2	0.818 (0.595, 0.937)	0.801 (0.586, 0.926)	0.737 (0.487, 0.891)		0.989 (0.982, 0.994)	0.862
TREE_25_5	0.577 (0.188, 0.837)	0.57 (0.193, 0.833)	0.515 (0.135, 0.785)		0.949 (0.922, 0.971)	0.666
Sedentary decliners						
BTC_EO_100	0.991 (0.976, 0.997)	0.966 (0.908, 0.992)	0.905 (0.845, 0.958)		0.999 (0.998, 0.999)	0.964
BTC_EO_5000	0.636 (0.229, 0.926)	0.638 (0.25, 0.92)	0.575 (0.157, 0.844)		0.918 (0.876, 0.955)	0.734
BTC_HAB_10	0.827 (0.577, 0.959)	0.831 (0.608, 0.957)	0.751 (0.491, 0.907)		0.921 (0.875, 0.96)	0.825
BTC_HAB_2	0.961 (0.902, 0.991)	0.943 (0.871, 0.984)	0.874 (0.784, 0.945)		0.994 (0.99, 0.997)	0.944
EYR_EO_100	0.979 (0.945, 0.994)	0.955 (0.892, 0.987)	0.893 (0.823, 0.952)		0.998 (0.997, 0.999)	0.956
EYR_EO_5000	0.236 (0, 0.788)	0.241 (0, 0.815)	0.214 (0.001, 0.704)		0.817 (0.724, 0.889)	0.442
EYR_HAB_10	0.469 (0.078, 0.787)	0.461 (0.077, 0.783)	0.416 (0.05, 0.729)		0.908 (0.857, 0.948)	0.541
EYR_HAB_2	0.816 (0.61, 0.939)	0.796 (0.58, 0.925)	0.735 (0.51, 0.889)		0.985 (0.977, 0.992)	0.850
SFW_EO_100	0.987 (0.966, 0.996)	0.962 (0.904, 0.99)	0.901 (0.837, 0.955)		0.998 (0.998, 0.999)	0.961
SFW_EO_5000	0.254 (0, 0.889)	0.258 (0, 0.909)	0.232 (0, 0.826)		0.845 (0.779, 0.9)	0.120
SFW_HAB_10	0.587 (0.214, 0.841)	0.591 (0.221, 0.845)	0.539 (0.142, 0.791)		0.905 (0.853, 0.947)	0.652
SFW_HAB_2	0.891 (0.746, 0.963)	0.877 (0.724, 0.961)	0.814 (0.649, 0.919)		0.99 (0.984, 0.995)	0.896
Intermediate/Equivocal Decliner						
GST_EO_100	0.991 (0.976, 0.998)	0.966 (0.908, 0.992)	0.905 (0.845, 0.958)		0.999 (0.998, 0.999)	0.964
GST_EO_5000	0.624 (0.204, 0.923)	0.627 (0.227, 0.919)	0.565 (0.135, 0.842)		0.913 (0.868, 0.952)	0.736
GST_HAB_10	0.596 (0.198, 0.86)	0.597 (0.205, 0.869)	0.545 (0.155, 0.808)		0.895 (0.838, 0.941)	0.681
GST_HAB_2	0.891 (0.722, 0.969)	0.874 (0.694, 0.961)	0.814 (0.633, 0.919)		0.989 (0.982, 0.994)	0.905
SPP_HAB_10	0.516 (0.112, 0.842)	0.519 (0.123, 0.853)	0.468 (0.078, 0.765)		0.906 (0.85, 0.947)	0.611
SPP_HAB_2	0.861 (0.688, 0.965)	0.844 (0.672, 0.959)	0.783 (0.58, 0.907)		0.986 (0.978, 0.992)	0.884
WB_EO_100	0.989 (0.973, 0.997)	0.905 (0.846, 0.958)	0.964 (0.893, 0.99)		0.999 (0.998, 0.999)	0.963
WB_EO_5000	0.595 (0.163, 0.927)	0.598 (0.166, 0.927)	0.542 (0.1, 0.857)		0.903 (0.855, 0.946)	0.727
WB_HAB_10	0.599 (0.195, 0.899)	0.606 (0.193, 0.913)	0.544 (0.145, 0.837)		0.892 (0.832, 0.94)	0.715
WB_HAB_2	0.899 (0.729, 0.979)	0.886 (0.714, 0.966)	0.816 (0.645, 0.923)		0.99 (0.984, 0.995)	0.917
Mobile Decliners						
FH_EO_100	1 (1, 1)	0.974 (0.913, 0.996)	0.915 (0.865, 0.963)		0.998 (0.997, 0.999)	0.969
FH_EO_5000	0.688 (0.304, 0.935)	0.685 (0.322, 0.926)	0.62 (0.234, 0.855)		0.944 (0.914, 0.97)	0.762
FH_HAB_10	0.652 (0.281, 0.932)	0.651 (0.28, 0.929)	0.583 (0.2, 0.857)		0.907 (0.855, 0.951)	0.681
FH_HAB_2	0.918 (0.798, 0.983)	0.899 (0.77, 0.974)	0.826 (0.674, 0.922)		0.986 (0.978, 0.992)	0.908
YTH_EO_100	1 (1, 1)	0.974 (0.913, 0.996)	0.915 (0.865, 0.963)		0.998 (0.997, 0.999)	0.969
YTH_EO_5000	0.641 (0.24, 0.937)	0.641 (0.237, 0.936)	0.581 (0.165, 0.861)		0.924 (0.883, 0.958)	0.750
YTH_HAB_10	0.631 (0.231, 0.948)	0.63 (0.233, 0.941)	0.567 (0.145, 0.878)		0.904 (0.849, 0.948)	0.696
YTH_HAB_2	0.914 (0.786, 0.985)	0.895 (0.764, 0.977)	0.826 (0.661, 0.925)		0.989 (0.983, 0.994)	0.913
Mobile Tolerant						
WPH_EO_100	1 (1, 1)	0.974 (0.912, 0.996)	0.915 (0.865, 0.963)		0.998 (0.997, 0.999)	0.969
WPH_EO_5000	0.784 (0.504, 0.957)	0.772 (0.492, 0.952)	0.709 (0.413, 0.891)		0.974 (0.96, 0.985)	0.818
WPH_HAB_10	0.795 (0.551, 0.936)	0.801 (0.567, 0.944)	0.732 (0.47, 0.888)		0.944 (0.912, 0.973)	0.828
WPH_HAB_2	0.957 (0.894, 0.988)	0.942 (0.867, 0.984)	0.876 (0.79, 0.951)		0.996 (0.993, 0.998)	0.947
Mean	0.75	0.736	0.680		0.949	0.782

Lower and Upper 95% credible intervals are given in brackets after mean pearson R^2