**Supplementary Material**

**Supplementary Table S1.** Assessment table to deliver Species Distributions Models and inform decision-making, based on Sofaer et al. (2019).

|  |  |  |
| --- | --- | --- |
| Effects of the quantity and quality of species data on model credibility | | |
| Presence data | Acceptable | Spatial autocorrelation avoided, but sampling bias may occur. |
| Absence/ background data | Interpret with caution | Background data does not mimic sampling bias in presence locations. |
| Evaluation data | Acceptable | Based on cross-validation of training data. |
| Attributes of environmental predictors affecting model credibility. | | |
| Ecological and predictive relevance | Ideal | Predictors represent factors known to govern distributional limits or are direct signals of species presence. |
| Spatial and temporal alignment | Acceptable | Resolution of predictors is appropriate given uncertainty and for the focal species. Climate data represents the average for the years 1970-2000. |
| Attributes of the modeling process affecting model credibility | | |
| Algorithm choice | Acceptable | Models were developed using only MaxEnt. |
| Sensitivity | Acceptable | Assessment of sensitivity to choice of algorithm(s) and selected settings and input data. |
| Statistical rigor | Acceptable | Assumptions recognized and considered. |
| Performance | Acceptable | Multiple metrics evaluated and evaluation scores are close to generally accepted levels, ecological plausibility evaluated. |
| Model review | Acceptable | Review by regional and taxonomic experts, their comments considered in model revisions or in recommendations for its use. |
| Iterative | Acceptable | Not updated based on new field observations. |
| Attributes of the model products affecting model credibility | | |
| Mapped products | Acceptable | Continuous map with clear description to interpret range of values. Thresholds based on test data. |
| Interpretation support products | Ideal | Information to easily evaluate every row in this table. |
| Reproducibility | Acceptable | Inputs saved and made available, scripts, settings, and model results archived. |

**Supplementary Table S2.** Proportion of each land cover category found in randomly selected locations with high invasion risk (above the “10 percentile training presence Cloglog threshold”), and in their surrounding landscape at medium (0-150m) and long (0-500) distances.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Growth form** | **Scientific name** | **Location** | | | | | | | **Medium distance (0-150 m)** | | | | | | | **Long distance (0-500 m)** | | | | | | |
| **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** | **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** | **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** |
| Graminoid | *Arundo donax* | 0.11 | 0.09 | 0.01 | 0.12 | 0.03 | 0.63 | 0.00 | 0.20 | 0.09 | 0.01 | 0.17 | 0.07 | 0.44 | 0.00 | 0.24 | 0.11 | 0.01 | 0.18 | 0.09 | 0.35 | 0.00 |
| *Imperata cylindrica* | 0.38 | 0.15 | 0.06 | 0.15 | 0.01 | 0.23 | 0.00 | 0.40 | 0.14 | 0.07 | 0.14 | 0.03 | 0.20 | 0.01 | 0.43 | 0.13 | 0.07 | 0.13 | 0.04 | 0.18 | 0.00 |
| *Microstegium vimineum* | 0.68 | 0.02 | 0.00 | 0.10 | 0.01 | 0.16 | 0.00 | 0.67 | 0.03 | 0.00 | 0.13 | 0.02 | 0.14 | 0.00 | 0.64 | 0.03 | 0.00 | 0.16 | 0.03 | 0.12 | 0.00 |
| *Miscanthus sinensis* | 0.54 | 0.01 | 0.01 | 0.18 | 0.00 | 0.25 | 0.00 | 0.59 | 0.00 | 0.00 | 0.17 | 0.01 | 0.21 | 0.00 | 0.64 | 0.01 | 0.00 | 0.16 | 0.01 | 0.17 | 0.01 |
| *Panicum repens* | 0.25 | 0.07 | 0.20 | 0.07 | 0.05 | 0.23 | 0.00 | 0.27 | 0.08 | 0.19 | 0.07 | 0.06 | 0.22 | 0.01 | 0.29 | 0.07 | 0.18 | 0.07 | 0.06 | 0.21 | 0.01 |
| *Phragmites australis* ssp. *australis* | 0.12 | 0.01 | 0.17 | 0.03 | 0.01 | 0.43 | 0.01 | 0.24 | 0.02 | 0.17 | 0.07 | 0.01 | 0.34 | 0.01 | 0.31 | 0.02 | 0.15 | 0.08 | 0.02 | 0.27 | 0.01 |
| *Schedonorus phoenix* | 0.31 | 0.06 | 0.00 | 0.30 | 0.05 | 0.25 | 0.00 | 0.36 | 0.05 | 0.00 | 0.27 | 0.07 | 0.23 | 0.00 | 0.43 | 0.04 | 0.00 | 0.24 | 0.08 | 0.19 | 0.00 |
| *Sorghum halepense* | 0.23 | 0.08 | 0.01 | 0.29 | 0.06 | 0.28 | 0.00 | 0.27 | 0.09 | 0.01 | 0.28 | 0.08 | 0.24 | 0.00 | 0.32 | 0.09 | 0.01 | 0.26 | 0.09 | 0.20 | 0.00 |
| Forb/Herb | *Alliaria petiolata* | 0.61 | 0.01 | 0.00 | 0.17 | 0.01 | 0.18 | 0.01 | 0.61 | 0.01 | 0.00 | 0.20 | 0.01 | 0.16 | 0.01 | 0.63 | 0.01 | 0.00 | 0.20 | 0.02 | 0.13 | 0.01 |
| *Carduus nutans* | 0.26 | 0.10 | 0.00 | 0.38 | 0.01 | 0.23 | 0.00 | 0.35 | 0.08 | 0.00 | 0.34 | 0.02 | 0.19 | 0.00 | 0.41 | 0.08 | 0.00 | 0.30 | 0.03 | 0.15 | 0.00 |
| *Colocasia esculenta* | 0.45 | 0.06 | 0.09 | 0.04 | 0.04 | 0.21 | 0.01 | 0.44 | 0.08 | 0.09 | 0.08 | 0.06 | 0.16 | 0.01 | 0.43 | 0.08 | 0.09 | 0.10 | 0.07 | 0.15 | 0.01 |
| *Dipsacus fullonum* | 0.17 | 0.00 | 0.00 | 0.17 | 0.00 | 0.65 | 0.00 | 0.34 | 0.00 | 0.00 | 0.24 | 0.01 | 0.40 | 0.00 | 0.50 | 0.00 | 0.00 | 0.21 | 0.01 | 0.26 | 0.00 |
| *Lespedeza bicolor* | 0.46 | 0.08 | 0.00 | 0.22 | 0.02 | 0.17 | 0.00 | 0.51 | 0.07 | 0.00 | 0.19 | 0.03 | 0.15 | 0.00 | 0.55 | 0.07 | 0.00 | 0.17 | 0.04 | 0.13 | 0.00 |
| *Lespedeza cuneata* | 0.51 | 0.04 | 0.00 | 0.15 | 0.04 | 0.21 | 0.00 | 0.52 | 0.04 | 0.00 | 0.17 | 0.05 | 0.18 | 0.00 | 0.53 | 0.04 | 0.00 | 0.19 | 0.06 | 0.15 | 0.00 |
| *Reynoutria japonica* | 0.41 | 0.00 | 0.00 | 0.12 | 0.01 | 0.42 | 0.01 | 0.45 | 0.01 | 0.00 | 0.17 | 0.01 | 0.33 | 0.01 | 0.51 | 0.01 | 0.00 | 0.18 | 0.02 | 0.27 | 0.01 |
| *Vinca minor* | 0.65 | 0.01 | 0.00 | 0.05 | 0.00 | 0.28 | 0.00 | 0.61 | 0.03 | 0.00 | 0.13 | 0.02 | 0.21 | 0.00 | 0.60 | 0.03 | 0.00 | 0.15 | 0.02 | 0.18 | 0.00 |
| Shrub | *Elaeagnus angustifolia* | 0.30 | 0.03 | 0.00 | 0.30 | 0.07 | 0.23 | 0.00 | 0.39 | 0.03 | 0.00 | 0.27 | 0.07 | 0.18 | 0.01 | 0.44 | 0.03 | 0.00 | 0.25 | 0.07 | 0.16 | 0.00 |
| *Elaeagnus umbellata* | 0.45 | 0.02 | 0.00 | 0.20 | 0.01 | 0.27 | 0.01 | 0.49 | 0.02 | 0.00 | 0.20 | 0.03 | 0.22 | 0.01 | 0.53 | 0.02 | 0.00 | 0.19 | 0.04 | 0.18 | 0.01 |
| *Lantana camara* | 0.41 | 0.07 | 0.11 | 0.17 | 0.01 | 0.21 | 0.02 | 0.35 | 0.09 | 0.11 | 0.15 | 0.02 | 0.24 | 0.01 | 0.35 | 0.10 | 0.11 | 0.15 | 0.03 | 0.22 | 0.01 |
| *Ligustrum japonicum* | 0.48 | 0.09 | 0.01 | 0.12 | 0.02 | 0.26 | 0.01 | 0.45 | 0.11 | 0.01 | 0.15 | 0.04 | 0.21 | 0.01 | 0.44 | 0.11 | 0.02 | 0.17 | 0.06 | 0.19 | 0.00 |
| *Ligustrum lucidum* | 0.39 | 0.07 | 0.03 | 0.14 | 0.00 | 0.33 | 0.01 | 0.40 | 0.10 | 0.02 | 0.16 | 0.02 | 0.28 | 0.01 | 0.40 | 0.11 | 0.02 | 0.17 | 0.04 | 0.24 | 0.00 |
| *Ligustrum sinense* | 0.50 | 0.08 | 0.01 | 0.14 | 0.03 | 0.21 | 0.00 | 0.46 | 0.09 | 0.01 | 0.17 | 0.05 | 0.20 | 0.01 | 0.46 | 0.09 | 0.01 | 0.19 | 0.06 | 0.17 | 0.01 |
| *Ligustrum vulgare* | 0.49 | 0.05 | 0.00 | 0.13 | 0.01 | 0.27 | 0.01 | 0.49 | 0.05 | 0.00 | 0.17 | 0.03 | 0.22 | 0.00 | 0.49 | 0.05 | 0.00 | 0.20 | 0.03 | 0.18 | 0.00 |
| *Lonicera maackii* | 0.55 | 0.00 | 0.00 | 0.18 | 0.01 | 0.23 | 0.00 | 0.53 | 0.02 | 0.00 | 0.21 | 0.02 | 0.19 | 0.01 | 0.54 | 0.03 | 0.00 | 0.21 | 0.03 | 0.16 | 0.00 |
| *Nandina domestica* | 0.56 | 0.06 | 0.01 | 0.09 | 0.01 | 0.25 | 0.01 | 0.52 | 0.08 | 0.01 | 0.13 | 0.03 | 0.21 | 0.00 | 0.49 | 0.09 | 0.01 | 0.16 | 0.04 | 0.19 | 0.00 |
| *Phyllostachys aurea* | 0.41 | 0.09 | 0.02 | 0.02 | 0.04 | 0.40 | 0.01 | 0.40 | 0.09 | 0.02 | 0.10 | 0.06 | 0.32 | 0.00 | 0.41 | 0.09 | 0.01 | 0.13 | 0.07 | 0.27 | 0.00 |
| *Rosa multiflora* | 0.52 | 0.01 | 0.00 | 0.18 | 0.03 | 0.21 | 0.00 | 0.52 | 0.02 | 0.00 | 0.19 | 0.04 | 0.18 | 0.00 | 0.53 | 0.03 | 0.00 | 0.20 | 0.05 | 0.16 | 0.00 |
| *Sesbania punicea* | 0.46 | 0.11 | 0.06 | 0.04 | 0.08 | 0.20 | 0.01 | 0.43 | 0.08 | 0.07 | 0.08 | 0.09 | 0.21 | 0.01 | 0.43 | 0.08 | 0.07 | 0.09 | 0.09 | 0.19 | 0.01 |
| Tree | *Ailanthus altissima* | 0.45 | 0.01 | 0.00 | 0.20 | 0.02 | 0.29 | 0.00 | 0.47 | 0.03 | 0.00 | 0.22 | 0.04 | 0.23 | 0.00 | 0.49 | 0.03 | 0.00 | 0.22 | 0.04 | 0.19 | 0.00 |
| *Albizia julibrissin* | 0.39 | 0.09 | 0.02 | 0.15 | 0.03 | 0.29 | 0.00 | 0.40 | 0.08 | 0.02 | 0.17 | 0.05 | 0.26 | 0.00 | 0.43 | 0.08 | 0.02 | 0.18 | 0.06 | 0.21 | 0.00 |
| *Broussonetia papyrifera* | 0.25 | 0.06 | 0.02 | 0.07 | 0.03 | 0.57 | 0.01 | 0.32 | 0.07 | 0.02 | 0.14 | 0.06 | 0.38 | 0.01 | 0.36 | 0.07 | 0.01 | 0.16 | 0.07 | 0.31 | 0.01 |
| *Cinnamomum camphora* | 0.50 | 0.11 | 0.04 | 0.11 | 0.01 | 0.19 | 0.01 | 0.49 | 0.09 | 0.05 | 0.12 | 0.03 | 0.19 | 0.01 | 0.47 | 0.09 | 0.06 | 0.13 | 0.03 | 0.19 | 0.00 |
| *Melaleuca quinquenervia* | 0.30 | 0.03 | 0.27 | 0.01 | 0.00 | 0.22 | 0.00 | 0.29 | 0.04 | 0.24 | 0.01 | 0.00 | 0.26 | 0.00 | 0.27 | 0.04 | 0.23 | 0.03 | 0.00 | 0.27 | 0.00 |
| *Melia azedarach* | 0.31 | 0.12 | 0.04 | 0.18 | 0.06 | 0.27 | 0.01 | 0.33 | 0.11 | 0.04 | 0.19 | 0.07 | 0.23 | 0.00 | 0.35 | 0.11 | 0.04 | 0.20 | 0.08 | 0.20 | 0.00 |
| *Paulownia tomentosa* | 0.59 | 0.07 | 0.00 | 0.11 | 0.01 | 0.20 | 0.01 | 0.57 | 0.05 | 0.00 | 0.16 | 0.02 | 0.18 | 0.01 | 0.57 | 0.04 | 0.00 | 0.18 | 0.03 | 0.16 | 0.01 |
| *Pyrus calleryana* | 0.25 | 0.07 | 0.01 | 0.31 | 0.03 | 0.32 | 0.01 | 0.30 | 0.06 | 0.01 | 0.29 | 0.07 | 0.25 | 0.00 | 0.38 | 0.06 | 0.00 | 0.25 | 0.09 | 0.20 | 0.00 |
| *Triadica sebifera* | 0.37 | 0.09 | 0.04 | 0.15 | 0.00 | 0.29 | 0.01 | 0.37 | 0.11 | 0.03 | 0.17 | 0.04 | 0.23 | 0.00 | 0.39 | 0.11 | 0.04 | 0.16 | 0.06 | 0.20 | 0.00 |
| Vine | *Celastrus orbiculatus* | 0.65 | 0.01 | 0.00 | 0.14 | 0.00 | 0.18 | 0.00 | 0.63 | 0.01 | 0.00 | 0.17 | 0.01 | 0.16 | 0.00 | 0.64 | 0.01 | 0.00 | 0.18 | 0.01 | 0.14 | 0.00 |
| *Dioscorea oppositifolia* | 0.64 | 0.01 | 0.00 | 0.03 | 0.00 | 0.31 | 0.00 | 0.65 | 0.01 | 0.00 | 0.11 | 0.01 | 0.21 | 0.00 | 0.66 | 0.01 | 0.00 | 0.13 | 0.01 | 0.17 | 0.00 |
| *Hedera helix* | 0.44 | 0.04 | 0.01 | 0.13 | 0.01 | 0.35 | 0.00 | 0.43 | 0.05 | 0.01 | 0.16 | 0.04 | 0.30 | 0.00 | 0.47 | 0.05 | 0.01 | 0.17 | 0.05 | 0.23 | 0.00 |
| *Lonicera japonica* | 0.49 | 0.06 | 0.01 | 0.18 | 0.03 | 0.18 | 0.00 | 0.47 | 0.07 | 0.01 | 0.20 | 0.05 | 0.17 | 0.00 | 0.48 | 0.07 | 0.01 | 0.20 | 0.06 | 0.15 | 0.00 |
| *Lygodium japonicum* | 0.60 | 0.12 | 0.02 | 0.03 | 0.00 | 0.20 | 0.01 | 0.57 | 0.12 | 0.02 | 0.07 | 0.02 | 0.17 | 0.00 | 0.54 | 0.12 | 0.03 | 0.09 | 0.04 | 0.15 | 0.00 |
| *Pueraria montana* var. *lobata* | 0.47 | 0.07 | 0.00 | 0.17 | 0.06 | 0.18 | 0.00 | 0.47 | 0.07 | 0.00 | 0.18 | 0.07 | 0.17 | 0.00 | 0.49 | 0.07 | 0.01 | 0.18 | 0.08 | 0.14 | 0.00 |
| *Wisteria floribunda* | 0.67 | 0.06 | 0.00 | 0.05 | 0.00 | 0.20 | 0.01 | 0.64 | 0.07 | 0.00 | 0.10 | 0.01 | 0.17 | 0.01 | 0.64 | 0.06 | 0.00 | 0.13 | 0.01 | 0.14 | 0.01 |
| *Wisteria sinensis* | 0.48 | 0.09 | 0.01 | 0.07 | 0.02 | 0.32 | 0.01 | 0.47 | 0.11 | 0.01 | 0.11 | 0.05 | 0.23 | 0.00 | 0.48 | 0.11 | 0.01 | 0.13 | 0.06 | 0.20 | 0.00 |

**Supplementary Table S3.** Proportion of each land cover category found in randomly selected locations with low invasion risk (below the “10 percentile training presence Cloglog threshold”), and in their surrounding landscape at medium (0-150m) and long (0-500) distances.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Growth form** | **Scientific name** | **Location** | | | | | | | **Medium distance (0-150 m)** | | | | | | | **Long distance (0-500 m)** | | | | | | |
| **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** | **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** | **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** |
| Graminoid | *Arundo donax* | 0.49 | 0.12 | 0.03 | 0.20 | 0.12 | 0.02 | 0.00 | 0.47 | 0.12 | 0.03 | 0.18 | 0.11 | 0.05 | 0.00 | 0.47 | 0.12 | 0.03 | 0.18 | 0.11 | 0.06 | 0.00 |
| *Imperata cylindrica* | 0.57 | 0.07 | 0.03 | 0.13 | 0.10 | 0.05 | 0.00 | 0.56 | 0.08 | 0.04 | 0.12 | 0.10 | 0.06 | 0.00 | 0.56 | 0.08 | 0.03 | 0.13 | 0.10 | 0.07 | 0.00 |
| *Microstegium vimineum* | 0.47 | 0.07 | 0.01 | 0.22 | 0.17 | 0.04 | 0.00 | 0.50 | 0.06 | 0.01 | 0.19 | 0.16 | 0.05 | 0.00 | 0.51 | 0.07 | 0.01 | 0.18 | 0.15 | 0.06 | 0.00 |
| *Miscanthus sinensis* | 0.61 | 0.05 | 0.00 | 0.24 | 0.03 | 0.06 | 0.00 | 0.61 | 0.04 | 0.00 | 0.23 | 0.03 | 0.07 | 0.00 | 0.60 | 0.04 | 0.00 | 0.24 | 0.03 | 0.08 | 0.00 |
| *Panicum repens* | 0.52 | 0.09 | 0.02 | 0.18 | 0.10 | 0.08 | 0.00 | 0.52 | 0.09 | 0.02 | 0.17 | 0.10 | 0.08 | 0.00 | 0.52 | 0.10 | 0.02 | 0.17 | 0.10 | 0.08 | 0.00 |
| *Phragmites australis* ssp. *australis* | 0.55 | 0.07 | 0.02 | 0.17 | 0.10 | 0.07 | 0.00 | 0.54 | 0.07 | 0.02 | 0.17 | 0.10 | 0.08 | 0.00 | 0.54 | 0.07 | 0.02 | 0.16 | 0.10 | 0.08 | 0.00 |
| *Schedonorus phoenix* | 0.60 | 0.06 | 0.00 | 0.18 | 0.14 | 0.00 | 0.01 | 0.57 | 0.06 | 0.00 | 0.18 | 0.13 | 0.02 | 0.01 | 0.55 | 0.06 | 0.00 | 0.19 | 0.13 | 0.04 | 0.01 |
| *Sorghum halepense* | 0.61 | 0.09 | 0.04 | 0.11 | 0.12 | 0.00 | 0.00 | 0.57 | 0.09 | 0.03 | 0.13 | 0.12 | 0.02 | 0.00 | 0.54 | 0.10 | 0.03 | 0.14 | 0.11 | 0.04 | 0.00 |
| Forb/Herb | *Alliaria petiolata* | 0.62 | 0.02 | 0.00 | 0.24 | 0.04 | 0.06 | 0.01 | 0.61 | 0.02 | 0.00 | 0.23 | 0.05 | 0.07 | 0.00 | 0.59 | 0.02 | 0.00 | 0.23 | 0.04 | 0.09 | 0.00 |
| *Carduus nutans* | 0.62 | 0.07 | 0.01 | 0.12 | 0.13 | 0.03 | 0.00 | 0.58 | 0.07 | 0.01 | 0.15 | 0.13 | 0.05 | 0.00 | 0.56 | 0.07 | 0.01 | 0.16 | 0.12 | 0.06 | 0.00 |
| *Colocasia esculenta* | 0.48 | 0.11 | 0.02 | 0.20 | 0.13 | 0.04 | 0.00 | 0.49 | 0.10 | 0.02 | 0.19 | 0.13 | 0.06 | 0.00 | 0.49 | 0.10 | 0.02 | 0.19 | 0.12 | 0.06 | 0.00 |
| *Dipsacus fullonum* | 0.72 | 0.00 | 0.00 | 0.20 | 0.01 | 0.05 | 0.01 | 0.71 | 0.01 | 0.00 | 0.19 | 0.01 | 0.07 | 0.01 | 0.72 | 0.00 | 0.00 | 0.19 | 0.01 | 0.07 | 0.01 |
| *Lespedeza bicolor* | 0.58 | 0.04 | 0.00 | 0.14 | 0.20 | 0.02 | 0.00 | 0.55 | 0.04 | 0.00 | 0.16 | 0.18 | 0.05 | 0.00 | 0.53 | 0.05 | 0.01 | 0.17 | 0.17 | 0.05 | 0.00 |
| *Lespedeza cuneata* | 0.57 | 0.07 | 0.01 | 0.17 | 0.15 | 0.00 | 0.00 | 0.57 | 0.07 | 0.01 | 0.16 | 0.15 | 0.02 | 0.00 | 0.54 | 0.07 | 0.01 | 0.16 | 0.14 | 0.04 | 0.00 |
| *Reynoutria japonica* | 0.63 | 0.05 | 0.00 | 0.20 | 0.07 | 0.02 | 0.00 | 0.62 | 0.05 | 0.00 | 0.19 | 0.06 | 0.05 | 0.00 | 0.61 | 0.05 | 0.00 | 0.19 | 0.06 | 0.06 | 0.00 |
| *Vinca minor* | 0.49 | 0.08 | 0.00 | 0.25 | 0.12 | 0.02 | 0.00 | 0.51 | 0.07 | 0.01 | 0.22 | 0.12 | 0.04 | 0.00 | 0.51 | 0.07 | 0.01 | 0.21 | 0.12 | 0.05 | 0.00 |
| Shrub | *Elaeagnus angustifolia* | 0.65 | 0.08 | 0.00 | 0.13 | 0.13 | 0.01 | 0.00 | 0.63 | 0.08 | 0.01 | 0.13 | 0.12 | 0.03 | 0.00 | 0.60 | 0.07 | 0.00 | 0.14 | 0.12 | 0.04 | 0.00 |
| *Elaeagnus umbellata* | 0.61 | 0.06 | 0.01 | 0.15 | 0.12 | 0.02 | 0.00 | 0.60 | 0.06 | 0.01 | 0.15 | 0.12 | 0.04 | 0.00 | 0.58 | 0.07 | 0.01 | 0.15 | 0.12 | 0.05 | 0.00 |
| *Lantana camara* | 0.47 | 0.11 | 0.02 | 0.18 | 0.12 | 0.07 | 0.00 | 0.47 | 0.10 | 0.02 | 0.18 | 0.12 | 0.08 | 0.00 | 0.47 | 0.10 | 0.02 | 0.18 | 0.12 | 0.08 | 0.00 |
| *Ligustrum japonicum* | 0.49 | 0.09 | 0.03 | 0.22 | 0.13 | 0.02 | 0.01 | 0.50 | 0.07 | 0.03 | 0.20 | 0.12 | 0.04 | 0.00 | 0.50 | 0.08 | 0.03 | 0.19 | 0.12 | 0.05 | 0.00 |
| *Ligustrum lucidum* | 0.46 | 0.13 | 0.04 | 0.18 | 0.13 | 0.04 | 0.00 | 0.46 | 0.12 | 0.04 | 0.18 | 0.12 | 0.05 | 0.00 | 0.46 | 0.11 | 0.03 | 0.18 | 0.11 | 0.06 | 0.00 |
| *Ligustrum sinense* | 0.49 | 0.10 | 0.03 | 0.19 | 0.15 | 0.01 | 0.01 | 0.51 | 0.09 | 0.03 | 0.19 | 0.13 | 0.02 | 0.00 | 0.51 | 0.08 | 0.03 | 0.18 | 0.12 | 0.04 | 0.00 |
| *Ligustrum vulgare* | 0.55 | 0.06 | 0.00 | 0.23 | 0.14 | 0.00 | 0.00 | 0.54 | 0.06 | 0.00 | 0.22 | 0.13 | 0.03 | 0.00 | 0.53 | 0.06 | 0.00 | 0.21 | 0.13 | 0.05 | 0.00 |
| *Lonicera maackii* | 0.53 | 0.09 | 0.00 | 0.22 | 0.12 | 0.02 | 0.00 | 0.53 | 0.08 | 0.00 | 0.20 | 0.11 | 0.04 | 0.00 | 0.52 | 0.08 | 0.00 | 0.20 | 0.11 | 0.05 | 0.00 |
| *Nandina domestica* | 0.45 | 0.09 | 0.03 | 0.24 | 0.15 | 0.01 | 0.00 | 0.48 | 0.08 | 0.03 | 0.21 | 0.14 | 0.03 | 0.00 | 0.49 | 0.07 | 0.03 | 0.20 | 0.13 | 0.05 | 0.00 |
| *Phyllostachys aurea* | 0.52 | 0.08 | 0.03 | 0.23 | 0.11 | 0.01 | 0.00 | 0.52 | 0.07 | 0.03 | 0.20 | 0.11 | 0.03 | 0.00 | 0.51 | 0.07 | 0.03 | 0.19 | 0.11 | 0.05 | 0.00 |
| *Rosa multiflora* | 0.53 | 0.09 | 0.02 | 0.17 | 0.14 | 0.03 | 0.00 | 0.53 | 0.09 | 0.02 | 0.16 | 0.14 | 0.04 | 0.00 | 0.52 | 0.09 | 0.02 | 0.16 | 0.13 | 0.06 | 0.00 |
| *Sesbania punicea* | 0.48 | 0.09 | 0.04 | 0.19 | 0.12 | 0.05 | 0.00 | 0.49 | 0.09 | 0.04 | 0.18 | 0.11 | 0.06 | 0.00 | 0.49 | 0.09 | 0.04 | 0.18 | 0.11 | 0.06 | 0.00 |
| Tree | *Ailanthus altissima* | 0.54 | 0.08 | 0.01 | 0.18 | 0.13 | 0.02 | 0.00 | 0.53 | 0.08 | 0.02 | 0.18 | 0.12 | 0.04 | 0.00 | 0.51 | 0.09 | 0.02 | 0.18 | 0.12 | 0.05 | 0.00 |
| *Albizia julibrissin* | 0.54 | 0.09 | 0.03 | 0.20 | 0.13 | 0.00 | 0.00 | 0.54 | 0.08 | 0.03 | 0.18 | 0.12 | 0.02 | 0.00 | 0.52 | 0.08 | 0.03 | 0.18 | 0.11 | 0.04 | 0.00 |
| *Broussonetia papyrifera* | 0.51 | 0.08 | 0.03 | 0.20 | 0.12 | 0.01 | 0.00 | 0.51 | 0.07 | 0.03 | 0.19 | 0.12 | 0.04 | 0.00 | 0.50 | 0.08 | 0.03 | 0.18 | 0.11 | 0.05 | 0.00 |
| *Cinnamomum camphora* | 0.38 | 0.10 | 0.10 | 0.09 | 0.16 | 0.09 | 0.01 | 0.38 | 0.09 | 0.11 | 0.10 | 0.15 | 0.09 | 0.00 | 0.39 | 0.09 | 0.10 | 0.12 | 0.14 | 0.09 | 0.00 |
| *Melaleuca quinquenervia* | 0.29 | 0.08 | 0.08 | 0.18 | 0.18 | 0.16 | 0.00 | 0.31 | 0.08 | 0.07 | 0.18 | 0.18 | 0.14 | 0.00 | 0.32 | 0.08 | 0.08 | 0.17 | 0.17 | 0.14 | 0.00 |
| *Melia azedarach* | 0.50 | 0.13 | 0.02 | 0.17 | 0.12 | 0.02 | 0.00 | 0.49 | 0.13 | 0.03 | 0.17 | 0.12 | 0.03 | 0.00 | 0.47 | 0.13 | 0.03 | 0.17 | 0.12 | 0.05 | 0.00 |
| *Paulownia tomentosa* | 0.53 | 0.07 | 0.01 | 0.20 | 0.13 | 0.03 | 0.00 | 0.52 | 0.09 | 0.01 | 0.19 | 0.13 | 0.05 | 0.00 | 0.51 | 0.09 | 0.01 | 0.18 | 0.13 | 0.06 | 0.00 |
| *Pyrus calleryana* | 0.63 | 0.06 | 0.02 | 0.13 | 0.13 | 0.01 | 0.00 | 0.60 | 0.06 | 0.02 | 0.14 | 0.12 | 0.03 | 0.00 | 0.58 | 0.07 | 0.02 | 0.15 | 0.11 | 0.05 | 0.00 |
| *Triadica sebifera* | 0.49 | 0.09 | 0.02 | 0.20 | 0.14 | 0.04 | 0.00 | 0.50 | 0.08 | 0.02 | 0.19 | 0.13 | 0.06 | 0.00 | 0.49 | 0.09 | 0.02 | 0.19 | 0.13 | 0.07 | 0.00 |
| Vine | *Celastrus orbiculatus* | 0.61 | 0.02 | 0.00 | 0.24 | 0.08 | 0.04 | 0.00 | 0.60 | 0.03 | 0.00 | 0.22 | 0.07 | 0.05 | 0.00 | 0.58 | 0.04 | 0.00 | 0.23 | 0.06 | 0.07 | 0.00 |
| *Dioscorea oppositifolia* | 0.56 | 0.04 | 0.01 | 0.21 | 0.10 | 0.06 | 0.01 | 0.55 | 0.04 | 0.00 | 0.20 | 0.10 | 0.08 | 0.00 | 0.55 | 0.04 | 0.00 | 0.20 | 0.10 | 0.08 | 0.00 |
| *Hedera helix* | 0.52 | 0.09 | 0.02 | 0.19 | 0.13 | 0.01 | 0.00 | 0.52 | 0.08 | 0.02 | 0.19 | 0.12 | 0.02 | 0.00 | 0.51 | 0.08 | 0.02 | 0.18 | 0.12 | 0.05 | 0.00 |
| *Lonicera japonica* | 0.49 | 0.10 | 0.03 | 0.20 | 0.16 | 0.00 | 0.00 | 0.51 | 0.09 | 0.03 | 0.18 | 0.14 | 0.01 | 0.00 | 0.51 | 0.09 | 0.04 | 0.17 | 0.13 | 0.03 | 0.00 |
| *Lygodium japonicum* | 0.44 | 0.08 | 0.05 | 0.21 | 0.15 | 0.04 | 0.00 | 0.46 | 0.08 | 0.05 | 0.18 | 0.14 | 0.05 | 0.00 | 0.47 | 0.08 | 0.05 | 0.17 | 0.13 | 0.07 | 0.00 |
| *Pueraria montana* var. *lobata* | 0.54 | 0.06 | 0.05 | 0.18 | 0.16 | 0.00 | 0.00 | 0.54 | 0.06 | 0.04 | 0.16 | 0.15 | 0.02 | 0.00 | 0.52 | 0.07 | 0.04 | 0.17 | 0.14 | 0.04 | 0.00 |
| *Wisteria floribunda* | 0.53 | 0.07 | 0.02 | 0.21 | 0.13 | 0.02 | 0.00 | 0.53 | 0.08 | 0.01 | 0.19 | 0.13 | 0.04 | 0.00 | 0.53 | 0.08 | 0.01 | 0.18 | 0.12 | 0.05 | 0.00 |
| *Wisteria sinensis* | 0.52 | 0.06 | 0.02 | 0.23 | 0.13 | 0.01 | 0.00 | 0.52 | 0.06 | 0.02 | 0.20 | 0.12 | 0.04 | 0.00 | 0.52 | 0.06 | 0.02 | 0.19 | 0.12 | 0.05 | 0.00 |

**Supplementary Table S4.** Susceptibility of each land cover category to be invaded by the major terrestrial invasive species in the southeastern United States. The values were obtained by dividing the proportion of the corresponding land cover category found in locations with high invasion risk by that from locations with low invasion risk. Values above and below 1 indicate that the corresponding land cover has a high or low invasion risk, respectively. Values close to 1 indicate medium susceptibility to invasion. Values below 0.75, between 0.75 and 1.25, and above 1.25 are differently shaded. Susceptibility to invasion was evaluated in the locations of the random points and in their surrounding landscape, at medium (0-150 m) and long (0-500 m) distances.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Growth form** | **Scientific name** | **Location** | | | | | | | **Medium distance (0-150 m)** | | | | | | | **Long distance (0-500 m)** | | | | | | |
| **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** | **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** | **Forest** | **Scrub/Shrubland** | **Herb. wetland** | **Pasture/Grassland** | **Cultivated area** | **Developed area** | **Barren land** |
| Graminoid | *Arundo donax* | 0.22 | 0.79 | 0.19 | 0.59 | 0.29 | 32.76 | 0.66 | 0.42 | 0.75 | 0.46 | 0.94 | 0.62 | 9.42 | 1.08 | 0.51 | 0.88 | 0.54 | 1.02 | 0.78 | 5.97 | 1.08 |
| *Imperata cylindrica* | 0.66 | 2.06 | 2.04 | 1.19 | 0.12 | 4.65 | 1.41 | 0.72 | 1.80 | 1.97 | 1.09 | 0.32 | 3.22 | 1.96 | 0.78 | 1.54 | 1.90 | 1.05 | 0.40 | 2.63 | 1.64 |
| *Microstegium vimineum* | 1.43 | 0.31 | 0.10 | 0.47 | 0.07 | 4.45 | 1.08 | 1.34 | 0.42 | 0.14 | 0.65 | 0.13 | 2.51 | 0.99 | 1.25 | 0.45 | 0.14 | 0.89 | 0.19 | 1.94 | 1.18 |
| *Miscanthus sinensis* | 0.89 | 0.24 | 3.16 | 0.76 | 0.00 | 3.96 | 0.00 | 0.96 | 0.11 | 3.07 | 0.73 | 0.24 | 3.01 | 2.02 | 1.07 | 0.16 | 0.64 | 0.66 | 0.41 | 2.22 | 1.98 |
| *Panicum repens* | 0.48 | 0.83 | 12.57 | 0.39 | 0.50 | 2.87 | 0.00 | 0.53 | 0.83 | 9.79 | 0.42 | 0.59 | 2.90 | 3.04 | 0.57 | 0.70 | 9.36 | 0.44 | 0.60 | 2.70 | 2.66 |
| *Phragmites australis* ssp. *australis* | 0.21 | 0.08 | 8.49 | 0.17 | 0.06 | 6.19 | 2.30 | 0.43 | 0.30 | 8.81 | 0.39 | 0.11 | 4.19 | 3.52 | 0.57 | 0.34 | 7.93 | 0.49 | 0.22 | 3.27 | 3.16 |
| *Schedonorus phoenix* | 0.52 | 1.10 | 0.59 | 1.71 | 0.34 | 78.84 | 0.35 | 0.64 | 0.77 | 0.52 | 1.48 | 0.50 | 9.51 | 0.34 | 0.78 | 0.69 | 0.45 | 1.26 | 0.61 | 4.17 | 0.42 |
| *Sorghum halepense* | 0.38 | 0.90 | 0.34 | 2.57 | 0.51 | 146.29 | 1.22 | 0.46 | 0.93 | 0.24 | 2.10 | 0.68 | 11.92 | 1.16 | 0.60 | 0.93 | 0.31 | 1.82 | 0.76 | 4.93 | 1.34 |
| Forb/Herb | *Alliaria petiolata* | 0.98 | 0.31 | 35.97 | 0.70 | 0.19 | 3.02 | 1.51 | 0.99 | 0.28 | 1.24 | 0.88 | 0.29 | 2.13 | 1.71 | 1.06 | 0.22 | 0.41 | 0.88 | 0.40 | 1.51 | 1.53 |
| *Carduus nutans* | 0.41 | 1.37 | 0.16 | 3.09 | 0.08 | 8.63 | 14.75 | 0.60 | 1.21 | 0.10 | 2.28 | 0.19 | 3.90 | 1.92 | 0.73 | 1.17 | 0.17 | 1.88 | 0.26 | 2.66 | 1.27 |
| *Colocasia esculenta* | 0.93 | 0.59 | 4.60 | 0.19 | 0.33 | 4.89 | 5.37 | 0.91 | 0.84 | 5.35 | 0.42 | 0.47 | 2.57 | 2.40 | 0.88 | 0.85 | 5.35 | 0.53 | 0.56 | 2.28 | 2.33 |
| *Dipsacus fullonum* | 0.24 | 0.00 | 0.00 | 0.89 | 0.00 | 13.55 | 0.00 | 0.48 | 0.00 | 0.00 | 1.29 | 1.00 | 5.92 | 0.39 | 0.69 | 0.04 | 0.00 | 1.14 | 1.45 | 3.83 | 0.83 |
| *Lespedeza bicolor* | 0.79 | 2.01 | 1.41 | 1.64 | 0.08 | 7.47 | 1.41 | 0.92 | 1.62 | 0.52 | 1.21 | 0.17 | 3.33 | 2.45 | 1.03 | 1.33 | 0.46 | 0.98 | 0.22 | 2.51 | 1.76 |
| *Lespedeza cuneata* | 0.90 | 0.51 | 0.32 | 0.87 | 0.23 | 50.01 | 5.77 | 0.91 | 0.57 | 0.20 | 1.04 | 0.33 | 9.59 | 3.77 | 0.97 | 0.55 | 0.16 | 1.16 | 0.41 | 3.60 | 1.74 |
| *Reynoutria japonica* | 0.65 | 0.10 | 0.00 | 0.61 | 0.15 | 16.90 | 2.01 | 0.72 | 0.20 | 0.00 | 0.91 | 0.24 | 6.46 | 1.94 | 0.83 | 0.22 | 0.05 | 0.92 | 0.26 | 4.19 | 1.89 |
| *Vinca minor* | 1.32 | 0.09 | 0.53 | 0.20 | 0.02 | 16.36 | 2.67 | 1.19 | 0.37 | 0.07 | 0.58 | 0.13 | 5.31 | 0.70 | 1.17 | 0.48 | 0.12 | 0.69 | 0.20 | 3.43 | 1.06 |
| Shrub | *Elaeagnus angustifolia* | 0.46 | 0.37 | 0.38 | 2.35 | 0.53 | 35.69 | 1.92 | 0.62 | 0.40 | 0.55 | 2.13 | 0.55 | 5.99 | 1.59 | 0.74 | 0.45 | 0.42 | 1.75 | 0.58 | 3.68 | 1.70 |
| *Elaeagnus umbellata* | 0.73 | 0.31 | 0.00 | 1.30 | 0.12 | 12.14 | 19.16 | 0.82 | 0.29 | 0.08 | 1.32 | 0.28 | 5.80 | 4.61 | 0.92 | 0.31 | 0.06 | 1.26 | 0.34 | 3.56 | 3.66 |
| *Lantana camara* | 0.87 | 0.61 | 6.10 | 0.99 | 0.05 | 2.89 | 6.97 | 0.76 | 0.88 | 5.86 | 0.82 | 0.17 | 3.17 | 3.79 | 0.74 | 0.97 | 5.70 | 0.84 | 0.27 | 2.74 | 2.86 |
| *Ligustrum japonicum* | 0.97 | 1.06 | 0.53 | 0.54 | 0.17 | 15.80 | 0.82 | 0.91 | 1.46 | 0.47 | 0.72 | 0.36 | 5.60 | 1.51 | 0.88 | 1.46 | 0.53 | 0.88 | 0.50 | 3.57 | 1.28 |
| *Ligustrum lucidum* | 0.86 | 0.57 | 0.80 | 0.79 | 0.03 | 9.07 | 2.07 | 0.86 | 0.87 | 0.54 | 0.84 | 0.20 | 5.81 | 1.57 | 0.87 | 0.97 | 0.57 | 0.95 | 0.32 | 4.10 | 1.09 |
| *Ligustrum sinense* | 1.02 | 0.83 | 0.40 | 0.73 | 0.17 | 35.69 | 0.83 | 0.89 | 1.06 | 0.37 | 0.91 | 0.39 | 10.64 | 1.17 | 0.89 | 1.06 | 0.37 | 1.03 | 0.53 | 4.56 | 1.02 |
| *Ligustrum vulgare* | 0.89 | 0.76 | 0.00 | 0.56 | 0.09 | 61.85 | 1.21 | 0.91 | 0.83 | 0.93 | 0.80 | 0.19 | 6.45 | 1.37 | 0.93 | 0.87 | 0.56 | 0.93 | 0.27 | 3.75 | 1.45 |
| *Lonicera maackii* | 1.04 | 0.04 | 1.13 | 0.83 | 0.10 | 12.90 | 2.26 | 0.99 | 0.27 | 0.22 | 1.03 | 0.21 | 4.78 | 2.63 | 1.03 | 0.31 | 0.15 | 1.06 | 0.29 | 2.96 | 1.92 |
| *Nandina domestica* | 1.27 | 0.63 | 0.42 | 0.38 | 0.04 | 21.25 | 3.01 | 1.09 | 1.07 | 0.36 | 0.63 | 0.19 | 6.01 | 1.40 | 1.00 | 1.25 | 0.39 | 0.79 | 0.31 | 4.00 | 1.24 |
| *Phyllostachys aurea* | 0.79 | 1.24 | 0.87 | 0.07 | 0.35 | 35.21 | 2.54 | 0.76 | 1.24 | 0.56 | 0.51 | 0.54 | 9.38 | 1.26 | 0.80 | 1.23 | 0.55 | 0.65 | 0.64 | 5.37 | 1.00 |
| *Rosa multiflora* | 0.97 | 0.12 | 0.12 | 1.08 | 0.21 | 8.14 | 2.06 | 0.98 | 0.29 | 0.14 | 1.17 | 0.32 | 4.08 | 1.09 | 1.03 | 0.33 | 0.09 | 1.19 | 0.42 | 2.74 | 1.10 |
| *Sesbania punicea* | 0.95 | 1.21 | 1.47 | 0.24 | 0.65 | 3.91 | 5.87 | 0.88 | 0.91 | 1.66 | 0.43 | 0.81 | 3.55 | 3.51 | 0.89 | 0.86 | 1.78 | 0.50 | 0.88 | 3.16 | 2.48 |
| Tree | *Ailanthus altissima* | 0.83 | 0.12 | 0.10 | 1.10 | 0.14 | 12.89 | 0.43 | 0.89 | 0.34 | 0.12 | 1.23 | 0.29 | 5.59 | 0.76 | 0.96 | 0.38 | 0.18 | 1.18 | 0.37 | 3.48 | 0.96 |
| *Albizia julibrissin* | 0.72 | 1.04 | 0.86 | 0.78 | 0.25 | 157.82 | 0.85 | 0.74 | 0.92 | 0.54 | 0.94 | 0.45 | 12.77 | 0.71 | 0.82 | 0.92 | 0.51 | 0.99 | 0.55 | 5.23 | 0.81 |
| *Broussonetia papyrifera* | 0.48 | 0.72 | 0.63 | 0.33 | 0.27 | 39.60 | 1.18 | 0.63 | 0.95 | 0.50 | 0.77 | 0.49 | 9.49 | 1.26 | 0.71 | 0.97 | 0.46 | 0.90 | 0.58 | 5.69 | 1.38 |
| *Cinnamomum camphora* | 1.31 | 1.20 | 0.44 | 1.24 | 0.09 | 2.07 | 1.60 | 1.29 | 0.99 | 0.50 | 1.19 | 0.18 | 2.18 | 1.99 | 1.20 | 0.99 | 0.64 | 1.12 | 0.22 | 2.18 | 1.27 |
| *Melaleuca quinquenervia* | 1.03 | 0.34 | 3.38 | 0.08 | 0.00 | 1.35 | 0.00 | 0.93 | 0.54 | 3.38 | 0.06 | 0.00 | 1.87 | 5.18 | 0.86 | 0.47 | 2.75 | 0.17 | 0.02 | 1.96 | 0.77 |
| *Melia azedarach* | 0.61 | 0.96 | 1.89 | 1.04 | 0.49 | 15.01 | 2.36 | 0.67 | 0.86 | 1.55 | 1.14 | 0.61 | 7.42 | 1.18 | 0.74 | 0.87 | 1.38 | 1.16 | 0.67 | 4.13 | 1.27 |
| *Paulownia tomentosa* | 1.12 | 0.98 | 0.00 | 0.52 | 0.08 | 6.20 | 7.18 | 1.09 | 0.55 | 0.08 | 0.87 | 0.16 | 4.01 | 2.32 | 1.13 | 0.44 | 0.11 | 0.97 | 0.23 | 2.67 | 1.82 |
| *Pyrus calleryana* | 0.39 | 1.14 | 0.72 | 2.38 | 0.21 | 33.74 | 5.11 | 0.51 | 0.97 | 0.45 | 2.05 | 0.59 | 7.90 | 1.59 | 0.66 | 0.92 | 0.31 | 1.67 | 0.76 | 4.07 | 0.98 |
| *Triadica sebifera* | 0.75 | 1.00 | 2.23 | 0.74 | 0.00 | 7.23 | 1.43 | 0.75 | 1.35 | 1.52 | 0.88 | 0.29 | 3.89 | 1.34 | 0.80 | 1.26 | 1.81 | 0.87 | 0.45 | 2.98 | 1.16 |
| Vine | *Celastrus orbiculatus* | 1.07 | 0.61 | 0.00 | 0.59 | 0.00 | 5.11 | 1.58 | 1.05 | 0.33 | 0.14 | 0.75 | 0.14 | 3.08 | 0.69 | 1.11 | 0.26 | 0.12 | 0.77 | 0.21 | 2.01 | 0.78 |
| *Dioscorea oppositifolia* | 1.15 | 0.22 | 0.82 | 0.14 | 0.00 | 4.78 | 0.00 | 1.18 | 0.22 | 0.21 | 0.54 | 0.13 | 2.61 | 0.69 | 1.19 | 0.34 | 0.14 | 0.67 | 0.09 | 2.10 | 1.19 |
| *Hedera helix* | 0.85 | 0.45 | 0.54 | 0.66 | 0.08 | 52.47 | 1.37 | 0.83 | 0.57 | 0.25 | 0.85 | 0.29 | 11.99 | 0.60 | 0.91 | 0.61 | 0.31 | 0.93 | 0.43 | 5.06 | 0.62 |
| *Lonicera japonica* | 1.01 | 0.66 | 0.48 | 0.91 | 0.19 | 94.34 | 1.40 | 0.92 | 0.82 | 0.32 | 1.09 | 0.34 | 14.60 | 1.27 | 0.94 | 0.84 | 0.27 | 1.17 | 0.44 | 4.95 | 1.17 |
| *Lygodium japonicum* | 1.36 | 1.49 | 0.33 | 0.16 | 0.00 | 4.90 | 6.98 | 1.23 | 1.62 | 0.46 | 0.36 | 0.15 | 3.12 | 1.18 | 1.14 | 1.56 | 0.62 | 0.52 | 0.31 | 2.27 | 1.02 |
| *Pueraria montana* var. *lobata* | 0.88 | 1.29 | 0.09 | 0.95 | 0.37 | 39.70 | 0.69 | 0.88 | 1.08 | 0.11 | 1.09 | 0.48 | 9.89 | 1.17 | 0.94 | 0.99 | 0.14 | 1.09 | 0.59 | 3.82 | 1.46 |
| *Wisteria floribunda* | 1.27 | 0.96 | 0.00 | 0.25 | 0.00 | 8.85 | 87.41 | 1.21 | 0.86 | 0.19 | 0.51 | 0.06 | 4.52 | 4.63 | 1.21 | 0.78 | 0.31 | 0.70 | 0.12 | 2.66 | 3.52 |
| *Wisteria sinensis* | 0.92 | 1.62 | 0.55 | 0.31 | 0.16 | 27.84 | 2.28 | 0.91 | 1.72 | 0.61 | 0.54 | 0.41 | 6.06 | 1.18 | 0.92 | 1.74 | 0.64 | 0.66 | 0.54 | 3.63 | 0.99 |

**Supplementary Table S5.** Relationship between susceptibility to invasion of randomly selected locations and landscape configuration variables at medium (0-150 m) and long (0-500 m) distances from those locations. The values refer to Spearman correlations. Bold values indicate statistical significance (p<0.001). Cells with significant positive and negative correlations are shaded with dark and light gray, respectively.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Growth form** | **Scientific name** | **Medium distance (0-150 m)** | | | | | | | | **Long distance (0-500 m)** | | | | | | | |
| **Patch density** | **Edge density** | **Landscape shape index** | **Proportion of like adjacencies** | **Aggregation index** | **Patch cohesion index** | **Proportional landscape core** | **Land cover heterogeneity** | **Patch density** | **Edge density** | **Landscape shape index** | **Proportion of like adjacencies** | **Aggregation index** | **Patch cohesion index** | **Proportional landscape core** | **Land cover heterogeneity** |
| Graminoid | *Arundo donax* | **0.39** | **0.38** | **0.40** | **0.23** | **0.27** | **0.33** | **-0.35** | **0.37** | **0.37** | **0.34** | **0.36** | **0.21** | **0.22** | **0.30** | **-0.32** | **0.28** |
| *Imperata cylindrica* | 0.06 | 0.03 | 0.02 | -0.07 | -0.05 | -0.03 | -0.02 | -0.02 | 0.02 | -0.02 | -0.03 | -0.09 | -0.08 | -0.08 | 0.03 | -0.06 |
| *Microstegium vimineum* | **0.11** | **0.14** | **0.11** | -0.03 | 0.01 | 0.02 | **-0.14** | 0.05 | 0.03 | 0.05 | 0.00 | **-0.17** | **-0.13** | **-0.11** | -0.06 | **-0.09** |
| *Miscanthus sinensis* | -0.06 | -0.08 | -0.10 | **-0.23** | **-0.20** | **-0.18** | 0.09 | **-0.15** | **-0.18** | **-0.23** | **-0.25** | **-0.40** | **-0.35** | **-0.30** | **0.24** | **-0.31** |
| *Panicum repens* | **-0.13** | **-0.13** | **-0.15** | **-0.17** | **-0.18** | **-0.23** | **0.12** | **-0.18** | **-0.16** | **-0.20** | **-0.23** | **-0.21** | **-0.21** | **-0.29** | **0.20** | **-0.22** |
| *Phragmites australis* ssp. *australis* | **0.08** | **0.08** | 0.07 | -0.03 | -0.01 | -0.01 | **-0.08** | 0.04 | 0.04 | -0.01 | 0.00 | -0.07 | -0.05 | -0.01 | 0.02 | -0.02 |
| *Schedonorus phoenix* | **0.38** | **0.32** | **0.36** | **0.24** | **0.28** | **0.29** | **-0.29** | **0.35** | **0.32** | **0.26** | **0.26** | **0.10** | **0.13** | **0.18** | **-0.25** | **0.17** |
| *Sorghum halepense* | **0.45** | **0.42** | **0.45** | **0.25** | **0.31** | **0.37** | **-0.39** | **0.41** | **0.39** | **0.36** | **0.38** | **0.20** | **0.23** | **0.33** | **-0.33** | **0.29** |
| Forb/Herb | *Alliaria petiolata* | 0.02 | 0.03 | 0.02 | -0.10 | -0.06 | -0.04 | -0.01 | -0.02 | **-0.16** | **-0.18** | **-0.22** | **-0.35** | **-0.31** | **-0.25** | **0.20** | **-0.28** |
| *Carduus nutans* | **0.25** | **0.24** | **0.24** | **0.11** | **0.14** | **0.19** | **-0.23** | **0.21** | **0.21** | **0.20** | **0.17** | 0.00 | 0.02 | 0.08 | **-0.20** | **0.07** |
| *Colocasia esculenta* | 0.04 | 0.03 | 0.04 | -0.01 | -0.01 | 0.00 | -0.02 | 0.02 | 0.02 | -0.02 | 0.00 | 0.00 | 0.00 | 0.01 | 0.03 | 0.01 |
| *Dipsacus fullonum* | **0.57** | **0.55** | **0.58** | **0.41** | **0.48** | **0.49** | **-0.51** | **0.56** | **0.40** | **0.45** | **0.47** | **0.32** | **0.33** | **0.43** | **-0.43** | **0.40** |
| *Lespedeza bicolor* | **0.30** | **0.29** | **0.29** | **0.12** | **0.16** | **0.24** | **-0.27** | **0.23** | **0.30** | **0.30** | **0.28** | **0.08** | **0.12** | **0.19** | **-0.29** | **0.17** |
| *Lespedeza cuneata* | **0.35** | **0.33** | **0.34** | **0.16** | **0.21** | **0.24** | **-0.31** | **0.30** | **0.26** | **0.25** | **0.22** | -0.01 | 0.03 | **0.11** | **-0.24** | **0.10** |
| *Reynoutria japonica* | **0.15** | **0.14** | **0.14** | -0.04 | 0.01 | 0.02 | **-0.12** | **0.10** | 0.01 | -0.03 | -0.05 | **-0.26** | **-0.21** | **-0.13** | 0.05 | **-0.14** |
| *Vinca minor* | **0.26** | **0.26** | **0.26** | **0.10** | **0.14** | **0.17** | **-0.24** | **0.22** | **0.21** | **0.17** | **0.16** | -0.02 | 0.01 | 0.03 | **-0.16** | 0.06 |
| Shrub | *Elaeagnus angustifolia* | **0.24** | **0.21** | **0.23** | **0.14** | **0.17** | **0.16** | **-0.19** | **0.23** | **0.22** | **0.15** | **0.18** | 0.05 | **0.08** | **0.15** | **-0.13** | **0.16** |
| *Elaeagnus umbellata* | **0.14** | **0.15** | **0.14** | -0.02 | 0.02 | 0.06 | **-0.13** | **0.10** | 0.04 | 0.03 | 0.00 | **-0.22** | **-0.17** | **-0.12** | -0.01 | **-0.09** |
| *Lantana camara* | **0.10** | **0.09** | **0.08** | -0.03 | -0.02 | 0.01 | **-0.07** | 0.04 | 0.03 | 0.03 | -0.01 | **-0.10** | **-0.11** | -0.07 | -0.03 | **-0.10** |
| *Ligustrum japonicum* | **0.41** | **0.40** | **0.42** | **0.24** | **0.29** | **0.37** | **-0.38** | **0.37** | **0.38** | **0.38** | **0.36** | **0.18** | **0.20** | **0.26** | **-0.37** | **0.24** |
| *Ligustrum lucidum* | **0.36** | **0.35** | **0.35** | **0.19** | **0.23** | **0.29** | **-0.33** | **0.31** | **0.37** | **0.37** | **0.35** | **0.17** | **0.17** | **0.25** | **-0.36** | **0.23** |
| *Ligustrum sinense* | **0.59** | **0.55** | **0.59** | **0.41** | **0.46** | **0.56** | **-0.52** | **0.57** | **0.56** | **0.52** | **0.57** | **0.40** | **0.42** | **0.51** | **-0.50** | **0.48** |
| *Ligustrum vulgare* | **0.30** | **0.29** | **0.31** | **0.12** | **0.19** | **0.21** | **-0.26** | **0.28** | **0.27** | **0.26** | **0.22** | -0.01 | 0.02 | **0.12** | **-0.25** | **0.09** |
| *Lonicera maackii* | **0.23** | **0.21** | **0.22** | **0.10** | **0.13** | **0.17** | **-0.20** | **0.20** | **0.15** | **0.10** | **0.11** | -0.01 | 0.02 | **0.09** | **-0.10** | **0.08** |
| *Nandina domestica* | **0.47** | **0.47** | **0.48** | **0.27** | **0.33** | **0.41** | **-0.44** | **0.42** | **0.50** | **0.49** | **0.48** | **0.25** | **0.27** | **0.38** | **-0.47** | **0.34** |
| *Phyllostachys aurea* | **0.52** | **0.49** | **0.53** | **0.33** | **0.38** | **0.47** | **-0.46** | **0.49** | **0.49** | **0.47** | **0.48** | **0.30** | **0.32** | **0.43** | **-0.44** | **0.38** |
| *Rosa multiflora* | **0.23** | **0.22** | **0.23** | **0.09** | **0.12** | **0.15** | **-0.21** | **0.19** | **0.16** | **0.14** | **0.13** | -0.04 | 0.01 | **0.08** | **-0.14** | **0.07** |
| *Sesbania punicea* | 0.05 | 0.03 | 0.04 | 0.00 | 0.00 | -0.02 | -0.03 | 0.03 | 0.07 | 0.01 | 0.02 | -0.03 | -0.03 | 0.00 | 0.00 | 0.02 |
| Tree | *Ailanthus altissima* | **0.27** | **0.25** | **0.27** | **0.12** | **0.17** | **0.20** | **-0.23** | **0.28** | **0.23** | **0.20** | **0.20** | -0.01 | 0.04 | **0.11** | **-0.19** | **0.24** |
| *Albizia julibrissin* | **0.53** | **0.51** | **0.55** | **0.37** | **0.42** | **0.47** | **-0.47** | **0.52** | **0.49** | **0.44** | **0.48** | **0.31** | **0.32** | **0.42** | **-0.42** | **0.40** |
| *Broussonetia papyrifera* | **0.42** | **0.38** | **0.42** | **0.30** | **0.33** | **0.37** | **-0.35** | **0.41** | **0.40** | **0.34** | **0.39** | **0.29** | **0.30** | **0.37** | **-0.33** | **0.35** |
| *Cinnamomum camphora* | **0.17** | **0.16** | 0.13 | 0.03 | 0.05 | 0.08 | **-0.17** | 0.07 | 0.15 | **0.15** | 0.09 | -0.06 | -0.04 | 0.05 | **-0.15** | -0.01 |
| *Melaleuca quinquenervia* | 0.10 | 0.15 | 0.09 | -0.16 | -0.11 | -0.07 | -0.12 | -0.02 | 0.06 | 0.11 | 0.04 | -0.18 | -0.14 | -0.12 | -0.11 | -0.08 |
| *Melia azedarach* | **0.36** | **0.34** | **0.36** | **0.22** | **0.25** | **0.33** | **-0.31** | **0.33** | **0.35** | **0.33** | **0.34** | **0.22** | **0.22** | **0.27** | **-0.31** | **0.26** |
| *Paulownia tomentosa* | **0.18** | **0.17** | **0.17** | 0.03 | **0.07** | **0.09** | **-0.16** | **0.14** | **0.14** | **0.11** | **0.09** | -0.06 | -0.01 | 0.00 | **-0.11** | 0.02 |
| *Pyrus calleryana* | **0.44** | **0.41** | **0.45** | **0.32** | **0.35** | **0.42** | **-0.38** | **0.43** | **0.42** | **0.38** | **0.41** | **0.28** | **0.29** | **0.40** | **-0.36** | **0.34** |
| *Triadica sebifera* | **0.29** | **0.27** | **0.28** | **0.17** | **0.20** | **0.24** | **-0.26** | **0.26** | **0.28** | **0.28** | **0.28** | **0.21** | **0.20** | **0.24** | **-0.27** | **0.22** |
| Vine | *Celastrus orbiculatus* | 0.02 | 0.05 | 0.02 | **-0.16** | **-0.11** | -0.05 | -0.03 | -0.04 | **-0.11** | **-0.14** | **-0.17** | **-0.35** | **-0.30** | **-0.28** | **0.16** | **-0.26** |
| *Dioscorea oppositifolia* | 0.00 | 0.00 | -0.02 | **-0.11** | -0.07 | -0.03 | 0.01 | -0.05 | -0.03 | -0.06 | -0.08 | **-0.20** | **-0.15** | **-0.14** | 0.07 | **-0.12** |
| *Hedera helix* | **0.48** | **0.46** | **0.47** | **0.26** | **0.32** | **0.39** | **-0.43** | **0.43** | **0.41** | **0.38** | **0.38** | **0.13** | **0.17** | **0.29** | **-0.37** | **0.25** |
| *Lonicera japonica* | **0.48** | **0.45** | **0.50** | **0.30** | **0.36** | **0.42** | **-0.41** | **0.48** | **0.44** | **0.38** | **0.43** | **0.24** | **0.28** | **0.39** | **-0.36** | **0.36** |
| *Lygodium japonicum* | **0.23** | **0.23** | **0.22** | **0.10** | **0.12** | **0.16** | **-0.21** | **0.17** | **0.17** | **0.17** | **0.13** | 0.04 | 0.03 | 0.04 | **-0.17** | 0.04 |
| *Pueraria montana* var. *lobata* | **0.47** | **0.47** | **0.49** | **0.29** | **0.34** | **0.41** | **-0.44** | **0.44** | **0.42** | **0.39** | **0.41** | **0.23** | **0.27** | **0.37** | **-0.38** | **0.33** |
| *Wisteria floribunda* | **0.23** | **0.24** | **0.23** | 0.05 | **0.10** | **0.13** | **-0.23** | **0.17** | **0.13** | **0.16** | **0.08** | **-0.15** | **-0.12** | -0.07 | **-0.16** | -0.05 |
| *Wisteria sinensis* | **0.49** | **0.46** | **0.49** | **0.37** | **0.41** | **0.48** | **-0.44** | **0.47** | **0.48** | **0.46** | **0.47** | **0.34** | **0.34** | **0.41** | **-0.45** | **0.38** |