**Supplementary material 2: Description of differences between Northern and Southern FIA Regions in invasive plant species monitoring protocols**

**Text S2.1**

Here we describe differences between the Northern and Southern FIA Regions (Suppl. material 1, fig. S1.1 for locations) in their invasive species sampling protocols. First, because invasive species of concern vary across space, FIA regions did not always monitor the same species. Considerable overlap in monitored species, however, occurred between regions, thereby accounting for cross-regional invasions (Table S2.1). Second, the Southern FIA Region monitors all plots for invasive plants, while the Northern Region only monitors 18% of its plots for invasive plants. Calculating separate slope estimates for each of the 91 ecological sections embedded in our study region (as described in main paper), however, helps to account for this difference in sampling intensity. Furthermore, prior analyses suggest that the lower sampling intensity employed in the North provided information of similar quality to that attained using the Southern Region's protocol. For example, summary statistics calculated for a random selection of 18% of the southern plots (i.e. an equivalent sampling intensity as that used in the Northern FIA Region) differed little from those calculated across all southern plots. Estimates for the randomly selected and full dataset were: invasive richness (mean ± SD) = 1.14 ± 1.28 and 1.16 ± 1.29; invasive richness = 16 ± 29% and 17 ± 29%; and invasive species detected = 44 and 49). The five invasive plant species that were not detected using the randomly selected dataset sub-set only occurred in four or less plots. Finally, the Southern FIA Region monitors for invasive plants all year, while the Northern FIA Region does so only during the growing season due to the likely presence of snow cover. The statistical framework we used for our analysis (described in main paper), however, controlled for this variability by estimating slopes separately for each ecological region.

**Table S2.1.** Differences and overlap in the invasive plant species monitored by the Northern (NR) and Southern (SR) FIA Administrative Regions. * Due to challenges in field species identification, more than one species was grouped together to reduce errors.

| Scientific Name | Common Name | Growth Form | FIA Region(s) Monitored |
|---|---|---|---|
| *Berberis thunbergii* | Japanese barberry | Shrub | NR |
| *Berberis vulgaris* | common barberry | Shrub | NR |
| *Cynanchum louiseae* | Louis' swallow-wort | Vine | NR |
| *Cynanchum rossicum* | European swallow-wort | Vine | NR |
| *Frangula alnus* | glossy buckthorn | Shrub | NR |
| *Lysimachia nummularia* | creeping jenny | Forb | NR |
| *Melaleuca quinquenervia* | punktree | Tree | NR |
| *Phalaris arundinacea* | reed canarygrass | Grass | NR |
| *Phragmites australis* | common reed | Grass | NR |
| *Polygonum cuspidatum* | Japanese knotweed | Forb | NR |
| *Polygonum sachalinense* | giant knotweed | Forb | NR |
| *Polygonum* x *bohemicum* | Japanese/giant knotweed hybrid | Forb | NR |
| *Rhamnus cathartica* | common buckthorn | Shrub | NR |
| *Triadica sebifera* | Chinese tallowtree | Tree | NR |
| *Viburnum opulus* | European cranberrybush | Shrub | NR |
| *Cirsium vulgare* | bull thistle | Forb | NR |
| *Hesperis matronalis* | dames rocket | Forb | NR |

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|---|---|---|---|
| *Lythrum salicaria* | purple loosestrife | Forb | NR |
| *Ulmus pumila* | Siberian elm | Tree | NR |
| *Centaurea biebersteinii* | spotted knapweed | Forb | NR |
| *Cirsium arvense* | Canada thistle | Forb | NR |
| *Euphorbia esula* | leafy spurge | Forb | NR |
| *Elaeagnus angustifolia* | Russian olive | Shrub | NR, SR |
| *Centaurea stoebe* | spotted knapweed | Forb | NR, SR |
| *Acer platanoides* | Norway maple | Tree | NR, SR |
| *Ailanthus altissima* | tree of heaven | Tree | NR, SR |
| *Albizia julibrissin* | silktree | Tree | NR, SR |
| *Alliaria petiolata* | garlic mustard | Forb | NR, SR |
| *Celastrus orbiculatus* | oriental bittersweet | Vine | NR, SR |
| *Elaeagnus umbellata* | autumn olive | Shrub | NR, SR |
| *Hedera helix* | English ivy | Vine | NR, SR |
| *Ligustrum sinense & vulgare** | common and Chinese Privet | Shrub | NR, SR |
| *Lonicera japonica* | Japanese honeysuckle | Vine | NR, SR |
| *Lonicera* spp.* | non-native bush honeysuckles | Shrub | NR, SR |
| *Melia azedarach* | Chinaberrytree | Tree | NR, SR |
| *Microstegium vimineum* | Nepalese browntop | Grass | NR, SR |
| *Paulownia tomentosa* | princesstree | Tree | NR, SR |

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|---|---|---|---|
| *Rosa* spp.* | non-native rose | Shrub | NR, SR |
| *Spiraea japonica* | Japanese meadowsweet | Shrub | NR, SR |
| *Lespedeza cuneata* | Chinese lespedeza | Forb | SR |
| *Solanum viarum* | tropical soda apple | Forb | SR |
| *Abrus precatorius* | rosarypea | Vine | SR |
| *Ardisia crenata* | hen's eyes | Shrub | SR |
| *Arundo donax* | giant reed | Grass | SR |
| *Casuarina equisetifolia* | beach sheoak | Tree | SR |
| *Cinnamomum camphora* | camphortree | Tree | SR |
| *Cupaniopsis anacardioides* | carrotwood | Tree | SR |
| *Dioscorea bulbifera & oppositifolia & alata** | air yam | Vine | SR |
| *Elaeagnus pungens* | thorny olive | Shrub | SR |
| *Eugenia uniflora* | Surinam cherry | Shrub | SR |
| *Euonymus alata* | winged burning bush | Shrub | SR |
| *Euonymus fortunei* | winter creeper | Vine | SR |
| *Imperata cylindrica* | cogongrass | Grass | SR |
| *Lantana camara* | lantana | Shrub | SR |
| *Lespedeza bicolor* | shrubby lespedeza | Forb | SR |
| *Ligustrum japonicum & lucidum** | Japanese and glossy privet | Shrub | SR |
| *Lolium arundinaceum* | tall fescue | Grass | SR |

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| *Lygodium japonicum* | Japanese climbing fern | Shrub | SR |
| *Lygodium microphyllum* | small-leaf climbing fern | Vine | SR |
| *Macfadyena unguis-cati* | catclawvine | Vine | SR |
| *Miscanthus sinensis* | Chinese silvergrass | Grass | SR |
| *Nandina domestica* | sacred bamboo | Shrub | SR |
| *Nephrolepis cordifolia* | narrow swordfern | Forb | SR |
| *Paederia foetida* | stinkvine | Vine | SR |
| *Phyllostachys* spp. & *Bambusa* spp.* | non-native bamboos | Grass | SR |
| *Psidium guajava* | guava | Shrub | SR |
| *Pueraria montana* | kudzu | Vine | SR |
| *Pyrus calleryana* | Callery pear | Forb | SR |
| *Rhodomyrtus tomentosus* | rose myrtle | Shrub | SR |
| *Schefflera actinophylla* | octopus tree | Tree | SR |
| *Schinus terebinthifolius* | Brazilian peppertree | Tree | SR |
| *Solanum tampicense* | scrambling nightshade | Forb | SR |
| *Syzygium cumini* | Java plum | Tree | SR |
| *Vinca major & minor** | bigleaf and common periwinkle | Vine | SR |
| *Wisteria floribunda* | Japanese wisteria | Vine | SR |