

Weeds in South Australia: a regional account of the assault

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Summary The first account of the flora of South Australia documented 1,706 native plant taxa. In July 2014, 4965 vascular plant taxa were documented as growing wild in South Australia. Currently 1517 (30.6%), almost one third of the vascular plants are recorded as alien taxa, 1262 (25.4%) are categorised as naturalised, and a further 255 taxa (5.1%) are ‘questionably naturalised’, where it is unknown if small initial populations will become established as independent self-replicating populations.

The State Herbarium of South Australia recognises 13 botanical–geographical regions. These vary in size and species richness. Comparisons of relative numbers of weedy versus native taxa were made among the 13 regions. Large remote geographical areas have the smallest percentage of alien plants (5.9%). In contrast a large proportion of taxa of alien plants (up to 46.9%) are found in smaller regions with a combination of

the following factors: temperate climate; high topographical heterogeneity; high anthropogenic activity including large settlements; and major transport corridors.

For the questionably naturalised plants in the 13 regions, initial invasion pathways were examined comparing ‘garden/planted’, ‘agricultural’, ‘both’ or ‘unknown’. The majority were from gardens and other non-agricultural plantings (garden/planted) and it is likely that this is the most common pathway to becoming a weed.

Similarly, ‘garden/planted’ is the initial invasion pathway for a small group of naturalised weeds ‘Proposed for Declaration’ (under South Australian legislation).

Discussion focuses on where invasive weeds are currently found and where future effort is needed to prevent the establishment of future invasive weeds.