

Data table metadata						
File name	Site_data.csv					
Case sensitive?	No					
Number of records	30					
Orientation	The data are arranged with major variables in columns.					
Data table structure and attribute description						
Attribute name	Label	Definition	Unit	Type	Usage	Attribute description
Site.Name	Site name	Site at which data were collected		String		30 individual patches in 24 unique parks
Code	Site code	Short string for site name		String		30 individual patches in 24 unique parks
RdDens.1KM	Road density	The length of roads per unit area within a 1km radius of the patch edge	1/km	Double	Predictor	
RdS	Standardized road density	RdDens.1KM minus the mean and divided by the standard deviation		Double	Transformed predictor	
		The distance-weighted sum of the area of surrounding savanna patches: $C_i = \sum_{(i \neq j)} [\exp(-\alpha * d_{ij}) * A_j]$ where A_j is the area of patch j (in m ²), d_{ij} is the minimum edge-edge distances between patches i and j , and α represents the influence of distance on biotic connectivity, <i>i.e.</i> species' distance-dependent dispersal range. For grassland species, $\alpha = 0.002$ is likely a realistic estimate of migration range, representing migration in which medium-long distance dispersal events are not rare.				
Conn	Connectivity	Conn minus the mean and divided by the standard deviation		Double	Predictor	
ConnS	Standardized connectivity			Double	Transformed predictor	
		Qualitative measure of management intensity collected through conversation with managers. Removal efforts in all patches involved hand-pulling invasive species individuals. Local managers do not use herbicide or mechanical methods, and we found no evidence that these tactics had been used.				"None" = the organization did none and we found no evidence of community intervention; "Low" = no formal management, but management evidence present (e.g. old piles of pulled plants); "Medium" = irregular invasive species control; "High" = annual invasive species removal occurred
Invasive	Invasive species management			String	Predictor	
Inv_C	Invasive species management: Ordinal	Invasive transformed to ordinal (0-3) scale		Integer	Transformed predictor	

<i>Area_07</i>	Patch area, 2007	Using aerial photographs, open canopy patch boundaries were estimated based on vegetation density and ground-truthed during field surveys, using a GPS to mark necessary adjustments based on canopy cover and characteristic species.	Double	Predictor
<i>Area_17</i>	Patch area, 2017	Using aerial photographs, open canopy patch boundaries were estimated based on vegetation density and ground-truthed during field surveys, using a GPS to mark necessary adjustments based on canopy cover and characteristic species.	Double	
<i>Nat_07</i>	Native species richness, 2007	Species presence data was collected with parallel transects 25m apart across the patch extent. All vascular plant species were recorded. Two survey seasons, one in spring (Apr – May) and a second in summer (May – 24) were conducted.	Integer	
<i>NIS_07</i>	Non-native species richness, 2007	Species presence data was collected with parallel transects 25m apart across the patch extent. All vascular plant species were recorded. Two survey seasons, one in spring (Apr – May) and a second in summer (May – 24) were conducted.	Integer	
<i>Nat_17</i>	Native species richness, 2017	Species presence data was collected with parallel transects 25m apart across the patch extent. All vascular plant species were recorded. Two survey seasons, one in spring (Apr – May) and a second in summer (May – 24) were conducted.	Integer	
<i>NIS_17</i>	Non-native species richness, 2017	Species presence data was collected with parallel transects 25m apart across the patch extent. All vascular plant species were recorded. Two survey seasons, one in spring (Apr – May) and a second in summer (May – 24) were conducted.	Integer	
<i>Rich_07</i>	Total species richness, 2007	Species presence data was collected with parallel transects 25m apart across the patch extent. All vascular plant species were recorded. Two survey seasons, one in spring (Apr – May) and a second in summer (May – 24) were conducted.	Integer	

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<i>Rich_17</i>	Total species richness, 2017		Integer		
<i>AreaC</i>	Change in area	$(Area_17 - Area_07) / Area_07$	Double	Response; Predictor	0-1
<i>NatC</i>	Change in native richness	$Nat_17 - Nat_07$	Integer	Response	
<i>NISC</i>	Change in non-native richness	$NIS_17 - NIS_07$	Integer		
<i>RichC</i>	Change in total richness	$Rich_17 - Rich_07$	Integer		
<i>RD_07</i>	Response diversity, 2007	The multivariate functional dispersion of represented species in response trait space	Double		
<i>RD_17</i>	Response diversity, 2017	The multivariate functional dispersion of represented species in response trait space	Double		
<i>RDC</i>	Change in response diversity	$RD_17 - RD_07$	Double	Response	
<i>Turnover</i>	Species turnover, 2007-2017	The proportion of species either gained or lost relative to the total number of species observed across both time periods	Double	Response	0-1