Supplementary Materials

Table S1. Lizard species list for diet analyses (faecal pellet and stomach samples).

Prediction Category	Species	Sample Size
Nocturnal generalist	*Gehyra variegata*	12
	Heteronotia binoei	18
	Lucasium damaeum	2
	Lucasium stenodactylum	6
	Nephrurus levis	81
	Strophurus ciliaris	9
Nocturnal generalist skink	*Eremiascincus phantasmus*	10
Diurnal generalist	*Ctenotus ariadnae*	50
	Ctenotus brooksi	33
	Ctenotus calurus	10
	Ctenotus dux	38
	Ctenotus helenae	27
	Ctenotus lateralis	10
	Ctenotus leae	22
	Ctenotus leonhardii	13
	Ctenotus piankai	5
	Ctenotus regius	7
	Ctenotus schomburgkii	20
	Ctenotus species unknown	1
	Liopholis inornata	7
	Menetia greyii	14
	Morethia ruficauda	5
	Notoscincus ornatus	1
Specialist	*Ctenotus pantherinus*	65
	Diplodactylus conspicillatus	16
	Lerista labialis	38
	Rhynchoedura eyrensis	21
	Strophurus elderi	1

Table S2. List of prey taxa identified in lizard faecal pellet and stomach samples.

Prey Taxa	
Araneae	Larvae
Blattodea	Lepidoptera
Chilopoda	Mantodea
Coleoptera	Neuroptera

Collembola	Oribatida
Dermaptera	Orthoptera
Diptera	Phasmatodea
Gastropoda	Pseudoscorpionida
Hemiptera	Scorpiones
Hymenoptera (Formicidae)	Thysanura
Hymenoptera (Other)	Vegetation
Isoptera	Vertebrate

Table S3. List of dasyurid species captured at the study site.

Dasyurid Species
Dasycercus blythi
Ningaui ridei
Planigale gilesi
Planigale tenuirostris
Sminthopsis crassicaudata
Sminthopsis hirtipes
Sminthopsis macroura
Sminthopsis youngsoni

Table S4. Results of quantile regression models comparing the 0.5 and 0.9 quantiles of lizard diet breadth (species richness) as a function of dasyurid abundance for a suite of predictions. Prediction categories for lizard groupings are based on activity period (nocturnal or diurnal) and diet breadth (generalist vs specialist); and for mammalian competitors are grouped by all dasyurids or separately for each of two species, the most abundant (*Sminthopsis youngsoni*) and the largest (*Dasycercus blythi*) in the dasyurid community. A significant *P*-value indicated by * shows that there is a nonzero slope for that quantile.

Prediction Category – Lizard Group	**0.5 Quantile**				**0.9 Quantile**			
Dasyurid group	**Estimate**	**CI**	***t*-value**	***P***	**Estimate**	**CI**	***t*-value**	***P***
Nocturnal generalists								
All dasyurids	−0.304	−0.373–0.235	−8.728	**<0.0001***	−0.472	−0.679–0.265	−4.512	**<0.0001***
Sminthopsis youngsoni	−0.375	−0.461–0.289	−8.638	**<0.0001***	−0.567	−0.745–0.388	−6.267	**<0.0001***
Dasycercus blythi	0.000	−1.585–1.585	0.000	1.0000	−4e-16	−3.116–3.116	−3e-16	1.0000
Nocturnal generalist skink								
All dasyurids	0.754	−2.563–4.071	0.525	0.6141	1.924	−2.377–6.225	1.031	0.3325
Sminthopsis youngsoni	0.000	−19.81–19.81	0.000	1.0000	−8.987	−33.45–15.49	−0.846	0.4221
Dasycercus blythi	1.440	−3.288–6.168	0.702	0.5024	2.648	−8.404–13.70	0.553	0.5956
Diurnal generalists								
All dasyurids	0.000	−6e-17–6e-17	0.000	1.0000	0.166	−0.111–0.444	1.177	0.2404
Sminthopsis youngsoni	0.000	−0.184–0.184	0.000	1.0000	0.198	−0.255–0.305	0.777	0.438
Dasycercus blythi	−0.262	−0.518-0.006	−2.015	**0.0449***	−0.786	−1.520–0.051	−2.104	**0.0363***

Specialists								
All dasyurids	0.000	−1e-16–1e-16	0.000	1.0000	8e-17	−0.479–0.479	3e-16	1.0000
Sminthopsis youngsoni	0.000	−2e-16–2e-16	0.000	1.0000	0.396	−0.287–1.079	1.147	0.2534
Dasycercus blythi	0.000	−2e-15–2e-15	0.000	1.0000	2e-16	−0.025–0.025	2e-14	1.0000

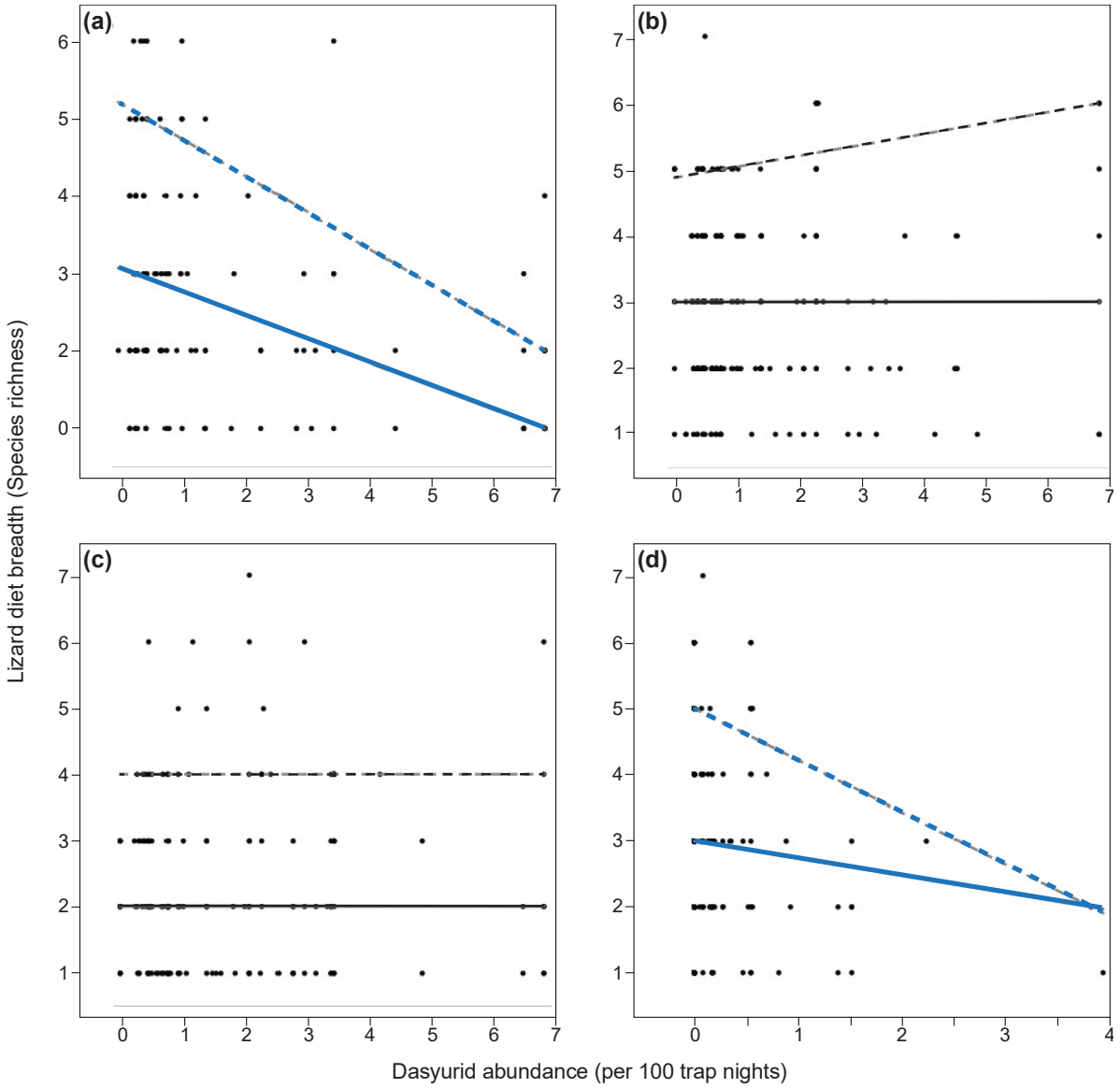

Figure S1. Relationships between lizard diet breadth (based on species richness) and dasyurid abundance (all species) at the 0.5 (solid line) and 0.9 (dashed line) quantiles for (**a**) nocturnal generalist lizards, (**b**) diurnal generalist lizards, (**c**) specialist lizards, and (**d**) mulgara (*Dasycercus blythi*) abundance and diurnal generalist lizards. Significant relationships ($P < 0.05$) are shown in blue.

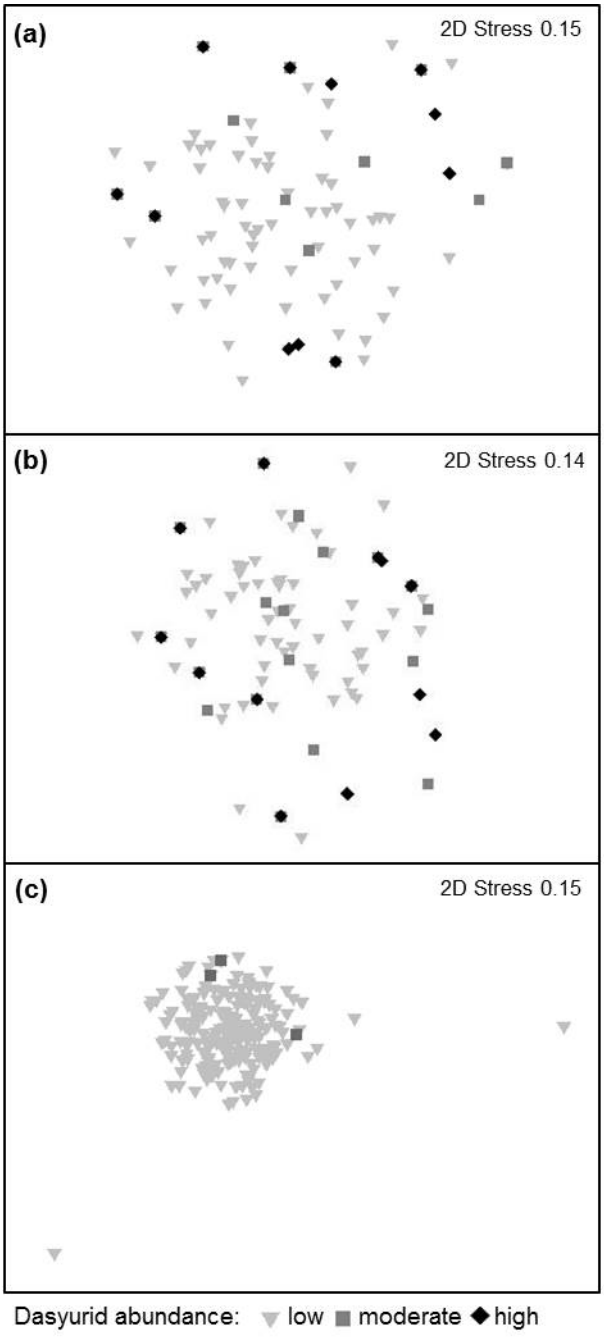

Figure S2. Non-metric multidimensional scaling ordinations of diet composition for nocturnal generalist lizards with (**a**) total dasyurid abundance, (**b**) *Sminthopsis youngsoni* abundance, and (**c**) diurnal generalist lizards with mulgara (*Dasycercus blythi*) abundance. Low abundance = 0–1.99 captures per 100 trap nights, moderate abundance = 2–3.99 captures per 100 trap nights, and high abundance ≥ 4 captures per 100 trap nights.