

Table S1. Numbers of field observations and faecal samples of kea (*Nestor notabilis*) collected in each habitat (alpine/rainforest; South Island, New Zealand) by season, sex and age.

		Spring				Summer				Autumn				Winter			
Mount Arthur (alpine)	<i>Observations</i> <i>Total = 5</i>	Male	0	Fledgling	0	Male	2	Fledgling	1	Male	0	Fledgling	0	Male	0	Fledgling	0
		Female	0	Juvenile	0	Female	3	Juvenile	4	Female	0	Juvenile	0	Female	0	Juvenile	0
		Unknown	0	Subadult	0	Unknown	0	Subadult	0	Unknown	0	Subadult	0	Unknown	0	Subadult	0
			Adult	0			Adult	0			Adult	0			Adult	0	
Death's Corner / Temple Basin (alpine)	<i>Observations</i> <i>Total = 34</i>	Male	5	Fledgling	0	Male	3	Fledgling	1	Male	3	Fledgling	2	Male	2	Fledgling	1
		Female	13	Juvenile	11	Female	0	Juvenile	3	Female	2	Juvenile	2	Female	1	Juvenile	1
		Unknown	0	Subadult	0	Unknown	2	Subadult	0	Unknown	1	Subadult	0	Unknown	2	Subadult	0
			Adult	7			Adult	1			Adult	2			Adult	3	
	<i>Faecal Samples</i> <i>Total = 59</i>	Male	2	Nestling	0	Male	8	Nestling	0	Male	4	Nestling		Male	7	Nestling	
		Female	0	Fledgling	0	Female	1	Fledgling	0	Female	4	Fledgling	8	Female	3	Fledgling	5
Unknown		0	Juvenile	0	Unknown	2	Juvenile	7	Unknown	19	Juvenile	1	Unknown	9	Juvenile	4	
			Subadult	0			Subadult	0			Subadult	2			Subadult	0	
		Adult	2			Adult	2			Adult	2			Adult	4		
		Unknown	0			Unknown	0			Unknown	14			Unknown	6		
Hawdon (alpine)	<i>Observations</i> <i>Total = 18</i>	Male	0	Fledgling	0	Male	16	Fledgling	4	Male	0	Fledgling	0	Male	0	Fledgling	0
		Female	0	Juvenile	0	Female	2	Juvenile	3	Female	0	Juvenile	0	Female	0	Juvenile	0
		Unknown	0	Subadult	0	Unknown	0	Subadult	0	Unknown	0	Subadult	0	Unknown	0	Subadult	0
			Adult	0			Adult	11			Adult	0			Adult	0	
	<i>Faecal Samples</i> <i>Total = 4</i>	Male	0	Nestling	0	Male	4	Nestling	0	Male	0	Nestling	0	Male	0	Nestling	0
		Female	0	Fledgling	0	Female	0	Fledgling	0	Female	0	Fledgling	0	Female	0	Fledgling	0
			Juvenile	0			Juvenile	3			Juvenile	0			Juvenile	0	
			Subadult	0			Subadult	0			Subadult	0			Subadult	0	
		Adult	0			Adult	1			Adult	0			Adult	0		
Craigieburn (alpine)	<i>Faecal Samples</i> <i>Total = 8</i>	Male	0	Nestling	0	Male	0	Nestling	0	Male	0	Nestling	0	Male	3	Nestling	0
		Female	0	Fledgling	0	Female	0	Fledgling	0	Female	0	Fledgling	0	Female	1	Fledgling	4
		Unknown	3	Juvenile	3	Unknown	0	Juvenile	0	Unknown	0	Juvenile	0	Unknown	1	Juvenile	0
				Subadult	0			Subadult	0			Subadult	0			Subadult	0
		Adult	0			Adult	0			Adult	0			Adult	1		
Okarito (rainforest)	<i>Faecal Samples</i> <i>Total = 21</i>	Male	7	Nestling	7	Male	2	Nestling	3	Male	1	Nestling	0	Male	1	Nestling	0
		Female	4	Fledgling	0	Female	2	Fledgling	0	Female	1	Fledgling	2	Female	3	Fledgling	0
				Juvenile	0			Juvenile	0			Juvenile	0			Juvenile	0
				Subadult	0			Subadult	0			Subadult	0			Subadult	1
				Adult	4			Adult	1			Adult	0			Adult	3
Red Tarns (alpine)	<i>Observations</i> <i>Total = 28</i>	Male	0	Fledgling	0	Male	7	Fledgling	21	Male	0	Fledgling	0	Male	0	Fledgling	0
		Female	0	Juvenile	0	Female	3	Juvenile	4	Female	0	Juvenile	0	Female	0	Juvenile	0
		Unknown	0	Subadult	0	Unknown	18	Subadult	2	Unknown	0	Subadult	0	Unknown	0	Subadult	0
		Adult	0			Adult	1			Adult	0			Adult	0		

Table S2. List of foods kea (*Nestor notabilis*) in both habitats (alpine/rainforest) were observed eating or which occurred in faecal samples. Key: *introduced species, †popular food (from observations, > 1% of feeding time), ‡ commonly occurring (found in > 5% of faecal samples), # previously unknown to be eaten by kea in alpine locations, § previously unknown to be eaten by kea in rainforest locations. Fl – Flower, Fr – Fruit, Le – Leaf/leaf-bud, Ne – Nectar, Ro – Root, Se – Seed, St – Stem; A – Alpine, R – Rainforest; O – Observation, FS – Faecal sample.

Species	Spring (Sep.–Nov.)	Summer (Dec.–Feb.)	Autumn (Mar.–May)	Winter (Jun.–Aug.)	Habitat	Source
<i>Achillea millefolium</i> *	Le, St				A	O
<i>Aciphylla</i> spp. ‡§	Fr		Fr		A + R	FS
<i>Agrostis capillaris</i> *#	Se, St				A	O
<i>Anisotome aromatica</i> †		Ro			A	O
<i>Anisotome haastii</i> #		St			A	O
Anthropogenic food †	Various	Various			A	O
<i>Astelia</i> spp.			Fr	Fr	A	FS
<i>Celmisia discolour</i>		St			A	O
<i>Celmisia spectabilis</i> (in flower) †		St, Ro, Fl			A	O
<i>Celmisia spectabilis</i> (in seed) †		Fl, St			A	O
<i>Celmisia traversii</i> #		Fl, St			A	O
<i>Coprosma cheesemanii</i> ‡	Fr	Fr, Le		Fr	A	O + FS
<i>Coprosma depressa</i>		Fr		Fr	A	FS
<i>Coprosma fowerakeri</i>		Fr		Fr	A	O + FS
<i>Coprosma intertexta</i> †‡§		Fr	Fr	Fr	A + R	O + FS
<i>Coprosma perpusilla</i> †		Fr		Fr	A	O + FS
<i>Coprosma pseudocuneata</i> ‡			Fr	Fr	A	FS
<i>Coprosma serrulata</i>			Fr		A	FS
<i>Coriaria angustissima</i> †#	Fl, Le, St	Fr			A	O + FS
<i>Coriaria sarmentosa</i> †‡	Fl	Fr	Fr		A	O + FS
<i>Crepis capillaris</i> *#	Le				A	O
<i>Dacrydium cupressinum</i>		Fr			R	FS
<i>Dracophyllum</i> spp. §	Fr			Fr	R	FS
<i>Fuscospora cliffortioides</i> †	Fl	Le		Le	A	O
<i>Gaultheria crassa</i> #	Fl				A	O
<i>Gaultheria depressa</i> †‡§	Fr	Fr	Fr	Fr	A + R	O + FS
<i>Gingidia montana</i>	Ro	Ro			A	O
Grasses (unidentified)	Se				A	O
<i>Hypochaeris radicata</i> *†#	Fl, Le, Ro, St				A	O
Introduced herb (unidentified) *†	Le				A	O
Invertebrate (unidentified) †	Invert				A	O
<i>Lepidothamnus laxifolius</i> #§	Fr		Fr	Fr	A	FS
<i>Leucogenes grandiceps</i> #		Fl			A	O
<i>Lotus pedunculatus</i> *#	St		St		A	O
<i>Luzula</i> spp.	Se		Se		A	O
<i>Muehlenbeckia axillaris</i> †		Fl, Fr			A	O
<i>Mycelis muralis</i> *	Fl, Le				A	O
<i>Nertera</i> spp. #	Fr	Fr		Fr	A + R	FS
<i>Pentachondra pumila</i>		Fr			A	O

Species	Spring (Sep.–Nov.)	Summer (Dec.–Feb.)	Autumn (Mar.–May)	Winter (Jun.–Aug.)	Habitat	Source
<i>Phormium cookianum</i> subsp. <i>cookianum</i>		Ne			A	O
<i>Phyllocladus alpinus</i> ‡§	Fr	Fr	Fr	Fr	A + R	FS
<i>Pilosella officinarum</i> *†#	Le, Ro	Fl, St			A	O
<i>Podocarpus nivalis</i> †‡§		Fr, Le		Fr	A + R	O + FS
<i>Prionoplus reticularis</i> (huhu beetle grub) §	Invert				R	O
<i>Pseudopanax</i> spp.	Fr		Fr		A + R	FS
<i>Rubus</i> spp. #	Fr				R	FS
<i>Rumex acetosella</i> *#	Le				A	O
<i>Senecio</i> spp.	Fl, St				A	O
<i>Trichosurus vulpecula</i> (brush-tail possum) †#		Decayed tail			A	O
<i>Uncinia</i> spp.			Se		R	FS
<i>Wahlenbergia</i> spp. #		Fl			A	O
<i>Weinmannia racemosa</i> #			Fr		A	FS