Supplemental Table 1. The list of all species in grazing and grazing exclusion paddocks (Niu et al., 2009, 2010; Wu et al., 2009).

Species	Palatability	Functional group	Species	Palatability	Functional group
Agrostis hugoniana	P	GG	*Euphorbia esula*	UP	FG
Agrostis micrantha	P	GG	*Euphrasia regelii*	UP	FG
Allium sikkimense	P	FG	*Gentiana macrophylla**	UP	FG
Astragalus polycladus	P	LG	*Gentiana sino-ornata*	UP	FG
Blysmus sinocompressus	P	SG	*Gentianopsis barbata*	UP	FG
Carex brunnescens	P	SG	*Geranium wilfordii*	UP	FG
Elymus nutans	P	GG	*Halenia elliptica*	UP	FG
Festuca sinensis	P	GG	*Lamiophlomis rotata*	UP	FG
Gueldenstaedtia diversifolia	P	LG	*Lancea tibetica*	UP	FG
Kobresia graminifolia	P	SG	*Leontopodium souliei*	UP	FG
Kobresia humilis	P	SG	*Ligularia virgaurea*	UP	FG
Kobresia kansuensis	P	SG	*Oxytropis kansuensis*	UP	LG
Kobresia tibetica	P	SG	*Parnassia palustris*	UP	FG
Plantago depressa	P	FG	*Pleurospermum pulszkyi*	UP	FG
Poa chalarantha	P	GG	*Polygonum viviparum*	UP	FG
Poa poophagorum	P	GG	*Potentilla anserine*	UP	FG
Potentilla fragarioides	P	FG	*Ranunculus tanguticus*	UP	FG
Roegneria nutans	P	SG	*Rumex patientia*	UP	FG

Scirpus pumilus	P	SG	*Saussurea hieracoides*	UP	FG
Stipa aliena	P	GG	*Saussurea pachyneura*	UP	FG
Anaphalis lactea	UP	FG	*Saussurea stella*	UP	FG
Anemone obtusiloba	UP	FG	*Swertia bimaculata*	UP	FG
Anemone rioularis	UP	FG	*Thalicturn alpinum*	UP	FG
Anemone trullifolia	UP	FG	*Thermopsis lanceolata*	UP	LG
Arenaria serpyllifolia	UP	FG	*Thlaspi arvense*	UP	FG
Aster alpinus	UP	FG	**Trollius farreri**	UP	FG
Cerastium arvense	UP	FG	*Veronica eriogyne*	UP	FG
Cremanthodium lineare	UP	FG			

Bold font indicates the dominant species. P, palatable species; UP, unpalatable species; GG, group of grass species; SG, group of sedge species; LG, group of leguminous species; FG, group of forbs species; *G. macrophylla* presented in GP only.
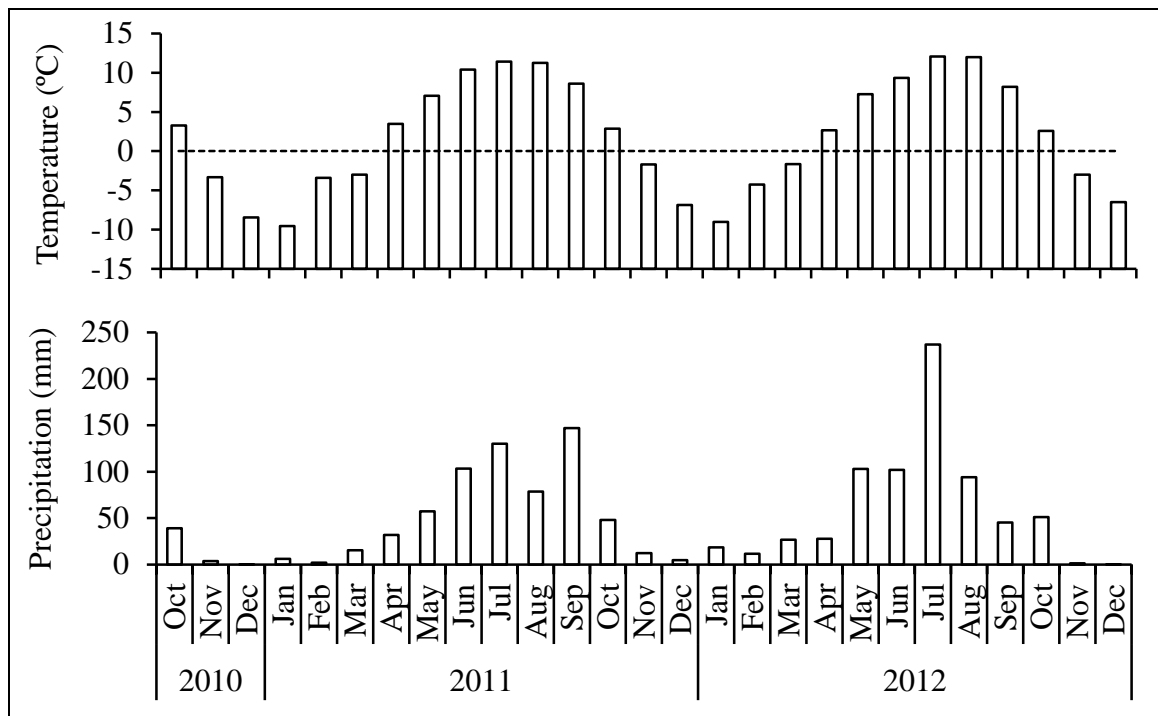
Figure S1. Mean temperature (°C) and total precipitation (mm) during the experiment.
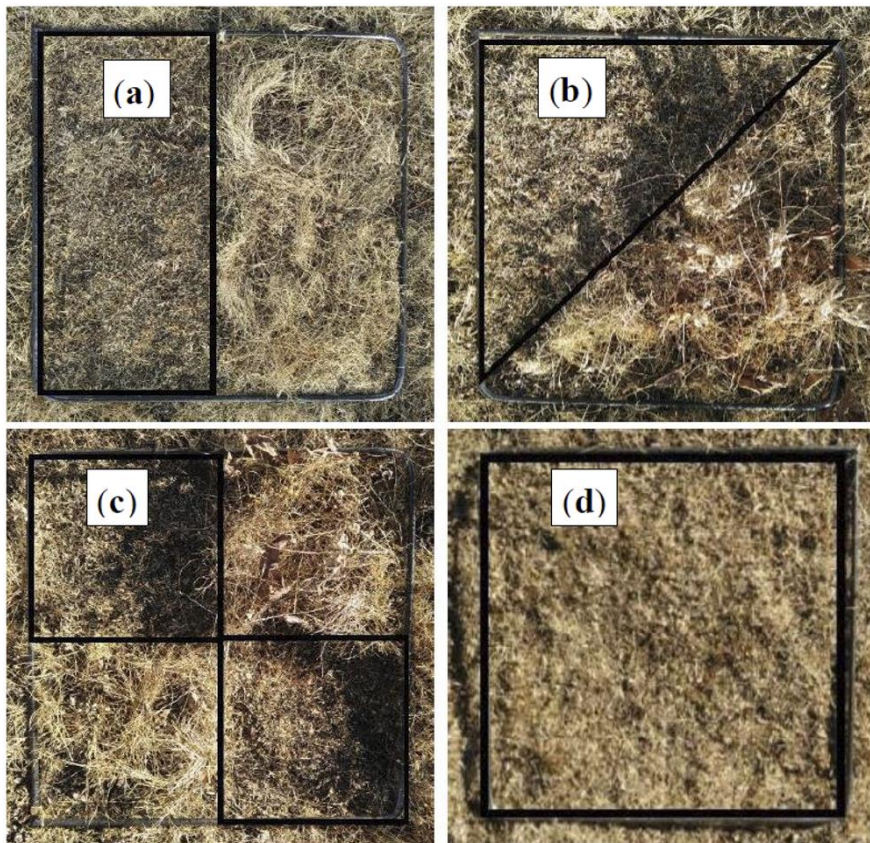
Figure S2. Field sampling methods: (**a**) half alongside, (**b**) half along diagonal, (**c**) two sub-quarters along

diagonal, and (**d**) additional quarter for supplementary litter collection to make up 20 g in quarter (a), (b) or (c).