

Table S1: Habitat covariates sampled by the used and available locations along the movement trajectories of 14 roe deer equipped with GPS telemetry collars. Habitat covariates were sampled during the spring and summer seasons 2013 in the eastern part of the Autonomous Province of Trento, Italy.

Covariate (Scale)	Spatial Unit	Type	Covariate Description
Topography (Macro-habitat)			
Aspect	Location point	Categorical	Four classes (north, south, east, west)
Slope	Location point	Continuous	Ground downward/upward inclination; degrees (0–50°)
Elevation	Location point	Continuous	Altitude a.s.l. (above sea level); meters (457–1916 m)
Habitat type (Macro-habitat)			
	Grid cell (approx. 50 m surrounding)	Categorical	Dominant tree/shrub species or general feature (e.g., field) of sampling locations
Cover (Macro-habitat)			
Canopy cover	Grid cell (approx. 50 m surrounding)	Continuous	Mean number of Lemmon’s densitometer squares covered by tree crowns against open sky in north, south, east and west (0–24 squares)
Hiding cover at 5 meters	Grid cell (approx. 50 m surrounding)	Continuous	Number of covered squares in a cover board at a randomly chosen distance of 5 m from the sampling locations (0–30 squares)
Hiding cover at 20 meters	Grid cell (approx. 50 m surrounding)	Continuous	Number of covered squares in a cover board at a randomly chosen distance of 20 m from the sampling locations (0–30 squares)
Vegetation composition (Micro-habitat)			
Forbs	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by forbs
Shrubs	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by shrubs (all plant species with a woody stem and a diameter <5 cm); from 0 to 1.5 m above soil level
Grasses/sedges	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by grasses/sedges
Ferns	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by ferns
Ground-layer (Micro-habitat)			
Bare/rocks	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by bare and rocks
Woody debris	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by woody debris
Mosses/lichens	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by mosses and lichens
Litter	Sampling quadrats (2 m ²)	Continuous	% of 2×1 m ² sampling frames covered by litter (dead leaves, needles and cones)
Shrub composition (Micro-habitat)			
Shrub species	Sampling quarter circle (7 ²)	Categorical	Shrub species present within a 3 m radius quarter circle from the lower left corner of the first sampling frame
Vegetation/shrub phenology (Micro-habitat)			
Old alive	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of old alive plants
Newly emergent	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of newly emergent plants
Old alive with new leaves	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of shrubs with new leaves
Old alive with buds	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of shrubs with buds
Flowering	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of plants with flowers
Fruiting	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of plants with fruits
Mature	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of plants with both flowers and fruits
Cured	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of plants dead the current year
Old dead	Samp[ling subunit (quadrat or quarter circle)	Continuous	% of plants dead the previous year