

Field surveys can improve predictions of habitat suitability for reintroductions: a swift fox case study

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SUPPLEMENTARY TABLE 1 Coyote and Leporidae occupancy estimation models ranked by Akaike information criterion (AIC). Models presented are those with a cumulative delta AIC < 2 and the null model. Models based on camera trap data collected June – October 2018, May – September 2019. Northern Great Plains, Montana, USA. negLogLike = negative loglikelihood; AIC = Akaike information criterion; delta = delta AIC; AICwt = AIC weight; cumltvWt = cumulative weight

	Model	negLogLike	nPars	AIC	delta	AICwt	cumltvWt
Leporidae	~factor(trail) ~ shrub cover+ shrub height+ slope + canopy cover	911.85	7	1837.7	0	0.388	0.388
	~factor(trail) ~ Human disturbance index + shrub cover + shrub height + slope + canopy cover	911.24	8	1838.48	0.78	0.2623	0.65
	~factor(trail) ~ shrub height + shrub cover	914.6	5	1839.19	1.49	0.184	0.834
	~factor(trail) ~ intercept only (<i>null</i>)	928.12	3	1862.25	24.55	1.81E-06	0.999
Coyote	~factor(trail) + shrub cover 5m radius~ shrub cover + shrub height + slope + canopy cover	2040.7	8	4097.4	0	0.758	0.758
	~factor(trail) + shrub cover 5m radius ~ human disturbance index + shrub cover + shrub height + slope + canopy cover	2040.92	9	4099.84	2.44	0.225	0.982
	~factor(trail) + shrub cover 5m radius ~ Intercept only (<i>null</i>)	2051.08	4	4110.16	12.75	0.0013	0.998

SUPPLEMENTARY TABLE 2 Environmental variables extracted from ENV-DATA application available on Movebank and used to correct for detection bias in the Bioacoustics model.

Variable	Source	Units	Description
Cloud cover	European Centre for Medium-Range Weather Forecasts (ECMWF) Interim Full Daily at Surface Forecast (SFC-FC) Total Cloud Cover	0-1	The proportion of the model grid cell covered by clouds occurring in high levels of the troposphere.
Total precipitation (0.75 degrees, 3-hourly)	ECMWF Interim Full Daily SFC-FC Total Precipitation	m of water	Accumulated precipitation, including rain and snow, at ground level.
Wind speed (10 m above the earth's)	ECMWF Interim Full Daily SFC-FC Wind (10 m above ground U component)	m/s	Velocity of the east-west (zonal) winds at 10 m above ground.
Temperature	ECMWF Interim Full Daily SFC-FC Temperature (2m above Ground)	K	Air temperature 2 m above ground level.