Appendix B. Focal Species and Landscape Integrity Resistance Values

Appendix B. Table B.1. Landscape features and resistance values for all focal species (by code[a]).

Landscape category *Landscape class*	*ANBO*	*CEEL*	*CEUR*	*GLSA*	*GUGU*	*LECA*	*LETO*	*LYCA*	*MAAM*	*ODHE*	*ORAM*	*OVCA*	*SCGR*	*TATA*	*TYPH*	*URAM*
Land cover/land-use																
agriculture	50	20	6	N/A[b]	100	2	2	100	100	5	1	7	100	15	6	100
urban/developed	500	100	1000	N/A	1000	1000	1000	200	200	100	0	500	200	1000	1000	200
water	10	20	10	N/A	100	50	50	100	100	20	8	10	500	40	10	100
sparsely vegetated	2	5	4	N/A	0	1	2	50	50	5	0	0	5	100	6	1
alpine	10	0	50	N/A	0	100	75	10	5	0	0	5	500	25	20	0
riparian	0	0	4	N/A	1	2	2	0	0	0	0	5	0	5	1	0
wetland	0	0	10	N/A	1	5	5	0	1	1	8	5	100	40	8	0
grass-dominated	0	0	1	N/A	1	5	0	50	50	2	0	0	5	0	0	1
shrub-dominated	0	0	0	N/A	1	0	0	50	50	2	0	1	5	0	0	1
dry forest	0	0	100	N/A	0	50	50	1	10	0	0	0	0	50	4	1
wet forest	0	0	1000	N/A	0	500	500	0	0	0	0	5	0	100	50	0
Elevation																
0–250 meters	0	0	0	N/A	10	0	3	50	5	0	2	0	0	N/A	0	5
> 250–500 meters	0	0	0	N/A	10	0	0	20	5	0	1	0	0	N/A	0	5
> 500–750 meters	0	0	0	N/A	10	0	0	10	5	0	1	0	0	N/A	0	4
> 750–1000 meters	0	0	0	N/A	1	3	1	5	5	0	0	1	0	N/A	0	3
> 1000–1500 meters	0	0	0	N/A	1	5	1	0	2	0	0	1	5	N/A	0	2
> 1500–2000 meters	0	0	0	N/A	0	10	7	0	1	1	0	5	10	N/A	0	1
> 2000–2500 meters	20	0	10	N/A	0	25	25	0	1	2	0	5	20	N/A	10	0
> 2500–3300 meters	40	25	50	N/A	10	50	50	20	1	25	1	10	100	N/A	50	1
> 3300 meters	500	25	500	N/A	100	500	500	1000	100	25	10000	1000	100	N/A	500	100
Slope																
0–20 degrees	0	0	0	N/A	0	0	0	0	0	0	0	5	0	0	0	0
> 20–40 degrees	0	0	1	N/A	1	0	0	2	1	0	0	0	0	10	1	1
> 40 degrees	0	30	2	N/A	5	10	10	10	3	30	0	2	5	25	2	3
Acres/DwellingUnit																
> 80 ac/du	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
> 40 to ≤ 80 acres/du	0	0	10	0	5	0	0	2	5	0	10	2	0	0	10	10
> 20 to ≤ 40 acres/du	20	5	100	5	10	2	5	4	10	1	100	5	5	0	100	10
> 10 to ≤ 20 acres/du	50	10	1000	50	200	10	25	10	15	2	1000	10	10	25	1000	10
≤ 10 acres/du	500	20	1000	100	200	25	100	100	50	10	10000	100	50	35	1000	100
TransFreeway																
> 500–1000 m buffer	25	10	0	0	100	0	0	10	1	0	0	100	0	0	0	10
> 0–500 m buffer	50	30	4	0	200	1	1	100	50	0	10	200	0	0	4	50
centerline	500	100	50	1000	400	250	250	1000	1000	200	900	1000	200	1000	50	1000
TransMajorHwy																
> 500–1000 m buffer	10	5	0	0	5	0	0	5	1	0	0	5	0	0	0	5
> 0–500 m buffer	20	10	3	0	10	0	0	10	10	0	0	10	0	0	3	10
centerline	100	80	30	500	70	50	50	100	100	50	8	500	100	200	30	100
TransSecondaryHwy																
> 500–1000 m buffer	0	3	0	0	2	0	0	3	1	0	0	5	0	0	0	4
> 0–500 m buffer	2	8	1	0	4	0	0	5	6	0	0	10	0	0	1	8
centerline	5	50	5	10	8	10	10	20	50	20	8	50	50	35	5	50
TransLocalRoad																
> 500–1000 m buffer	0	0	0	0	1	0	0	1	1	0	0	2	0	0	0	1
> 0–500 m buffer	1	1	0	0	1	0	0	1	1	0	0	5	0	0	0	2
centerline	2	5	2	0	1	5	5	1	1	2	0	10	5	5	2	3
ForestStructure																
nonforest	N/A	N/A	N/A	100	N/A	N/A	N/A	10	10	N/A	N/A	0	N/A	0	0	1
0–40%; ≤ 25 m	N/A	N/A	N/A	20	N/A	N/A	N/A	5	7	N/A	N/A	0	N/A	50	2	0
0–40%; > 25 m	N/A	N/A	N/A	20	N/A	N/A	N/A	5	7	N/A	N/A	0	N/A	50	4	0
> 40–70%; ≤ 25 m	N/A	N/A	N/A	5	N/A	N/A	N/A	2	5	N/A	N/A	10	N/A	100	6	0
> 40–70%; > 25 m	N/A	N/A	N/A	5	N/A	N/A	N/A	2	5	N/A	N/A	10	N/A	100	8	0
> 70–100%; ≤ 25 m	N/A	N/A	N/A	0	N/A	N/A	N/A	0	1	N/A	N/A	25	N/A	100	10	0
> 70–100%; > 25 m	N/A	N/A	N/A	0	N/A	N/A	N/A	0	0	N/A	N/A	25	N/A	100	10	0

[a]*Species codes: ANBO = western toad; CEEL = elk; CEUR = Greater Sage-Grouse; GLSA = northern flying squirrel; GUGU = wolverine; LECA = black-tailed jackrabbit; LETO = white-tailed jackrabbit; LYCA = Canada lynx; MAAM = American marten; ODHE = mule deer; ORAM = mountain goat; OVCA = bighorn sheep; SGCR = western gray squirrel; TATA = American badger; TYPH = Sharp-tailed Grouse; and URAM = American black bear.*

[b]*Landscape class not included in the model.*

Appendix B Table B.2. Landscape integrity resistance model transformations in relation to landscape class values.

Landscape category	*Landscape class*	*Landscape integrity resistance model values*[a]			
		Linear	*Low*	*Medium*	*High*
Land cover	agriculture	61	54	392	2867
Land cover	urban/developed	86	100	1000	10000
Land cover	water	41	27	14	724
Land cover	sparsely vegetated	1	1	1	1
Land cover	alpine	1	1	1	1
Land cover	riparian	1	1	1	1
Land cover	wetland	1	1	1	1
Land cover	grass-dominated	1	1	1	1
Land cover	shrub-dominated	1	1	1	1
Land cover	dry forest	1	1	1	1
Land cover	wet forest	1	1	1	1
Elevation	0–250 meters	N/A[b]	N/A	N/A	N/A
Elevation	> 250–500 meters	N/A	N/A	N/A	N/A
Elevation	> 500–750 meters	N/A	N/A	N/A	N/A
Elevation	> 750–1000 meters	N/A	N/A	N/A	N/A
Elevation	> 1000–1500 meters	N/A	N/A	N/A	N/A
Elevation	> 1500–2000 meters	N/A	N/A	N/A	N/A
Elevation	> 2000–2500 meters	N/A	N/A	N/A	N/A
Elevation	> 2500–3300 meters	N/A	N/A	N/A	N/A
Elevation	> 3300 meters	N/A	N/A	N/A	N/A
Slope	0–20 degrees	N/A	N/A	N/A	N/A
Slope	> 20–40 degrees	N/A	N/A	N/A	N/A
Slope	> 40 degrees	N/A	N/A	N/A	N/A
Acres/DwellingUnit	> 80 ac/du	0	0	0	0
Acres/DwellingUnit	> 40 to ≤ 80 acres/du	31	17	70	291
Acres/DwellingUnit	> 20 to ≤ 40 acres/du	41	27	140	724
Acres/DwellingUnit	> 10 to ≤ 20 acres/du	41	27	140	724
Acres/DwellingUnit	≤ 10 acres/du	86	100	1000	10000
TransFreeway	> 500–1000 m buffer	23	11	34	112
TransFreeway	> 0–500 m buffer	59	51	364	2598
TransFreeway	centerline	86	100	1000	10000
TransMajorHwy	> 500–1000 m buffer	23	11	34	112
TransMajorHwy	> 0–500 m buffer	59	51	364	2598
TransMajorHwy	centerline	86	100	1000	10000
TransSecondaryHwy	> 500–1000 m buffer	18	7	20	55
TransSecondaryHwy	> 0–500 m buffer	64	59	452	3468
TransSecondaryHwy	centerline	71	70	590	4951
TransLocalRoad	> 500–1000 m buffer	0	0	0	0
TransLocalRoad	> 0–500 m buffer	16	7	17	43
TransLocalRoad	centerline	41	27	140	724
ForestStructure	nonforest	N/A	N/A	N/A	N/A
ForestStructure	sparse_low; 0–40%; ≤ 25 m	N/A	N/A	N/A	N/A
ForestStructure	sparse_high; 0–40%; > 25 m	N/A	N/A	N/A	N/A
ForestStructure	open_low; > 40–70%; ≤ 25 m	N/A	N/A	N/A	N/A
ForestStructure	open_high ; > 40–70%; > 25 m	N/A	N/A	N/A	N/A
ForestStructure	dense_low; > 70–100%; ≤ 25 m	N/A	N/A	N/A	N/A
ForestStructure	dense_high; > 70–100%; > 25 m	N/A	N/A	N/A	N/A

[a]*Rounded to nearest integer: Linear = linear transformation model; Low = low sensitivity to anthropogenic influence; Medium = medium sensitivity to anthropogenic influence; and High = high sensitivity to anthropogenic influence.*

[b]*Landscape class not included in the model.*