**Prioritizing highway defragmentation locations for restoring landscape connectivity** MIKEL GURRUTXAGA AND SANTIAGO SAURA

**APPENDIX 1**

**T****able S1** Accumulated connectivity importance of each potential wildlife overpass (sum of *dPCk* of all links running through the overpass location) and overpass ranking (*rd*) for each dispersal distance (*d*) obtained by using a resistance value for viaducts and defragmentation locations of 15 units (50% below the resistance value of 30 used in the study). \*Rank changes detected in comparison with the ranking obtained by using a resistance value of 30 units.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Overpass number* | *d* = 1 km (*r1*) | *d* = 5 km (*r5*) | *d* = 10 km (*r10*) | *d* = 25 km (*r25*) |
| 1 | 68.25388 (1) | 29.42782 (1) | 16.13224 (1) | 6.81348 (1) |
| 2 | 53.98663 (2) | 26.98931 (2) | 15.05284 (2) | 6.42312 (2) |
| 3 | 0.98137 (3) | 1.31776 (3) | 0.82936 (3) | 0.38020 (3) |
| 4 | 0.88676 (4) | 0.59076 (4) | 0.33782 (4) | 0.14598 (4) |
| 5 | 0.22850 (5) | 0.15758 (5) | 0.09351 (5) | 0.04144 (5) |
| 6 | 0.09096 (6) | 0.04968 (6) | 0.02809 (6) | 0.01200 (6) |
| 7 | 0.04849 (7) | 0.00946 (8)\* | 0.00462 (8)\* | 0.00181 (9)\* |
| 8 | 0.02000 (8) | 0.00851 (9)\* | 0.00458 (9)\* | 0.00184 (8)\* |
| 9 | 0.01472 (9) | 0.00328 (10) | 0.00163 (10) | 0.00062 (10) |
| 10 | 0.01211 (10) | 0.01139 (7) | 0.00703 (7) | 0.00316 (7) |
| 11 | 0.00142 (11) | 0.00133 (11) | 0.00078 (11) | 0.00033 (11) |

**Table S2** Accumulated connectivity importance of each potential wildlife overpass (sum of *dPCk* of all links running through the overpass location) and overpass ranking (*rd*) for each dispersal distance (*d*) obtained by using a resistance value for viaducts and defragmentation locations of 45 units (50% above the resistance value of 30 used in the study). No rank changes among the potential wildlife overpasses were detected compared to the ranking obtained by using a resistance value of 30 units.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Overpass number* | *d* = 1 km (*r1*) | *d* = 5 km (*r5*) | *d* = 10 km (*r10*) | *d* = 25 km (*r25*) |
| 1 | 65.13739 (1) | 28.85055 (1) | 15.87488 (1) | 6.72010 (1) |
| 2 | 48.20680 (2) | 25.15417 (2) | 14.11106 (2) | 6.04257 (2) |
| 3 | 0.88163 (3) | 1.24989 (3) | 0.79189 (3) | 0.36449 (3) |
| 4 | 0.81368 (4) | 0.56655 (4) | 0.32581 (4) | 0.14125 (4) |
| 5 | 0.21856 (5) | 0.14946 (5) | 0.08866 (5) | 0.03932 (5) |
| 6 | 0.09008 (6) | 0.05066 (6) | 0.02884 (6) | 0.01237 (6) |
| 7 | 0.03267 (7) | 0.00683 (9) | 0.00336 (9) | 0.00129 (9) |
| 8 | 0.01726 (8) | 0.00759 (8) | 0.00410 (8) | 0.00164 (8) |
| 9 | 0.01503 (9) | 0.00340 (10) | 0.00169 (10) | 0.00067 (10) |
| 10 | 0.01146 (10) | 0.01099 (7) | 0.00681 (7) | 0.00307 (7) |
| 11 | 0.00140 (11) | 0.00137 (11) | 0.00081 (11) | 0.00034 (11) |