Supporting Information

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SI Text

Alternative Analyses. Correlation coefficients (r) are commonly used measures of effect sizes in metaanalyses and are normalized by using the Fisher's z-transformation (z_r) to calculate a grand mean among studies:

$$z_r = 0.5 \ln \left(\frac{1+r}{1-r} \right).$$

The transformed values are then weighted by the inverse of their variances, which equates to 1/(df-1) for $z_r(1)$. In the analyses presented in Figs. 1–3, pR^2 values were unweighted and untransformed so that the distribution of the data were readily interpretable. As an alternative to these analyses, we present results by using the weighted Fisher's z-transformation to facilitate comparisons with other metaanalyses. We caution that effect sizes were measured with pR^2 values rather than correlation coefficients in our study (because the response variable was dichotomous), and the z-transformation therefore may not be appropriate. However, results from transformed and untransformed analyses were quite similar (Fig. S2). Additionally, the backtransformed mean pR^2 values from the alternative analyses were always lower than the unweighted/untransformed means, indicating that the low effect sizes reported in Fig. 1 were, if anything, overestimates.

Alternative analyses to those presented in Figs. 2 and 3 were also conducted. In Figs. S3 and S4, the slope parameters from the logistic regression analyses were used as measures of effect size instead of the pR^2 values. The slope parameter may be considered a superior measure because it offers more information, giving the direction of the area or isolation effect and the magnitude. Additionally, the slope can be weighed by the inverse of its variance estimate $(1/se^2)$. The disadvantage of the slope parameter is that it is more difficult to interpret than a goodness-of-fit measure. Either way, slope parameters and pR^2 values were correlated (r = 0.79 for patch area, r = -0.54 for patch isolation) and analyses had no qualitative differences, demonstrating the robustness of the results. In all alternative analyses, the slopes were weighted by the inverse of their variances.

Comparison of Simple and Complex Isolation Measures. Simple nearest-neighbor distance measures, such as NH (distance to nearest patch) and NS (distance to nearest source patch), are easy to calculate and widely used by conservation biologists and planners, but a complex measure that take into account the distances to all sources and species' dispersal abilities, known as an incidence function connectivity measure, has been advocated as superior in a study by Moilanen and Nieminen (96):

$$S_i = \sum_{j \neq i} \exp(-\alpha d_{ij}) A_j^b,$$

where $\alpha = 1$ /average migration distance, $d_{ij} = \text{distance}$ between patch i and occupied patch j, $A_j = \text{the}$ area of patch j, and b = a parameter scaling the effect of immigration to area. Moilanen and Nieminen advocate the use of S_i based on their comparison of models predicting colonization of two butterfly metapopulations and a review of 74 papers that measured isolation. We were able to calculate S_i for 24 of the population networks in our study (including the 2 used in the previous study), and this larger

dataset was used to compare NH, NS, S_i as predictors of occupancy. NS actually explained the same amount of deviance in occupancy as S_i did across the 24 population networks (34).

Relation of Occupancy Models to Species-Area Curves. The speciesarea relationship (SAR) describes the increase in the number of species (S) with sampling area (A), such that $S = cA^z$. A metaanalysis of 794 SARs showed that the slope of this relationship, z, varies substantially among communities, from 0-1 (2). The SAR of a community can be derived from the occupancy models of individual species that make up the community (3). Thus, if species in 1 community are more sensitive to area, on average, than species in another community, occupancy probabilities should increase more rapidly with area and a steeper SAR slope (z) should result. To relate our findings to the species-area literature, we created SARs for the 10 studies with the highest numbers of species (see Table S1). We then compared the slope of the SAR to the median slope of the occupancy model (i.e., the change in probability of species occupancy in relationship to log area) for each community. As predicted, z was positively related to the median occupancy slope across the 10 communities ($R^2 =$ $0.70, z = 0.12 \times \text{median occupancy slope} + 0.05)$, indicating that communities with species that are more sensitive to area have steeper species-area curves.

Additional Considerations. Researchers have used a variety of methods to survey patches. Survey protocols appeared to be most consistent among studies of amphibians and reptiles, with combined auditory and visual surveys used by most amphibian researchers and visual searches used by reptile researchers. Birds were usually surveyed by using point counts, and mammals were often detected by using live trapping or searching for sign such as tracks and feces. Invertebrates were surveyed by using a variety of methods, usually within an array of small plots in the patches. We classified survey methods broadly into 3 groups: (i) total area of all patches surveyed (21% of population networks), (ii) survey effort proportional to patch size (65%), or (iii) equal survey effort in each patch (14%). The strength of patch area effects varied among survey methods: pR^2 values were highest for proportionally surveyed population networks ($\bar{x} = 0.22$), moderate for complete surveys ($\bar{x} = 0.16$), and lowest for equal-effort surveys ($\bar{x} = 0.13$; $F_{2,795} = 11.3$, P < 0.0001).

Surveys with equal sampling effort across all patches effectively remove the "sampling effect," in which species are more likely to be detected in larger patches simply because more area is searched (4). Of the 120 population networks sampled equally, we had isolation measures for 31 (all of which were landscape isolation measures). The stronger effect of patch area in comparison to landscape isolation (reported in Fig. 1*A*) disappeared when we restricted analyses to studies with equal sampling effort in all patches (paired t test; $t_{30} = -0.46$, P = 0.64).

Detection probabilities undoubtedly varied among species and studies. Although increasingly recognized as an important consideration in presence/absence surveys (5), researchers often visit sites only once and detection probabilities cannot be calculated from these studies. Even when researchers survey repeatedly, detection probabilities are often not calculated or reported and we were therefore unable to correct for imperfect detection in this metaanalysis. Pellet *et al.* (97) recently assessed detection probabilities for several bird, amphibian, and butterfly

metapopulations and found substantial variation among species but low variation among taxonomic groups (mean detection probabilities were 60% for butterflies, 56% for amphibians, and 66% for birds). Although detection probabilities likely vary among studies, they should not vary systematically among patches within studies. Variation in detection probability should therefore affect the intercepts of logistic regression analyses rather than the slope parameters or model fits. In other words, the occurrence probabilities would be reduced in all patches for a species that is particularly difficult to detect, which would shift the logistic curve along the *x* axis but not change its shape.

- 1. Hedges LV, Olkin I (1985) Statistical Methods for Metaanalysis (Academic, New York).
- 2. Drakare S, Lennon JJ, Hillebrand H (2006) The imprint of the geographical, evolutionary and ecological context on species-area relationships. *Ecol Lett* 9:215–227.
- Ovaskainen O, Hanski I (2003) The species-area relationship derived from speciesspecific incidence functions. Ecol Lett 6:903–909.
- Coleman BD, Mares MA, Willig MR, Hsieh YH (1982) Randomness, area, and species richness. Ecology 63:1121–1133.
- Moilanen A (2002) Implications of empirical data quality to metapopulation model parameter estimation and application. Oikos 96:516–530.
- Banks SC, et al. (2005) The effects of habitat fragmentation due to forestry plantation establishment on the demography and genetic variation of a marsupial carnivore, Antechinus agilis. Biol Conserv 122:581–597.
- Bellamy PE, et al. (1998) The influences of habitat, landscape structure, and climate on local distribution patterns of the nuthatch (Sitta europaea L.). Oecologia 115:127–136.
- 8. Biedermann R (2005) Incidence and population dynamics of the leaf beetle *Gonioctena olivacea* in dynamic habitats. *Ecography* 28:673–681.
- Blake JG (1991) Nested subsets and the distribution of birds on isolated woodlots. Conserv Biol 5:58–66.
- Bonte D, Maelfait JP (2005) Spatial association between a spider wasp and its host in fragmented dune habitats. J Arachnol 33:222–229.
- Bonte D, Baert L, Lens L, Maelfait JP (2004) Effects of aerial dispersal, habitat specialisation, and landscape structure on spider distribution across fragmented grey dunes. Ecography 27:343-349.
- Bradford DF, Neale AC, Nash MS, Sada DW, Jaeger JR (2003) Habitat patch occupancy by toads (*Bufo punctatus*) in a naturally fragmented desert landscape. *Ecology* 84:1012–1023.
- Brown JH (1971) Mammals on mountaintops: Nonequilibrium insular biogeography. Am Nat 105:467–478.
- Carr LW, Fahrig L (2001) Effect of road traffic on two amphibian species of differing vagility. Conserv Biol 15:1071–1078.
- Celada C, Bogliani G, Gariboldi A, Maracci A (1994) Occupancy of isolated woodlots by the red squirrel Sciurus vulgaris L in Italy. Biol Conserv 69:177–183.
- Chapman CA, Chapman LJ, Vulinec K, Zanne A, Lawes MJ (2003) Fragmentation and alteration of seed dispersal processes: An initial evaluation of dung beetles, seed fate, and seedling diversity. *Biotropica* 35:382–393.
- Crochet PA, Chaline O, Cheylan M, Guillaume CP (2004) No evidence of general decline in an amphibian community of Southern France. Biol Conserv 119:297–304.
- Cronin JT (2004) Host-parasitoid extinction and colonization in a fragmented prairie landscape. *Oecologia* 139:503–514.
- Crooks KR (2002) Relative sensitivities of mammalian carnivores to habitat fragmentation. Conserv Biol 16:488–502.
- Crooks KR, Suarez AV, Bolger DT, Soule ME (2001) Extinction and colonization of birds on habitat islands. Conserv Biol 15:159–172.
- Davis BNK, Jones PE (1986) Insects on isolated colonies of common rock rose Helianthemum chamaecistus. Ecol Entomol 11:267–281.
- Dinesen L, Lehmberg T, Rahner MC, Fjeldsa J (2001) Conservation priorities for the forests of the Udzungwa Mountains, Tanzania, based on primates, duikers and birds. *Biol Conserv* 99:223–236.
- 23. Dunning JB, Borgella R, Clements K, Meffe GK (1995) Patch isolation, corridor effects, and colonization by a resident sparrow in a managed pine woodland. *Conserv Biol*
- Eber S, Brandl R (2003) Regional patch dynamics of Cirsium arvense and possible implications for plant-animal interactions. J Veg Sci 14:259–266.
- Fleishman E, Ray C, Sjogren-Gulve P, Boggs CL, Murphy DD (2002) Assessing the roles
 of patch quality, area, and isolation in predicting metapopulation dynamics. Conserv
 Biol 16:706–716.
- Forys E, Humphrey SR (1999) The importance of patch attributes and context to the management and recovery of an endangered lagomorph. Landsc Ecol 14:177–185.
- Franken RJ, Hik DS (2004) Influence of habitat quality, patch size, and connectivity on colonization and extinction dynamics of collared pikas Ochotona collaris. J Anim Ecol 73:889–896.
- Ganzhorn JU, Fietz J, Rakotovao E, Schwab D, Zinner D (1999) Lemurs and the regeneration of dry deciduous forest in Madagascar. Conserv Biol 13:794–804.
- Ganzhorn JU, Goodman SM, Ramanamanjato JB, Ralison J, Rakotondravony DBR (2000) Effects of fragmentation and assessing minimum viable populations of lemurs in Madagascar. *Bonn Zool Monogr* 46:265–272.
- Ganzhorn JU, Goodman SM, Dehgan A (2003) in The Natural History of Madagascar, eds Goodman SM, Benstead JP (Univ Chicago Press, Chicago), pp 1228–1234.
- 31. Gehring TM (2000) PhD Thesis (Purdue, West Lafayette, IN).

To separate the effects of patch area and isolation on occupancy patterns, the size and isolation of patches should be uncorrelated. There was no overall correlation across studies (grand mean r = -0.01, 95% CI = -0.04-0.01, n = 60), although correlations ranged from -0.48 to 0.76 and were significant for 10 individual studies. Area and isolation effects may have been somewhat confounded for these studies but probably had little effect on the results. The area-isolation correlation surpassed the commonly used cutoff of 0.7 only in 1 single-metapopulation study (27).

- 32. Gottfried BM (1979) Small mammal populations in woodlot islands. *Am Midl Nat* 102:105–112.
- Grayson DK, Livingston SD (1993) Missing mammals on Great Basin mountains: Holocene extinctions and inadequate knowledge. Conserv Biol 7:527–532.
- 34. Prugh LR, An evaluation of patch connectivity measures. Ecol Appl, in press.
- 35. Hanski I, Kuussaari M, Nieminen M (1994) Metapopulation structure and migration in the butterfly *Melitaea cinxia*. *Ecology* 75:747–762.
- Harrison S, Murphy DD, Ehrlich PR (1988) Distribution of the Bay checkerspot butterfly, *Euphydryas editha bayensis*: Evidence for a metapopulation model. Am Nat 132:360 – 382.
- Hecnar SJ, McLoskey RT (1996) Regional dynamics and the status of amphibians. Ecology 77:2091–2097.
- 38. Hinsley SA, Bellamy PE, Newton I, Sparks TH (1996) Influences of population size and woodland area on bird species distributions in small woods. *Oecologia* 105:100–106.
- 39. Hjermann DO, Ims RA (1996) Landscape ecology of the wart-biter *Decticus verrucivorus* in a patchy landscape. *J Anim Ecol* 65:768–780.
- Hokit DG, Stith BM, Branch LC (1999) Effects of landscape structure in Florida scrub: A population perspective. Ecol Appl 9:124–134.
- James M, Gilbert F, Zalat S (2003) Thyme and isolation for the Sinai baton blue butterfly (Pseudophilotes sinaicus). Oecologia 134:445–453.
- Kitchener DJ, Chapman A, Muir BG, Palmer M (1980) The conservation value for mammals of reserves in the western Australian wheat belt. Biol Conserv 18:179–207.
- Kitchener DJ, Chapman A, Dell J, Muir BG (1980) Lizard assemblage and reserve size and structure in the western Australian wheat belt: Some implications for conservation. *Biol Conserv* 17:25–62.
- Knapp RA, Matthews KR, Preisler HK, Jellison R (2003) Developing probabilistic models to predict amphibian site occupancy in a patchy landscape. Ecol Appl 13:1069–1082.
- Krauss J, Steffan-Dewenter I, Tscharntke T (2003) How does landscape context contribute to effects of habitat fragmentation on diversity and population density of butterflies? J Biogeogr 30:889–900.
- Krauss J, Steffan-Dewenter I, Tscharntke T (2004) Landscape occupancy and local population size depends on host plant distribution in the butterfly Cupido minimus. Biol Conserv 120:355–361.
- Kruess A, Tscharntke T (2000) Species richness and parasitism in a fragmented landscape: experiments and field studies with insects on Vicia sepium. Oecologia 122:129– 137
- Lawes MJ, Mealin PE, Piper SE (2000) Patch occupancy and potential metapopulation dynamics of three forest mammals in fragmented afromontane forest in South Africa. Conserv Biol 14:1088–1098.
- 49. Lens L, Van Dongen S, Norris K, Githiru M, Matthysen E (2002) Avian persistence in fragmented rainforest. *Science* 298:1236–1238.
- Lindenmayer DB, Lacy RC (2002) Small mammals, habitat patches and PVA models: A field test of model predictive ability. *Biol Conserv* 103:247–265.
- 51. Lomolino MV, Davis R (1997) Biogeographic scale and biodiversity of mountain forest mammals of western North America. *Global Ecol Biogeogr Lett* 6:57–76.
- Lomolino MV, Perault DR (2001) Island biogeography and landscape ecology of mammals inhabiting fragmented, temperate rain forests. Glob Ecol Biogeogr 10:113– 132.
- Lomolino MV, Smith GA (2001) Dynamic biogeography of prairie dog (Cynomys Iudovicianus) towns near the edge of their range. J Mammal 82:937–945.
- Lomolino MV, Brown JH, Davis R (1989) Island biogeography of montane forest mammals in the American southwest. Ecology 70:180–194.
- Maes D, Bonte D (2006) Using distribution patterns of five threatened invertebrates in a highly fragmented dune landscape to develop a multispecies conservation approach. *Biol Conserv* 133:490–499.
- Martinez-Morales MA (2005) Nested species assemblages as a tool to detect sensitivity to forest fragmentation: the case of cloud forest birds. Oikos 108:634–642.
- 57. Matthiae PE, Stearns F (1981) in Forest Island Dynamics in Man-Dominated Landscapes, eds Burgess RL, Sharpe DM (Springer, New York), pp 55–66.
- McAlpine CA, et al. (2006) The importance of forest area and configuration relative to local habitat factors for conserving forest mammals: A case study of koalas in Queensland, Australia. *Biol Conserv* 132:153–165.
- McCollin D (1993) Avian distribution patterns in a fragmented wooded landscape (North Humberside, UK): The role of between-patch and within-patch structure. Global Ecol Biogeogr Lett 3:48–62.
- Newmark WD (1986) Species area relationship and its determinants for mammals in western North American national parks. Biol J Linn Soc 28:83–98.
- Newmark WD (1991) Tropical forest fragmentation and the local extinction of understory birds in the eastern Usambara mountains, Tanzania. Conserv Biol 5:67–78.

- Nupp TE, Swihart RK (2000) Landscape-level correlates of small-mammal assemblages in forest fragments of farmland. J Mammal 81:512–526.
- Onderdonk DA, Chapman CA (2000) Coping with forest fragmentation: The primates of Kibale National Park, Uganda. Int J Primatol 21:587–611.
- Pardini R, de Souza SM, Braga-Neto R, Metzger JP (2005) The role of forest structure, fragment size and corridors in maintaining small mammal abundance and diversity in an Atlantic forest landscape. *Biol Conserv* 124:253–266.
- 65. Patterson BD, Atmar W (1986) Nested subsets and the structure of insular mammalian faunas and archipelagoes. *Biol J Linn Soc* 28:65–82.
- Pellet J, Schmidt BR (2005) Monitoring distributions using call surveys: Estimating site
 occupancy, detection probabilities and inferring absence. *Biol Conserv* 123:27–35.
- Radford JQ, Bennett AF (2004) Thresholds in landscape parameters: Occurrence of the white-browed treecreeper Climacteris affinis in Victoria, Australia. Biol Conserv 117:375–391.
- Ramanamanjato JB, Ganzhorn JU (2001) Effects of forest fragmentation, introduced Rattus rattus and the role of exotic tree plantations and secondary vegetation for the conservation of an endemic rodent and a small lemur in littoral forests of southeastern Madagascar. Anim Conserv 4:175–183.
- Ranius T (2002) Influence of stand size and quality of tree hollows on saproxylic beetles in Sweden. *Biol Conserv* 103:85–91.
- Reunanen P, Nikula A, Monkkonen M, Hurme E, Nivala V (2002) Predicting occupancy for the Siberian flying squirrel in old-growth forest patches. Ecol Appl 12:1188–1198.
- Rosenblatt DL, et al. (1999) Forest fragments in east-central Illinois: Islands or habitat patches for mammals? Am Midl Nat 141:115–123.
- 72. Hanski I (1994) A practical model of population dynamics. J Anim Ecol 63:151–162.
- 73. Sarre S, Smith GT, Meyers JA (1995) Persistence of two species of gecko (*Oedura reticulata* and *Gehyra variegata*) in remnant habitat. *Biol Conserv* 71:25–33.
- Schmidt BR (2005) Monitoring the distribution of pond-breeding amphibians when species are detected imperfectly. Aquat Conserv 15:681–692.
- Soule ME, et al. (1988) Reconstructed dynamics of rapid extinctions of chaparralrequiring birds in urban habitat islands. Conserv Biol 2:75–91.
- Steffan-Dewenter I, Tscharntke T (2000) Butterfly community structure in fragmented habitats. Ecol Lett 3:449–456.
- Suorsa P, et al. (2005) Thresholds in selection of breeding habitat by the Eurasian treecreeper (Certhia familiaris). Biol Conserv 121:443–452.
- Talley TS, Fleishman E, Holyoak M, Murphy DD, Ballard A (2007) Rethinking a rarespecies conservation strategy in an urban landscape: The case of the valley elderberry longhorn beetle. *Biol Conserv* 135:21–32.
- Tigas LA, Van Vuren DH, Sauvajot RM (2003) Carnivore persistence in fragmented habitats in urban southern California. Pac Conserv Biol 9:144–151.
- Uezu A, Metzger JP, Vielliard JME (2005) Effects of structural and functional connectivity and patch size on the abundance of seven Atlantic Forest bird species. Biol Conserv 123:507–519.

- 81. Umapathy G, Kumar A (2000) The occurrence of arboreal mammals in the rain forest fragments in the Anamalai Hills, south India. *Biol Conserv* 92:311–319.
- Valimaki P, Itamies J (2003) Migration of the clouded Apollo butterfly *Parnassius mnemosyne* in a network of suitable habitats: Effects of patch characteristics. *Ecography* 26:679–691.
- 83. Van Buskirk J (2005) Local and landscape influence on amphibian occurrence and abundance. *Ecology* 86:1936–1947.
- Van Langevelde F (1999) PhD Thesis (Wageningen Agricultural University, Wageningen, The Netherlands).
- Verbeylen G, De Bruyn L, Matthysen E (2003) Patch occupancy, population density, and dynamics in a fragmented red squirrel *Sciurus vulgaris* population. *Ecography* 26:118– 128.
- Villard MA, Trzcinski MK, Merriam G (1999) Fragmentation effects on forest birds: Relative influence of woodland cover and configuration on landscape occupancy. Conserv Biol 13:774–783.
- Virgos E, Telleria JL, Santos T (2002) A comparison on the response to forest fragmentation by medium-sized Iberian carnivores in central Spain. *Biodivers Conserv* 11:1063–1079.
- Wahlberg N, Moilanen A, Hanski I (1996) Predicting the occurrence of endangered species in fragmented landscapes. Science 273:1536–1538.
- Wahlberg N, Klemetti T, Hanski I (2002) Dynamic populations in a dynamic landscape:
 The metapopulation structure of the marsh fritillary butterfly. Ecography 25:224–232.
- Walker RS, Novaro AJ, Branch LC (2003) Effects of patch attributes, barriers, and distance between patches on the distribution of a rock-dwelling rodent (*Lagidium viscacia*). *Landsc Ecol* 18:187–194.
- 91. Ward LK, Lakhani KH (1977) Conservation of juniper: Fauna of food plant island sites in southern England. *J Appl Ecol* 14:121–135.
- 92. Watson DM (2003) Long-term consequences of habitat fragmentation: Highland birds in Oaxaca, Mexico. *Biol Conserv* 111:283–303.
- Watson JEM, Whittaker RJ, Dawson TP (2004) Avifaunal responses to habitat fragmentation in the threatened littoral forests of south-eastern Madagascar. J Biogeogr 31:1791–1807.
- Weddell BJ (1991) Distribution and movements of Columbian ground squirrels (Spermophilus columbianus Ord): are habitat patches like islands? J Biogeogr 18:385–394.
- Zabel J, Tscharntke T (1998) Does fragmentation of Urtica habitats affect phytophagous and predatory insects differentially? Oecologia 116:419–425.
- Moilanen A, Nieminen M (2002) Simple connectivity measures in spatial ecology. *Ecology* 83:1131–1145.
- 97. Pellet J, Fleishman E, Dobkin DS, Gander A, Murphy DD (2007) An empirical evaluation of the area and isolation paradigm of metapopulation dynamics. *Biol Conserv* 136:483–495

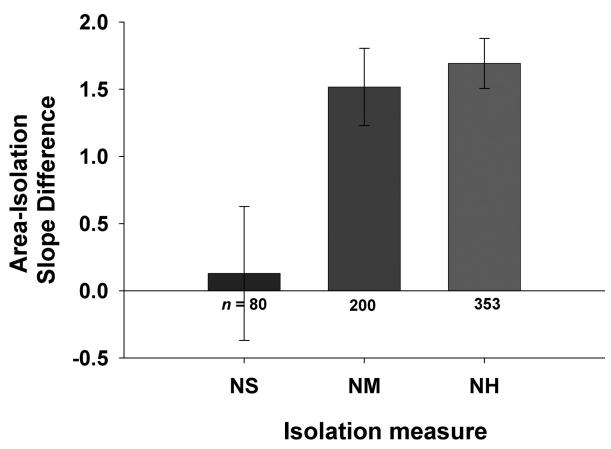


Fig. S1. Impact of isolation measure type on the relative strength of isolation effects. The effect of patch area on occupancy is stronger than the effect of isolation only when isolation is measured as the distance to the nearest habitat patch (*NH*) or nearest large (mainland) patch (*NM*). When isolation is measured as the distance to the nearest occupied (source) patch (*NS*), the effects of area and isolation are equal in magnitude. Strengths of effects were measured as the slope parameter estimates from logistic regression analyses using either patch area or isolation as the predictor. Positive differences in slope indicate relatively stronger area effects (*NM* difference = 1.16, t_{199} = 4.15, P < 0.0001; *NH* difference = 1.67, t_{352} = 10.5, P < 0.0001), whereas no difference indicates effects are equal in magnitude (*NS* difference = 0.18, t_{79} = 0.72, P = 0.48). Standard error bars are shown.

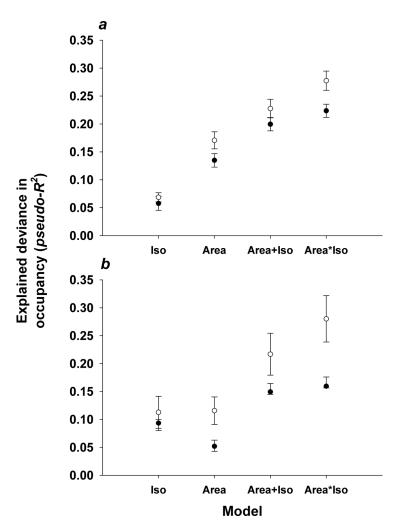


Fig. 52. Comparison of methods for calculating the overall effect of patch area and isolation on occupancy. pR^2 values were transformed by using Fisher's z-transformation and weighted by variance (\bullet); backtranformed), or unweighted and untransformed (\bigcirc). Means from weighted/transformed pR^2 values were always lower. Box plots in Fig. 1 and median pR^2 values reported in this study were based on unweighted and untransformed analyses. Analyses included all 3 isolation measures (a) or were restricted to the subset using distance to nearest source population as the isolation measure (b). Means and 95% confidence intervals are shown.

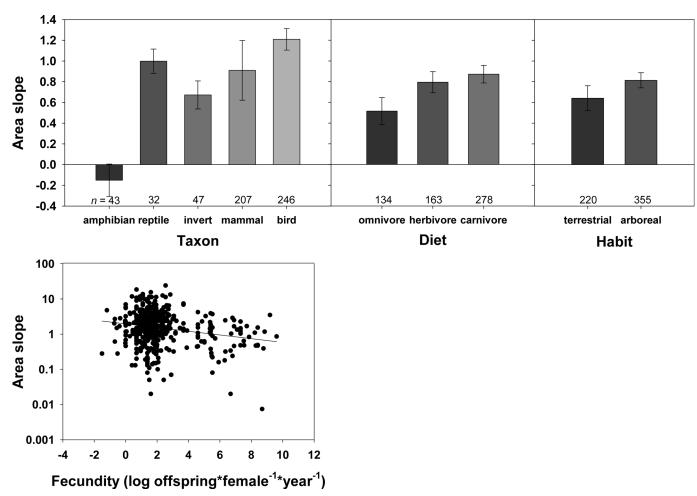


Fig. S3. Alternative analysis measuring the influence of species traits on the strength of area effects. As with the analysis presented in Fig. 2, the starting model included fecundity, specialization, taxon, diet, and habit as predictors, but the slope parameter was used as the effect size for patch area rather than the pR^2 . Slopes were weighted by the inverse of their variance estimates (1/se²). Results of both analyses were similar, although fecundity was retained as a predictor in this analysis in addition to taxon, diet, and habit (full model $F_{8,567} = 9.8$, $R^2 = 0.12$, P < 0.0001; taxon $F_4 = 12.3$, P < 0.0001, diet $F_2 = 4.0$, P = 0.02, habit $F_1 = 2.0$, P = 0.15, fecundity $F_1 = 3.7$, P = 0.06). Least-squared means and standard error bars are shown.

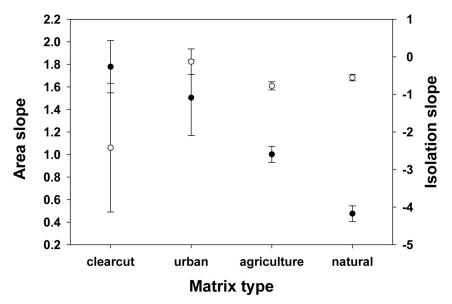


Fig. 54. Alternative analysis of the influence of matrix type on the strength of patch area (●) and isolation (○) effects. The slope parameters from logistic regression analyses were used as measures of effect size instead of the pR^2 values used in Fig. 3. Analyses were weighted such that each study (i.e., landscape) contributed equally to the results (n = 52 agricultural landscapes, 7 forestry clear cut, 5 urban, and 25 natural), and slopes were weighted by the inverse of their variance estimates ($1/se^2$). Patch area effects were strongest (i.e., slopes were greatest) in patches surrounded by clear cuts and urban areas, moderate in agricultural landscapes, and weakest in natural landscapes ($F_{3,875} = 67.6$, $F_{3,645} = 7.2$, $F_{3,645} = 7.2$, $F_{3,645} = 7.2$). Error bars show 95% confidence intervals.

Table S1. Attributes of studies included in the metaanalysis

Ref.*	Location	Landscape size, km²	N years	N patches	N species	Matrix type	Area range, ha	Isolation range, m	Isolation measure
6	Australia	56	1	23	1	f	0.05–95	50–1100	NS
7	England		1	28	1	а	0.1-157.5		
8	Germany	21	1	237	1	a	0.0001-0.025	16-1007	NS
9	Illinois		2	12	37	а	1.8-600		
10	Belgium	5	1	52	1	n	0.06-11.47	18–1063	NS
11	Belgium	12	1	19	28	n	0.01-10.8		
12	Nevada	20,000	1	137	1	а	0.00001-0.461	439–34013	NS
14	Ontario	2500	1	30	2	а	1.2-422.2		
15 [†]	Italy	135	1	46	1	a	2.4–120	1000–1600	NM
15 [†]	Italy	135	1	34	1	a	0.5–31.8	1–950	NH
16	Uganda	766	1	22	11	a	0.82-49.6	20–500	NH
17	France	992	1	56	10	n	0.0008-0.25		
18	North Dakota	0.64	5	142	2	n	0.00001-0.011	0–17	NH
19	California	373	1	39	11	u	2–5806	1–5700	NH
21	England	180	5	14	6	n	0.00025-0.011	50–3606	NM
22	Tanzania	35,556	1	19	19	a	100–52200	1485–42529	NS
23	South Carolina	770	1	19	1	f	4–41.6	1–9480	NS
24	Germany	15	5	512	1	a	0.0001-0.325	4–417	NH
25	Nevada		11	39	1	n	0.01–8.16	1–3026	NH
26	Florida	722	6	59	1	n	0.3–43.7	40–6066	NH
27	Yukon	4	7	27	1	n	0.07–15.7	12–118	NH
28	Madagascar	2488	1	13	5	a	0.64-30000		
29	Madagascar		1	10	3	a	20–675		
30	Madagascar		1	10	10	a	2–40000		
31	Indiana		1	45	8	a	0.12–328.7	1–841	NH
32	Iowa		1	10	4	a	0.009-0.06	80–2880	NM
13, 33‡	Great Basin	480,858	1	19	14	n	500–45500	6440–173880	NH
§	Alberta	2722	10	24	1	a	0.53–10.1		
35	Finland	15.5	1	47	1	a	0.0012-4.6	3–163	NS
36	California	450	1	27	1	n	0.3–249.9	1400–20800	NM
37	Ontario	22,297	1	180	13	a	0.0004–37.4	1–3000	NH
38	England	2450	3	164	15	a	0.02–30		
39	Norway	5	2	70	1	a	0.002-0.26	8–302	NH
40	Florida	23	1	95	2	n	0.02–55.65	34–5610	NS
41	Egypt	142.8	2	41	1	n	0.0001–0.037	161–3002	NH
42	Australia		1	23	19	a	34–5119		
43	Australia		1	23	48	a	34–5119		
44	California	1400	1	1716	1	n	0.0003–87.8	18–6707	NS
45, 76 [¶]	Germany	1944	2	33	58	a	0.03-5.14	55–1894	NH
46	Germany	2000	1	70	1	a	0.004–1.54	70–4400	NS
47	Germany	400	1	18	5	a	0.03–70		
48	South Africa	1100	1	199	3	a	0.04–1732	10–13,350	NM
49	Kenya		1	12	8	a	1–179	559–26,115	NH
50	Australia	450	1	39	2	f	0.4–40.5		
51	Southwest US	632,857	1	24	18	n	600–2116500	5000–677000	NM
52	Washington	600	1	20	16	f	0.93–58.91	483–6033	NH
53	Oklahoma	14737	1	405	1	a	0.12–249.4	1000–46500	NH
54	Rocky Mountains	4.0	1	28	7	n	689–5000000	2778–77778	NH
55	Belgium	12	2	133	5	u	0.0007–22.5	3–507	NH
56	Mexico	2000	1	13	138	a	0.6–16289	53–1908	NM
57	Wisconsin	525	1	22	12	u	0.4–14.5	640–3200	NH
58	Queensland	868.23	1	352	1	a	2–44031	50–267	NH
59	England	2500	1	16	41	a	0.74–14.51	1–24600	NH
60 [∥]	Western US	3,568,235	1	24	26	a	8600–2,073,600	66 4056	
61	Tanzania	353	1	10	20	a	0.1–521.01	66–1056	NH
62	Indiana	259	1	37	12	a	0.13–1512	10–710	NH
63	Uganda	766	1	20	5	a	0.8–130	50–300	NH
64	Brazil	430	1	12	12	a	1.96–274.33	4762 0722	
65	Rocky Mountains		1	28	24	n	8000-5,000,000	4762–95238	NH
66	Switzerland	396	1	27	4	a	0.004–0.77	425–4960	NS
67	Australia	41,446.4	1	47	1	n		200–66,800	NS
68 69	Madagascar	437.5	3	10	3	f	0.2–113		
	Sweden	210	1	38	10	a	0.04–375		

Ref.*	Location	Landscape size, km²	N years	N patches	N species	Matrix type	Area range, ha	Isolation range, m	Isolation measure
70	Finland	2352	1	207	1	f	3.94–696		
71	Illinois		1	10	15	a	1.8–600	67-60,600	NH
72	Finland		3	70	1	n	0.02-0.5	8–172	NS
73	Australia	1680	1	32	2	a	0.1–8	1–1100	NH
74	Switzerland	77	2	32	6	n	0.002-0.55	158-2488	NH
20, 75¶	California	373	2	37	9	u	0.4-104	40-674	NH
77	Finland	1150	5	228	1	f	0.06-12.88		
78	California		1	4943	1	a	0.0003-1.49	1-10,075	NS
79	California	200	1	12	5	u	4.4-561	10-750	NM
80	Brazil	100	1	13	5	a	12.92-274.33	31-90	NH
81	India	987	1	25	3	a	1-2500		
82	Finland	2.7	1	58	1	n	0.01-0.60	50-250	NS
83	Switzerland	900	6	83	9	a	0.0003-2		
84	Netherlands	1180	11	90	1	a	0.5-27.3		
85	Belgium	102	5	57	1	a	0.08-57.4	56-767	NH
86	Ontario	300	1	45	50	a	2.6-57.5		
87**	Spain		1	280	7	a	0.01-1768	220-45,300	NM
88	Finland	600	1	94	1	n	0.005-4	11-782	NS
89	Finland	150	2	113	1	n	0.027-16.8	11-140	NH
90	Argentina	8000	1	36	1	n	0.032-5.2	200-19,000	NS
91 [†]	England		1	12	11	a		1700-3370	NH
91 [†]	England		1	13	14	a		300-52,700	NH
92	Mexico	118,864	1	17	60	n	2-159,246	210-59170	NM
93	Madagascar	150	1	31	71	n	0.3-855.1	55-600	NH
94	Washington/ Idaho	15	1	67	1	а	0.007–362.3	10–1987	NS
95	Germany		1	32	19	a	0.0005-0.1	10-300	NH

Matrix type is the predominant land cover in areas between habitat patches: a = agriculture, n = natural (forests, meadows), u = urban, and f = forestry clearcuts. Isolation measures were classified as NH (distance to the nearest patch of any size), NM (distance to nearest large patch, or mainland), or NS (distance to nearest occupied patch, or source). Landscape size, patch area, and patch isolation data were unavailable for some studies.

^{*}Citations for studies are provided in the SI Text references.

[†]Separate studies were reported in the same publication.

[‡]Ref. 33 is an update to ref. 13.

[§]S. Hannon (University of Alberta, Edmonton, AB, Canada), personal communication.

[¶]A resurvey of the same area was reported in a separate publication; data were combined into a multiyear study.

Patches in this study were parks in the western United States. Because of the large scale, only carnivores and ungulates were included. Parks outside a species' distribution were excluded from regression analyses. Exclusion of this study did not change results.

^{**}Data from seven species studied in the same area were combined and considered to be one study.

Table S2. Taxonomic information and life history traits for the 785 species in the metaanalysis

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersa dist, kn
a	Anura	Bufonidae	Bufo americanus		75	6000	g	i	sa	LC		
a	Anura	Bufonidae	Bufo bufo		110	1500	g	i	sa	LC		
a	Anura	Bufonidae	Bufo calamita		65	4500	s	i	sa	LC	1	2.60
a	Anura	Bufonidae	Bufo punctatus		56		g	i	sa	LC		0.80
a	Anura	Discoglossidae	Alytes obstetricans		50	125	g	i	sa	LC		
a	Anura	Discoglossidae	Bombina variegata		50	225	g	i	sa	LC		
а	Anura	Hylidae	Hyla arborea		50	800	g	i	sa	LC	1	
a	Anura	Hylidae	Hyla meridionalis		55	1200	g	i	sa	LC		
a	Anura	Hylidae	Hyla versicolor		48	1900	g	i	sa	LC		
à	Anura	Hylidae	Pseudacris crucifer		26	900	g	i	sa	LC		
1	Anura	Hylidae	Pseudacris triseriata		29	1000	g	i	sa	LC		
ı	Anura	Pelobatidae	Pelobates cultripes		110	7000	g	i	sa	NT		
ì	Anura	Pelobatidae	Pelodytes punctatus		50	3000	g	i	sa	LC		
ı	Anura	Ranidae	Rana catesbeiana		108	15000	g	c	sa	LC	1.56	2.8
ı	Anura	Ranidae	Rana clamitans		67	3750	S	i	sa	LC		
ì	Anura	Ranidae	Rana esculenta		78	6500	g	i	sa	LC		
ì	Anura	Ranidae	Rana lessonae		60	3300	S	i	sa	LC		15
ı	Anura	Ranidae	Rana muscosa		63	233	g	i	sa	CR		
ı	Anura	Ranidae	Rana palustris		56	1850	g	i	sa	LC		
1	Anura	Ranidae	Rana pipiens		57	4000	g	i	sa	LC		8
ì	Anura	Ranidae	Rana ridibunda		135	9890	g	c	sa	LC		
	Anura	Ranidae	Rana septentrionalis		62	2250	g	i	sa	LC		
	Anura	Ranidae	Rana sylvatica		50	2000	g	i	sa	LC	1.20	
	Anura	Ranidae	Rana temporaria	23	78	2600	g	i	sa	LC		
	Caudata	Ambystomatidae	Ambystoma laterale		78	500	g	i	sa	LC		0.3
	Caudata	Ambystomatidae	Ambystoma maculatum		86	100	g	i	sa	LC	0.13	
	Caudata	Salamandridae	Notophthalmus viridescens		70	300	g	i	sa	LC		
	Urodela	Salamandridae	Triturus alpestris		100	250	g	i	sa	LC		
	Urodela	Salamandridae	Triturus cristatus	8	160	250	g	i	sa	LC		
	Urodela	Salamandridae	Triturus helveticus		90	375	g	i	sa	LC		
	Urodela	Salamandridae	Triturus marmoratus		145	300	g	i	sa	LC		12
	Urodela	Salamandridae	Triturus vulgaris		100	250	g	i	sa	LC		
	Anseriformes	Anatidae	Anas platyrhynchos	1125	565		g	0	sa	LC	19.90	
	Apodiformes	Apodidae	Aeronautes saxatalis	32	170	5	g	i	ar	LC		
	Apodiformes	Apodidae	Apus barbatus		170	2	g	i	ar	LC		
	Apodiformes	Apodidae	Apus melba	77	215		g	i	ar			
	Apodiformes	Apodidae	Chaetura vauxi	17	120	3	g	i	ar	LC		
	Apodiformes	Apodidae	Cypseloides spp.	33		1	g	0	ar			
)	Apodiformes	Apodidae	Cypsiurus parvus		170	3	g	i	ar	LC		
	Apodiformes	Apodidae	Strectoprocne zonaris	98			g	fn	te			
	Apodiformes	Apodidae	Zoonavena grandidieri		120		g	i	ar	LC		
	Apodiformes	Trochilidae	Amazilia beryllina	5	100	4	g	fn	ar	LC		
	Apodiformes	Trochilidae	Amazilia cyanocephala	6			g	fn	ar	LC		
	Apodiformes	Trochilidae	Atthis heloisa	2			g	i	ar	LC		
	Apodiformes	Trochilidae	Colibri thalassinus	6			g	0	ar	LC		
	Apodiformes	Trochilidae	Eugenes fulgens	7	130		g	i	ar	LC		
	Apodiformes	Trochilidae	Eupherusa cyanophrys				g	u		EN		
	Apodiformes	Trochilidae	Hylocharis leucotis	7	100		g	h	ar	LC		
	Apodiformes	Trochilidae	Lampornis amethystinus	7			g	0	te	LC		
	Apodiformes	Trochilidae	Lampornis clemenciae	8	130	6	g	0	te	LC		116
	Apodiformes	Trochilidae	Lamprolaima rhami				g	u		LC		
	Caprimulgiformes	Caprimulgidae	Caprimulgus madagascariensis	41	210	2	g	i	ar	LC		
	Caprimulgiformes	Caprimulgidae	Caprimulgus vociferus	53	250	4	g	i	ar	LC		
	Caprimulgiformes	Caprimulgidae	Nyctidromus albicollis	53	280	2	g	0	ar	LC		
	Charadriiformes	Scolopacidae	Scolopax rusticola	330	340		s	i	te	LC		
	Ciconiiformes	Ardeidae	Ardea purpurea		790	3	g	C	te	LC		
	Ciconiiformes	Cathartidae	Cathartes aura	1467	690	2	g	i	ar	LC		
	Ciconiiformes	Cathartidae	Coragyps atratus	2081	690	2	g	i	te	LC		
	Ciconiiformes	Columbidae	Alectroenas madagascariensis	173	280	1	g	fn	ar	LC		
	Ciconiiformes	Falconidae	Micrastur semitorquatus	675	_50		g	h	ar	LC		
	Ciconiiformes	Threskiornithidae	Lophotibis cristata	3,3	500	3	g	i	te	NT		
		co.cioi i i di lidae	p		275	,	g g					

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
b	Columbiformes	Columbidae	Columba fasciata	343	370	2	g	i	ar	LC		
b	Columbiformes	Columbidae	Columba flavirostris	324	370		g	i	ar	LC		
b	Columbiformes	Columbidae	Geotrygon albifacies	316			g	h	te	LC		
b	Columbiformes	Columbidae	Geotrygon montana	144			g	c	ar	LC		
b	Columbiformes	Columbidae	Leptotila verreauxi	153	290	4	g	i	ar	LC		1.86
b	Columbiformes	Columbidae	Oena capensis	37	280	2	g	h	te	LC		
b	Columbiformes	Columbidae	Streptopelia picturata	182	280	2	g	h	te	LC		
b	Columbiformes	Columbidae	Streptopelia turtur	140	270		g	h	te	LC	8.80	
b	Columbiformes	Columbidae	Treron australis	256	320	2	g	fn	ar	LC		
b	Columbiformes	Columbidae	Turtur tympanistria	71	220		g	h	ar	LC		
b	Columbiformes	Columbidae	Zenaida macroura	123	310	10	g	h	te	LC		4.80
b	Coraciiformes	Alcedinidae	Alcedo vintsioides	18	150	6	g	C	ar	LC		
b	Coraciiformes	Alcedinidae	Ispidina madagascariensis	17	140	4	g	C	ar			
b	Coraciiformes	Coraciidae	Eurystomus glaucurus	148	320	3	g	i	ar	LC		
b	Coraciiformes	Leptosomatidae	Leptosomus discolor	255	500	5	g	i	ar	LC		
b	Coraciiformes	Meropidae	Merops superciliosus	41	330	3	g	i	ar	LC		
b	Coraciiformes	Momotidae	Momotus momota	107			g	fn	ar	LC		
b	Coraciiformes	Upupidae	Upupa epops	76	320	2	g	i	te	LC		
b	Cuculiformes	Cuculidae	Geococcyx californianus	376	580	4	g	0	te	LC		
b	Cuculiformes	Cuculidae	Piaya cayana	108			g	fn	te	LC		
b	Cuculiformes	Musophagidae	Centropus toulou	161	500	3	g	0	ar	LC		
b	Cuculiformes	Musophagidae	Coua caerulea	243	500	1	g	0	ar	LC		
b	Cuculiformes	Musophagidae	Coua gigas	423	620	3	g	i	te	LC		
b	Cuculiformes	Musophagidae	Coua reynaudii	153	400	2	g	0	te	LC		
b	Cuculiformes	Musophagidae	Cuculus canorus	120	315		g	i	ar	LC		
b	Cuculiformes	Musophagidae	Cuculus rochii	59	280	1	g	i	ar	LC		
b	Falconiformes	Accipitridae	Accipiter francesiae	159	290	3	g	C	ar	LC		
b	Falconiformes	Accipitridae	Accipiter madagascariensis	206	400	3	g	C	ar	NT		
b	Falconiformes	Accipitridae	Aviceda madagascariensis		400		g	C	ar	LC		
b	Falconiformes	Accipitridae	Buteo brachypterus	680	510	2	g	C	ar	LC		
b	Falconiformes	Accipitridae	Buteo jamaicensis	1126	560	3	S	0	ar	LC		3000
b	Falconiformes	Accipitridae	Milvus aegyptius		600	3	g	C	ar			
b	Falconiformes	Accipitridae	Polyboroides radiatus		680	2	g	C	ar	LC		
b	Falconiformes	Falconidae	Caracara plancus	894			g	i	ar	LC		
b	Falconiformes	Falconidae	Falco concolor	210	345		g	C	ar	LC		
b	Falconiformes	Falconidae	Falco newtoni	90	300	4	g	C	ar	LC		
b	Falconiformes	Falconidae	Falco sparverius	116	270	5	g	C	ar	LC	4.93	38.79
b	Galliformes	Cracidae	Ortalis vetula	563	560	3	g	0	ar	LC	0.40	10
b	Galliformes	Cracidae	Penelope purpurascens	2060			g	i	ar	LC		
b	Galliformes	Numididae	Numida meleagris	1350	650	10	g	h	te	LC		
b	Galliformes	Odontophoridae	Callipepla californica	176	250	12	g	h	te	LC		27
b	Galliformes	Odontophoridae	Dactylortyx thoracicus	205			g	0	ar	LC		
b	Galliformes	Odontophoridae	Dendrortyx barbatus	432			g	0	ar	VU		
b	Galliformes	Odontophoridae	Dendrortyx macroura				g	u		LC		
b	Galliformes	Phasianidae	Margaroperdix madagascariensis	250	260	17	g	0	te	LC		
b	Galliformes	Phasianidae	Phasianus colchicus	1350	710		g	h	te	LC	3.20	3.50
b	Galliformes	Phasianidae	Xenoperdix udzungwensis		290		s	0	te	EN		
b	Gruiformes	Rallidae	Canirallus kioloides		280	2	g	i	te	LC		
b	Gruiformes	Rallidae	Dryolimnas cuvieri		320	5	S	i	te	LC		
b	Gruiformes	Rallidae	Gallinula chloropus	335	335		g	0	sa	LC	4.50	
b	Gruiformes	Rallidae	Sarothrura insularis	23	140	4	g	0	te	LC		
b	Passeriformes	Aegithalidae	Aegithalos caudatus	9	140	9	g	i	ar	LC	8.30	
b	Passeriformes	Alaudidae	Mirafra hova	19	130	2	g	i	te	LC		
b	Passeriformes	Bombycillidae	Bombycilla cedrorum	32		8	S	fn	ar	LC	222	
b	Passeriformes	Campephagidae	Coracina cineriea	47	240	1	g	i	ar			
b	Passeriformes	Cardinalidae	Cardinalis cardinalis	45	220	5	g	0	ar	LC	2.01	60.40
b	Passeriformes	Cardinalidae	Passerina cyanea	15	123	16	g	0	ar	LC		470
b	Passeriformes	Cardinalidae	Pheucticus Iudovicianus	46	200	4	g	0	te	LC		200
b	Passeriformes	Cardinalidae	Pheucticus melanocephalus	42	210	4	g	i	ar	LC		
b	Passeriformes	Certhiidae	Certhia americana	8	130	6	s	0	ar	LC	0.89	10.04
b	Passeriformes	Certhiidae	Certhia familiaris	10	125	11	g	i	ar	LC		
b	Passeriformes	Cisticolidae	Apalis chariessa		115		s	i	ar	VU		
b	Passeriformes	Cisticolidae	Apalis thoracica	10	125		g	i	ar	LC		

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
b	Passeriformes	Cisticolidae	Cisticola cherina	9	120	4	g	i	te	LC		
b	Passeriformes	Climacteridae	Climacteris affinis	23	170	8	S	i	te	LC	0.60	4.50
b	Passeriformes	Corvidae	Aphelocoma ultramarina	124	290	5	g	c	ar	LC	0.58	
b	Passeriformes	Corvidae	Aphelocoma unicolor	124			g	c	ar	LC		
b	Passeriformes	Corvidae	Corvus albus	580	520	5	g	0	te	LC		
b	Passeriformes	Corvidae	Corvus corone	510	460		g	0	ar	LC	9.90	
b	Passeriformes	Corvidae	Corvus frugilegus	310	450		g	0	ar	LC	8.50	
b	Passeriformes	Corvidae	Corvus monedula	220	335		g	0	ar	LC	8.60	
b	Passeriformes	Corvidae	Cyanocitta cristata	87	280	4	g	0	ar	LC	2	3
b	Passeriformes	Corvidae	Cyanocitta stelleri	120	320	3	g	0	ar	LC	12.50	
b	Passeriformes	Corvidae	Cyanocorax yncas	79	270	4	g	i	ar	LC		
b	Passeriformes	Corvidae	Cyanolyca cucullata	102			g	0	ar	LC		
b	Passeriformes	Corvidae	Cyanolyca nana	41	260	2	g	0	ar	VU		
b	Passeriformes	Corvidae	Dicrurus forficatus	47	260	3	g	i	ar	LC	2.50	
b	Passeriformes Passeriformes	Corvidae	Garrulus glandarius	165 225	345 450	7	g	0	ar	LC LC	3.50	1 20
b	Passeriformes	Corvidae Dendrocolaptidae	Pica pica	35	450		g	0	te	LC	0.43	1.30
b		Dendrocolaptidae	Lepidocolaptes affinis Lepidocolaptes leucogaster	33			g	0	ar	LC		
b	Passeriformes Passeriformes	Dendrocolaptidae	Sittasomus griseicapillus	14			g	u fn	25	LC		
b			,		205		g	fn	ar			
b	Passeriformes	Dendrocolaptidae	Xiphocolaptes promeropirhynchus	136	305		g	h	ar	LC		
b	Passeriformes	Dendrocolaptidae	Xiphorhynchus erythropygius	47			g	h	ar	LC		
b	Passeriformes Passeriformes	Dendrocolaptidae Emberizidae	Xiphorhynchus flavigaster Aimophila aestivalis	44 20	150	10	g	0	ar	LC NT		6
b b	Passeriformes	Emberizidae	•	32	150	10	g	0	te	LC		0
b	Passeriformes	Emberizidae	Atlapetes albinucha Atlapetes pileatus	24			S	0	ar te	LC		
b	Passeriformes	Emberizidae	Buarremon brunneinucha	47			g	0	ar	LC		
b	Passeriformes	Emberizidae	Emberiza citrinella	31	163		g	0	te	LC	8.40	
b	Passeriformes	Emberizidae	Junco phaeonotus	20	160	12	g g	0	ar	LC	0.68	
b	Passeriformes	Emberizidae	Melospiza georgiana	17	150	9	g	0	te	LC	0.00	
b	Passeriformes	Emberizidae	Melospiza lincolnii	17	130	5	_	c	ar	LC		
b	Passeriformes	Emberizidae	Melospiza melodia	22		8	g g	0	te	LC	0.20	13.20
b	Passeriformes	Emberizidae	Pipilo erythrophthalmus	48	220	6	g	fn	ar	LC	0.20	13.20
b	Passeriformes	Emberizidae	Pipilo maculatus	41	194	5	g	0	te	LC		
b	Passeriformes	Emberizidae	Pipilo ocai	71	134	3	s	u	te	LC		
b	Passeriformes	Emberizidae	Spizella passerina	13	140	5	g	h	ar	LC		
b	Passeriformes	Emberizidae	Spizella pusilla	13	140	13	s	h	te	LC		
b	Passeriformes	Emberizidae	Sporophila torqueola	10	110	5	g	0	ar	LC		
b	Passeriformes	Emberizidae	Tiaris olivaceus	10	120	-	g	h	te	LC		
b	Passeriformes	Emberizidae	Zonotrichia albicollis	27	170	4	g	0	te	LC		
b	Passeriformes	Estrildidae	Cryptospiza reichenovii	13	120	•	s	h	te	LC		
b	Passeriformes	Estrildidae	Mandingoa nitidula	9	105		g	0	te	LC		
b	Passeriformes	Eurylaimidae	Smithornis capensis	24	140		s	i	ar	LC		
b	Passeriformes	Formicariidae	Batara cinerea	140			g	i	te	LC		
b	Passeriformes	Formicariidae	Pyriglena leucoptera	30			g	i	te	LC		
b	Passeriformes	Fringillidae	Carduelis cannabina	19	135		g	0	te	LC	4.40	
b	Passeriformes	Fringillidae	Carduelis carduelis	17	120		g	0	te	LC	11.10	
b	Passeriformes	Fringillidae	Carduelis chloris		150		g	0	ar	LC	5	150
b	Passeriformes	Fringillidae	Carduelis notata	11			g	i	ar	LC		
b	Passeriformes	Fringillidae	Carduelis tristis	16	120	5	g	h	te	LC		
b	Passeriformes	Fringillidae	Carpodacus mexicanus	19	150	9	g	i	ar	LC		
b	Passeriformes	Fringillidae	Carpodacus purpureus	25	150	7	g	0	ar	LC		
b	Passeriformes	Fringillidae	Coccothraustes abeillei	50			g	0	ar	LC		
b	Passeriformes	Fringillidae	Fringilla coelebs	24	145	5	g	0	te	LC	3.60	
b	Passeriformes	Fringillidae	Loxia curvirostra	30		6	s	h	ar	LC		
b	Passeriformes	Fringillidae	Pyrrhula pyrrhula	33	155		g	h	ar	LC	4.60	
b	Passeriformes	Furnariidae	Automolus rubiginosus	37			s	i	ar	LC		
b	Passeriformes	Hirundinidae	Phedina borbonica	21	140	4	g	i	ar	LC		
b	Passeriformes	Hirundinidae	Riparia paludicola	9	120	4	g	i	ar	LC		
b	Passeriformes	Hirundinidae	Stelgidopteryx serripennis	16	140	4	g	i	ar	LC		
b	Passeriformes	Icteridae	Agelaius phoeniceus	64	220	4	g	0	ar	LC	32.10	
b	Passeriformes	Icteridae	Icterus bullockii	33	220	5	g	c	ar	LC	0.53	1.32
b	Passeriformes	Icteridae	Icterus galbula	34	220	5	g	0	te	LC		
b	Passeriformes	Icteridae	Icterus graduacauda	42	240	8	g	0	te	LC		

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
b	Passeriformes	Icteridae	Molothrus ater	44		40	g	h	ar	LC	10.43	40
b	Passeriformes	Icteridae	Quiscalus quiscula	127	320	5	g	0	ar	LC	18.05	
b	Passeriformes	Mimidae	Dumetella carolinensis	37	220	7	g	0	ar		0.36	1.04
b	Passeriformes	Mimidae	Melanotis caerulescens	60			g	0	ar	LC		
b	Passeriformes	Mimidae	Toxostoma longirostre	64	290	8	g	С	ar	LC		
b	Passeriformes	Mimidae	Toxostoma redivivum	84	310	6	S	0	ar	LC	4.00	
b	Passeriformes	Mimidae	Toxostoma rufum	69	290	4	g	0	te	LC	4.90	
b	Passeriformes	Monarchidae	Terpsiphone mutata	13 8	180	3	g	i :	ar	LC		
b b	Passeriformes Passeriformes	Monarchidae Motacillidae	Trochocercus albonotatus Motacilla flaviventris	23	145 190	4	S	i i	ar te	LC		
b	Passeriformes	Muscicapidae	Acrocephalus schoenobaenus	12	130	4	g	0	te	LC	40.40	
b	Passeriformes	Muscicapidae	Copsychus albospecularis	24	180	3	g	i	ar	LC	40.40	
b	Passeriformes	Muscicapidae	Muscicapa striata	17	145	5	g g	i	ar	LC	12.80	
b	Passeriformes	Muscicapidae	Regulus calendula	7	111	8	g	0	ar	LC	12.00	
b	Passeriformes	Muscicapidae	Regulus regulus	6	90	O	g	i	ar	LC		
b	Passeriformes	Muscicapidae	Sheppardia lowei	· ·	130		9	i	te	VU		
b	Passeriformes	Muscicapidae	Swynnertonia swynnertoni	16	135		S	i	te	VU		
b	Passeriformes	Muscicapidae	Sylvia atricapilla	21	130		g	0	te	LC	41.20	
b	Passeriformes	Muscicapidae	Sylvia borin	19	140		g	0	te	LC	20	
b	Passeriformes	Muscicapidae	Sylvia communis	15	140		g	0	ar	LC	14.40	
b	Passeriformes	Nectariniidae	Anthreptes pallidigaster		80		s	fn	ar	EN		
b	Passeriformes	Nectariniidae	Anthreptes rubritorques		90		g	fn	ar	VU		
b	Passeriformes	Nectariniidae	Nectarinia notata	14	140	2	g	fn	ar	LC		
b	Passeriformes	Nectariniidae	Nectarinia olivacea	11	145		g	fn	ar	LC		
b	Passeriformes	Nectariniidae	Nectarinia rufipennis		120		3	fn	ar	VU		
b	Passeriformes	Nectariniidae	Nectarinia sovimanga	7	110	2	g	fn	ar	LC		
b	Passeriformes	Paridae	Baeolophus bicolor	22		6	g	0	ar	LC		
b	Passeriformes	Paridae	Parus ater	9	115		g	0	ar	LC	9.40	
b	Passeriformes	Paridae	Parus caeruleus	11	115		g	0	ar	LC	0.70	470
b	Passeriformes	Paridae	Parus major	18	140		g	0	ar	LC	0.75	3.30
b	Passeriformes	Paridae	Parus palustris	12	115	10	g	0	te	LC	1.85	7.30
b	Passeriformes	Paridae	Poecile atricapillus	12	135	7	g	0	ar		0.20	11.20
b	Passeriformes	Paridae	Poecile sclateri	10		7	s	i	ar			
b	Passeriformes	Parulidae	Basileuterus belli	10			S	i	ar	LC		
b	Passeriformes	Parulidae	Basileuterus culicivorus	11			g	fn	ar	LC		
b	Passeriformes	Parulidae	Basileuterus leucoblepharus	20			g	i	te	LC		
b	Passeriformes	Parulidae	Basileuterus rufifrons	11			g	0	ar	LC		
b	Passeriformes	Parulidae	Dendroica cerulea	9		5	S	i	ar	VU	1	
b	Passeriformes	Parulidae	Dendroica coronata	11	140	9	g	0	ar	LC		
b	Passeriformes	Parulidae	Dendroica dominica	9	140	8	g	i	te	LC		
b	Passeriformes	Parulidae	Dendroica gracei				g	u				
b	Passeriformes	Parulidae	Dendroica magnolia	7		4	g	fn	ar	LC		
b	Passeriformes	Parulidae	Dendroica occidentalis	9	140	4	g	0	ar	LC		
b	Passeriformes	Parulidae	Dendroica pensylvanica	10		4	S	i	ar	LC		
b	Passeriformes	Parulidae	Dendroica petechia	12		3	g	i	ar	LC		
b	Passeriformes	Parulidae	Dendroica pinus	12	140	4	g	0	ar	LC		
b	Passeriformes	Parulidae	Dendroica townsendi	9	130	5	g	h	ar	LC		
b	Passeriformes	Parulidae	Dendroica virens	9	130	5	S	h	te	LC		
b	Passeriformes	Parulidae	Ergaticus ruber				g	u		LC		
b	Passeriformes	Parulidae	Geothlypis nelsoni				S	u		LC		
b	Passeriformes	Parulidae	Geothlypis trichas	10	130	6	g	i	te	LC		
b	Passeriformes	Parulidae	Icteria virens	25	180	6	g	0	te	LC		
b	Passeriformes	Parulidae	Mniotilta varia	11	130	11	S	0	ar	LC		
b	Passeriformes	Parulidae	Myioborus miniatus	10			S	0	te	LC		
b	Passeriformes	Parulidae	Myioborus pictus	8	150	4	S	0	ar	LC		
b	Passeriformes	Parulidae	Oporornis formosus	14	130	5	S	i	ar	LC		50
b	Passeriformes	Parulidae	Oporornis philadelphia	12		4	g	i	te	LC		
b	Passeriformes	Parulidae	Parula americana	9	110	4	S	i	te	LC	0.06	
b	Passeriformes	Parulidae	Parula superciliosa	9	110		g	i	ar	LC		
b	Passeriformes	Parulidae	Seiurus aurocapilla	21	150	4	g	i	te	LC		_
b	Passeriformes	Parulidae	Seiurus motacilla	20	150	5	S	i	ar	LC		4
b	Passeriformes	Parulidae	Seiurus noveboracensis	15	140	5	g	i	te	LC		
b	Passeriformes	Parulidae	Setophaga ruticilla	9	130	3	g	i	te	LC	0.25	6

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
b	Passeriformes	Parulidae	Vermivora pinus	9		5	g	i	te	LC		
b	Passeriformes	Parulidae	Vermivora ruficapilla	8	120	5	g	i	ar	LC		
b	Passeriformes	Parulidae	Wilsonia canadensis	9	130	4	s	h	ar	LC		
b	Passeriformes	Parulidae	Wilsonia pusilla	8	120	6	g	i	ar	LC		
b	Passeriformes	Passeridae	Lonchura nana	8	90	6	g	h	ar	LC		
b	Passeriformes	Passeridae	Passer domesticus	31	145		g	0	ar	LC	4	26
b	Passeriformes	Passeridae	Passer montanus	24	140		g	0	ar	LC	8	
b	Passeriformes	Peucedramidae	Peucedramus taeniatus	11	130	4	S	i	ar	LC		
b	Passeriformes	Pipridae	Chiroxiphia caudata	25			g	fn	ar	LC		
b	Passeriformes	Platysteiridae	Batis mixta		100			i	ar	LC		
b	Passeriformes	Ploceidae	Foudia madagascariensis	16	140	4	g	h	ar	LC		
b	Passeriformes	Ploceidae	Foudia omissa	19	150		g	0	ar	LC		
b	Passeriformes	Ploceidae	Ploceus nicolli		140		S	h	ar	EN		
b	Passeriformes	Prunellidae	Prunella modularis	21	145	10	g	i	te	LC	2.10	
b	Passeriformes	Ptilogonatidae	Ptilogonys cinereus	34			g	0	ar	LC		
b	Passeriformes	Pycnonotidae	Andropadus masukuensis		150		g	0	ar	LC		
b	Passeriformes	Pycnonotidae	Andropadus milanjensis	38	200		g	0	ar	LC		
b	Passeriformes	Pycnonotidae	Andropadus virens		165			0	ar	LC		
b	Passeriformes	Pycnonotidae	Arcanator orostruthus		170		S	i	te	VU		
b	Passeriformes	Pycnonotidae	Chlorocichla flaviventris	40	215		g	fn	ar	LC		
b	Passeriformes	Pycnonotidae	Hypsipetes madagascariensis	45	240	3	g	i	ar	LC		
b	Passeriformes	Pycnonotidae	Phyllastrephus cabanisi		165		g	0	te	LC		
b	Passeriformes	Pycnonotidae	Phyllastrephus flavostriatus	31	195		s	i	te	LC		
b	Passeriformes	Pycnonotidae	Phyllastrephus placidus		150		g	i	ar			
b	Passeriformes	Pycnonotidae	Tylas eduardi	47	200	2	g	i	ar	LC		
b	Passeriformes	Sittidae	Sitta carolinensis	21	150	7	g	0	ar	LC	1.00	11
b	Passeriformes	Sittidae	Sitta europaea	23	140	7	g	i	ar	LC	0.95	
b	Passeriformes	Sturnidae	Acridotheres tristis	150	240	4	g	0	te	LC		
b	Passeriformes	Sturnidae	Hartlaubius auratus	38	200		g	fn	ar			
b	Passeriformes	Sturnidae	Sturnus vulgaris	85	220	8	g	0	ar	LC	9.50	200
b	Passeriformes	Sylviidae	Bradypterus barrattii	19	155		S	i	te			
b	Passeriformes	Sylviidae	Camaroptera brachyura	10	125		g	i	ar	LC		
b	Passeriformes	Sylviidae	Neomixis striatigula	8	120	4	g	i	ar	LC		
b	Passeriformes	Sylviidae	Neomixis tenella	7	100	2	g	i	ar	LC		
b	Passeriformes	Sylviidae	Neomixis viridis	7	110		g	i	ar	LC		
b	Passeriformes	Sylviidae	Nesillas lantzii	18	180	3	g	i	ar	LC		
b	Passeriformes	Sylviidae	Nesillas typica	18	180	3	g	i	ar	LC		
b	Passeriformes	Sylviidae	Newtonia archboldi	8	120		g	i	ar	LC		
b	Passeriformes	Sylviidae	Newtonia brunneicauda	10	120		g	i	ar	LC		
b	Passeriformes	Sylviidae	Phylloscopus collybita		105	6	g	i	ar	LC		
b	Passeriformes	Sylviidae	Phylloscopus ruficapillus		90		g	i	ar			
b	Passeriformes	Sylviidae	Phylloscopus trochilus	10	110		g	0	te	LC	20.80	
b	Passeriformes	Sylviidae	Polioptila caerulea	6	110	7	g	c	ar	LC		
b	Passeriformes	Sylviidae	Polioptila californica	6	101	14	s	i	te	LC	1.40	22
b	Passeriformes	Sylviidae	Polioptila melanura	5	110		S	i	ar	LC		
b	Passeriformes	Thraupidae	Chlorospingus ophthalmicus	22			g	0	te	LC		
b	Passeriformes	Thraupidae	Diglossa baritula				g	fn		LC		
b	Passeriformes	Thraupidae	Euphonia elegantissima	14			s	i	ar	LC		
b	Passeriformes	Thraupidae	Habia fuscicauda	39			g	i	ar	LC		
b	Passeriformes	Thraupidae	Habia rubica	33			g	c	ar	LC		
b	Passeriformes	Thraupidae	Piranga bidentata	38			g	c	ar	LC		
b	Passeriformes	Thraupidae	Piranga erythrocephala				s	u	۵.	LC		
b	Passeriformes	Thraupidae	Piranga flava	38	200	3	g	fn	te	LC		
b	Passeriformes	Thraupidae	Piranga olivacea	28		4	g	0	ar	LC		
b	Passeriformes	Thraupidae	Piranga rubra	30	200	5	g	i	ar	LC		
b	Passeriformes	Thraupidae	Thraupis abbas	45	_50	,	g	0	ar	LC		
b	Passeriformes	Timaliidae	Chamaea fasciata	15	170	4	g	0	ar	LC	0.40	
b	Passeriformes	Timaliidae	Trichastoma rufipennis	1.5	170	7	9	i	aı	LC	0.40	
b	Passeriformes	Trochilidae	Archilochus colubris	3	100	5	g	0	ar	LC		
b	Passeriformes	Troglodytidae	Campylorhynchus gularis	30	100	,	g g	i	ar	LC		
b	Passeriformes	Troglodytidae	Henicorhina leucophrys	17			g g	h	ar	LC		
b	Passeriformes	Troglodytidae	Thryomanes bewickii	10	130	8	g g	i	ar	LC	0.73	3.20

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
b	Passeriformes	Troglodytidae	Troglodytes aedon	11	119	9	g	i	ar	LC	0.64	334
b	Passeriformes	Troglodytidae	Troglodytes brunneicollis				g	u				
b	Passeriformes	Troglodytidae	Troglodytes troglodytes	10	95	15	g	i	te	LC	8.90	
b	Passeriformes	Turdidae	Alethe fuelleborni	49	220		S	i	te	LC		
b	Passeriformes	Turdidae	Catharus aurantiirostris	27	163	5	g	С	ar	LC		
b	Passeriformes	Turdidae	Catharus frantzii	31	165	2	g	h	ar	LC		
b	Passeriformes	Turdidae	Catharus fuscescens	32		6	g	0	te	LC		
b	Passeriformes	Turdidae	Catharus guttatus	27	170	8	g	C	ar	LC		
b	Passeriformes	Turdidae	Catharus mexicanus	33			g	fn	ar	LC		
b	Passeriformes	Turdidae	Catharus occidentalis	26			g	h	ar	LC		
b	Passeriformes	Turdidae	Hylocichla mustelina	48		7	g	0	ar	LC	2.75	4.20
b	Passeriformes	Turdidae	Myadestes occidentalis	42			g	fn	ar	LC		
b	Passeriformes	Turdidae	Myadestes unicolor	37			g	i	ar	LC		
b	Passeriformes	Turdidae	Pogonocichla stellata	20	150		S	i	te	LC		
b	Passeriformes	Turdidae	Ridgwayia pinicola				S	u				
b	Passeriformes	Turdidae	Sialia sialis	28	180	9	g	0	ar	LC	160	300
b	Passeriformes	Turdidae	Turdus migratorius	77	250	7	g	0	ar			40
b	Passeriformes	Turdidae	Turdus assimilis	68			g	0	ar	LC		
b	Passeriformes	Turdidae	Turdus grayi	74	230	4	g	0	ar	LC		
b	Passeriformes	Turdidae	Turdus gurneyi		190			i	te			
b	Passeriformes	Turdidae	Turdus helleri		230		s	fn	te	CR		
b	Passeriformes	Turdidae	Turdus infuscatus	74			g	0	ar	LC		
b	Passeriformes	Turdidae	Turdus merula	103	245		g	0	te	LC	4	355
b	Passeriformes	Turdidae	Turdus philomelos	83	230	10	g	i	te	LC	4	355
b	Passeriformes	Turdidae	Turdus viscivorus	125	270		g	0	te	LC	8.30	
b	Passeriformes	Tyrannidae	Attila spadiceus	37			S	c	ar	LC		
b	Passeriformes	Tyrannidae	Contopus virens	14	160	3	g	i	te			
b	Passeriformes	Tyrannidae	Contopus pertinax	27	200	4	g	h	te	LC		
b	Passeriformes	Tyrannidae	Empidonax affinis				s	u		LC		
b	Passeriformes	Tyrannidae	Empidonax alnorum	12		4	g	i	te	LC		
b	Passeriformes	Tyrannidae	Empidonax fulvifrons	8	130	4	s	0	ar	LC	0.80	2
b	Passeriformes	Tyrannidae	Empidonax minimus	10		4	g	i	te	LC		
b	Passeriformes	Tyrannidae	Empidonax occidentalis	11	155	4	s	i	ar	LC		
b	Passeriformes	Tyrannidae	Empidonax spp.	15			g	i	te			
b	Passeriformes	Tyrannidae	Empidonax virescens	14	150	3	g	i	ar	LC		
b	Passeriformes	Tyrannidae	Mitrephanes phaeocercus	9			g	0	ar	LC		
b	Passeriformes	Tyrannidae	Myiarchus crinitus	34	220	5	g	0	ar	LC	0.80	22.50
b	Passeriformes	Tyrannidae	Myiarchus tuberculifer	20	180	5	g	c	ar	LC		
b	Passeriformes	Tyrannidae	Myiodynastes luteiventris	46	220	3	g	0	ar	LC		
b	Passeriformes	Tyrannidae	Pachyramphus aglaiae	30	180	_	g	i	ar	LC		
b	Passeriformes	Tyrannidae	Pachyramphus major	25			g	fn	te	LC		
b	Passeriformes	Tyrannidae	Sayornis phoebe	20	156	9	g	0	ar	LC		
b	Passeriformes	Tyrannidae	Tyrannus melancholicus	40	240	3	g	i	ar	LC		
b	Passeriformes	Tyrannidae	Tyrannus tyrannus	40	0	4	g	0	ar	LC		
b	Passeriformes	Vangidae	Cyanolanius madagascarinus	16	160	7	y s	i	ar	LC		
b	Passeriformes	Vangidae	Leptopterus chabert	20	140	3	g	h	ar	LC		
	Passeriformes	_	Schetba rufa	37	200	3				LC		
b b	Passeriformes	Vangidae Vangidae		66	290	3	g	c i	ar	LC		
b b	Passeriformes Passeriformes	Vangidae Vireonidae	Vanga curvirostris Cyclarhis gujanensis	29	290	3	g	i	ar ar	LC		
	Passeriformes	Vireonidae	Vireo flavifrons		120	4	g	i		LC	0.45	
b				18	139	4	g		ar		0.45	
b	Passeriformes	Vireonidae Vireonidae	Vireo gilvus	15	140	8	g	h i	ar	LC		20
b	Passeriformes		Vireo griseus	11		6	g		te	LC		20
b	Passeriformes	Vireonidae	Vireo huttoni	11		4	g	i e	ar	LC		
b	Passeriformes	Vireonidae	Vireo leucophrys	13	450		g	fn	ar	LC	4 50	
b	Passeriformes	Vireonidae	Vireo olivaceus	17	150	4	g	0	ar	LC	1.50	
b	Passeriformes	Vireonidae	Vireo plumbeus	16		4	g	i	ar	LC		
b	Passeriformes	Vireonidae	Vireo solitarius	17	140	6	g	fn	ar	LC		
b	Passeriformes	Vireonidae	Vireolanius melitophrys	35		_	g	0	ar	LC		
b	Passeriformes	Zosteropidae	Zosterops maderaspatanus	11	120	3	g	fn	ar	LC		
b	Passeriformes	Zosteropidae	Zosterops silvanus		115		S	0	ar	LC		
b	Piciformes	Picidae	Colaptes auratus	132	320	7	g	h	te	LC	191	
b	Piciformes	Picidae	Dendrocopos major	85	225	6	g	i	ar	LC	16.50	
b	Piciformes	Picidae	Melanerpes erythrocephalus	72	217	8	g	0	ar	NT	0.58	

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
b	Piciformes	Picidae	Melanerpes formicivorus	81	230	11	g	i	ar	LC	6.10	15
b	Piciformes	Picidae	Picoides pubescens	25	158	5	g	0	ar	LC	2.90	3.20
b	Piciformes	Picidae	Picoides scalaris	32		3	g	0	ar	LC		
b	Piciformes	Picidae	Picoides villosus	66	240	3	g	i	ar	LC	1.27	14.41
b	Piciformes	Picidae	Piculus rubiginosus	56			g	i	ar	LC		
b	Piciformes	Picidae	Sphyrapicus varius	50	220	6	S	h	ar	LC		
b	Piciformes	Picidae	Veniliornis fumigatus	35			g	0	ar	LC		
b	Piciformes	Ramphastidae	Aulacorhynchus prasinus	155			g	C	ar	LC		
b	Psittaciformes	Psittacidae	Agapornis cana	30	160	3	S	h	ar			
b	Psittaciformes	Psittacidae	Aratinga holochlora	169			g	0	ar	LC		
b	Psittaciformes	Psittacidae	Coracopsis nigra	525	500	3	g	fn	ar	LC		
b	Psittaciformes	Psittacidae	Coracopsis vasa	246	350	3	g	fn	ar	LC		
b	Psittaciformes	Psittacidae	Erithacus rubecula	18	140	10	g	i	te	LC	8	
b	Psittaciformes	Psittacidae	Pionus senilis	212	540		g	0	ar	LC		
b	Strigiformes	Strigidae	Bubo poensis	250	510			С	ar	LC		
b	Strigiformes	Strigidae	Ciccaba virgata	250			S	0	ar	LC		
b	Strigiformes	Strigidae	Glaucidium sanchezi	48		_	g	i	ar	LC		
b	Strigiformes	Strigidae	Otus rutilus	100	240	5	g	i	ar	LC		
b	Strigiformes	Strigidae	Strix aluco	460	380	4	g	С	ar	LC	4	22.40
b	Tinameformes	Tinamidae	Crypturellus cinnamomeus	419			g	С	ar	LC		
b	Trogoniformes	Trogonidae	Trogon collaris	64			g	i	ar	LC		
b	Trogoniformes	Trogonidae	Trogon elegans	68		2	g	0	ar	LC		
b	Trogoniformes	Trogonidae	Trogon mexicanus	69			g	0	ar	LC		
b	Trogoniformes	Trogonidae	Trogon surrucura	70			S	fn	ar	LC		
b	Turniciformes	Turnicidae	Turnix nigricollis	61	160	5	g	0	te	LC		
i	Araneae	Aranidae	Hypsosinga albovittata		3		g	i	te			4
i	Araneae	Dictynidae	Argenna subnigra		4		g	i	te			4
i	Araneae	Gnaphosidae	Zelotes electus		5	344	g	i	te			4
i	Araneae	Linyphiidae	Erigone atra		3	225	g	i	te			4
i	Araneae	Linyphiidae	Erigone dentipalps		2	225	g	i	te			4
i	Araneae	Linyphiidae	Meioneta rurestris		2	225	g	i	te			4
i	Araneae	Linyphiidae	Parapelecopsis nemoralis		2	225	g	i	te			4
i	Araneae	Linyphiidae	Pelecopsis parallella		2	225	g	i	te			4
i	Araneae	Linyphiidae	Styloctetor romanus		2	225	S	i	te			4
i	Araneae	Linyphiidae	Tenuiphantes tenuis		2	225	g	i	te			4
i	Araneae	Linyphiidae	Thyphochrestus digitatus		3	225	g	i	te			4
i	Araneae	Linyphiidae	Tiso vagans		1	225	g	i	te			4
i	Araneae	Linyphiidae	Trichopterna cito		2	225	g	i	te			4
i	Araneae	Linyphiidae	Walckenaeria monoceros		3		g	i	te			
i	Araneae	Linyphiidae	Walckenaeria stylifrons		2		S	i	te			
i	Araneae	Linyphiidae	Walckenanaeria antica		2	225	g	i	te			4
i	Araneae	Lycosidae	Alopecosa barbipes		15	100	g	i	te			4
i	Araneae	Lycosidae	Alopecosa fabrilis		8	100	S	i	te			4
i	Araneae	Lycosidae	Alopecosa pulverulenta		3	100	g	i	te			4
i	Araneae	Lycosidae	Arctosa perita		10	100	g	i	fo			4
i	Araneae	Lycosidae	Pardosa monticola		8	100	g	i	te			4
i	Araneae	Lycosidae	Pardosa nigriceps		5	100	g	i	te			4
i	Araneae	Lycosidae	Pardosa pullata		6	100	g	i	te			4
i	Araneae	Tetragnathidae	Pachygnatha degeeri		5		g	i	te			4
i	Araneae	Thomisidae	Ozyptila simplex		7	40	g	i	te			4
i	Araneae	Thomisidae	Xysticus kochi		7	40	g	i	te			4
i	Araneae	Thomisidae	Xysticus ninnii		7	40	g	i	te			4
i	Araneae	Thomisidae	Xysticus sabulosus		8	40	g	i	te			4
i	Coleoptera	Cantharidae	Cantharis livida		13		g	i	te		0.18	
i	Coleoptera	Cantharidae	Rhagonycha fulva		7		g	i	te			
i	Coleoptera	Cerambycidae	Desmocerus californicus		22		s	h	ar			
i	Coleoptera	Cetoniidae	Liocola marmorata		23		s	d	ar			
i	Coleoptera	Chrysomelidae	Aphthona herbigrada		2		s	h	te			
i i	Coleoptera	Chrysomelidae	Gonioctena olivacea		4		s	h	te			
i	Coleoptera	Chrysomelidae	Mantura matthewsi		10		s	h	te			
i	Coleoptera	Coccinellidae	Adalia bipunctata		4	600	g	i	te			
i	Coleoptera	Coccinellidae	Coccinella septempunctata		7	550	g	i	te			
i	Coleoptera	Coccinellidae	Propylaea 14-punctata		4	575	g	i	te			

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
i	Coleoptera	Curculionidae	Cidnorhinus quadrimaculatus		3	1500	S	h	te			
i	Coleoptera	Curculionidae	Parethelcus pollinarius			1500	S	h	te			
i	Coleoptera	Curculionidae	Phyllobius pomaceus		9	1500	s	h	te			
i	Coleoptera	Curculionidae	Tychius quinquepunctatus		3	1500	S	h	te			
i	Coleoptera	Elateridae	Ampedus cardinalis		14		S	d	ar			
i	Coleoptera	Elateridae	Ampedus hjorti		10		S	d	ar			
i	Coleoptera	Elateridae	Procraerus tibialis		8		S	d	ar			
i	Coleoptera	Nitidulidae	Brachypterus urticae		2	250	S	d	te			
i	Coleoptera	Nitidulidae	Meligethes solidus		2		S	h	te			
i	Coleoptera	Scarabaeidae	Catharsius ninus		20		S	d	te			
	Coleoptera	Scarabaeidae	Copris sp.		15		S	d	te			
i :	Coleoptera	Scarabaeidae	Diastellopalpus semirubidus		20		s	d	te			
i :	Coleoptera	Scarabaeidae	Garreta crenulipes		13 7		S	d d	te			
:	Coleoptera	Scarabaeidae	Neosisyphus sp.		7		S	d	te			
i i	Coleoptera	Scarabaeidae Scarabaeidae	Onthophagus liberianus		15		s s	d	te			
	Coleoptera Coleoptera	Scarabaeidae	Onthophagus liberianus		6			d	te			
i :	•		Onthophagus mixtidorsis		5		S		te			
i i	Coleoptera	Scarabaeidae Scarabaeidae	Onthophagus sp.? Onthophagus sp.5		5		s s	d d	te			
i i	Coleoptera Coleoptera	Scarabaeidae Scarabaeidae	Ontnopnagus sp.5 Osmoderma eremita		5 29		S S	d d	te ar	VU	0.08	0.19
i i	Coleoptera	Scarabaeidae	Sisyphus sp.1		29 5		s s	d	te	VU	0.06	0.19
i i	Coleoptera	Tenebrionidae	Allecula morio		5 7		s s	d	ar			
i i	Coleoptera	Tenebrionidae	Prionychus ater		13		S	d	ar			
i i	Coleoptera	Tenebrionidae	Pseudocistela ceramboides		11		S	d	ar			
i	Coleoptera	Tenebrionidae	Tenebrio molitor		15		s	d	ar			
i	Coleoptera	Tenebrionidae	Tenebrio opacus		17		s	d	ar			
i	Diptera	Cecidomyiidae	Contarinia helianthemi		.,		s	h	te			
i	Diptera	Cecidomyiidae	Schmidtiella gemmarum				s	h	te			
i	Diptera	Tephritidae	Urophora cardui	0		130	s	h	te			2.00
i	Hemiptera	Acanthosomatidae	•	-	9		s	h	te			
i	Hemiptera	Anthocoridae	Anthocoris nemorum		4	100	g	i	te			
i	Hemiptera	Anthocoridae	Orius minutus		2	104	g	i	te			
i	Hemiptera	Aphididae	Cinara juniperi		3		s	h	te			
i	Hemiptera	Delphacidae	Prokelisia crocea		3	49	s	h	te		0.05	
i	Hemiptera	Miridae	Deraeocoris ruber		7	242	g	i	te			
i	Hemiptera	Miridae	Dichrooscytus valesianus				s	h	te			
i	Hemiptera	Miridae	Liocoris tripustulatus		5	250	S	h	te			
i	Hemiptera	Nabidae	Himacerus apterus		8		g	i	ar			
i	Hemiptera	Nabidae	Nabicula limbata		9			i	te			
i	Homoptera	Cicadellidae	Batracomorphus irroratus		8		S	h	te			
i	Homoptera	Cicadellidae	Eupteryx aurata		4	50	S	h	te			
i	Homoptera	Cicadellidae	Eupteryx cyclops		4	50	S	h	te			
i	Homoptera	Cicadellidae	Macropsis scutellata		5	50	S	h	te			
i	Homoptera	Cicadellidae	Macrosteles variatus		8	50	S	h	te			
i	Hymenoptera	Braconidae	Pigeria piger		8	150	g	i	te			
i	Hymenoptera	Braconidae	Triaspis thoracicus		8	150	S	i	te			
i	Hymenoptera	Eupelmidae	Eupelmus vesicularis		3		g	i	te			
i	Hymenoptera	Mymaridae	Anagrus columbi		1	94	S	i	te		0.05	10.00
i	Hymenoptera	Pompilidae	Arachnospila rufa		18		S	i	te			
i	Hymenoptera	Torymidae	Megastigmus bipunctatus		3		S	h	te			
i	Lepidoptera	Coleophoridae	Mompha miscella				S	h	te			
i	Lepidoptera	Gelechiidae	Dichomeris marginella				S	h	te			
i	Lepidoptera	Geometridae	Eupithecia pusillata				g	h	te			
i	Lepidoptera	Geometridae	Thera juniperata				S	h	te			
i	Lepidoptera	Hesperiidae	Carterocephalus palaemon				g	h	te			
i	Lepidoptera	Hesperiidae	Erynnis tages				S	h	te			
i	Lepidoptera	Hesperiidae	Hesperia comma		14	215	S	h	te			8.65
i	Lepidoptera	Hesperiidae	Ochlodes sylvanus				g	h	te			
i	Lepidoptera	Hesperiidae	Pyrgus malvae				g	h	te			
i	Lepidoptera	Hesperiidae	Spialia sertorius				S	h	te			
i	Lepidoptera	Hesperiidae	Thymelicus acteon		17	215	S	h	te			2.25
	Lepidoptera	Hesperiidae	Thymelicus lineola				g	h	te			
I	Lepidoptera	Hesperiidae	Thymelicus sylvestris				g	h	te			

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
i	Lepidoptera	Lycaenidae	Callophrys rubi				g	h	te			
i	Lepidoptera	Lycaenidae	Celastrina argiolus				g	h	te			
i	Lepidoptera	Lycaenidae	Cupido minimus				S	h	te		0.04	17.00
i	Lepidoptera	Lycaenidae	Lycaena phlaeas				g	h	te			
i	Lepidoptera	Lycaenidae	Lycaena tityrus				S	h	te			
i	Lepidoptera	Lycaenidae	Plebeius argus				g	h	te			
i	Lepidoptera	Lycaenidae	Polyommatus agestis				S	h	te			
i	Lepidoptera	Lycaenidae	Polyommatus coridon				S	h	te			
i	Lepidoptera	Lycaenidae	Polyommatus icarus				g	h	te			
i	Lepidoptera	Lycaenidae	Pseudophilotes sinaicus				S	h	te		0.03	
i	Lepidoptera	Lycaenidae	Satyrium w-album				S	h	te			
i	Lepidoptera	Lycaenidae	Scolitantides orion				S	h	te			
i	Lepidoptera	Lycaenidae	Thecla betulae				S	h	te			
i	Lepidoptera	Nymphalidae	Araschnia levana				S	h	te			
i i	Lepidoptera	Nymphalidae	Argynnis adippe				s	h h	te			
	Lepidoptera	Nymphalidae	Argynnis aglaja				s	n h	te			
i :	Lepidoptera	Nymphalidae	Argynnis paphia				g	n h	te			
i i	Lepidoptera	Nymphalidae	Boloria euphrosyne			900	s s	n h	te		0.56	1.30
i i	Lepidoptera	Nymphalidae Nymphalidae	Euphydryas aurinia Euphydryas editha bayensis			831	s	h	te		0.50	1.50
i i	Lepidoptera Lepidoptera	Nymphalidae	Hipparchia semele			218	s	h	te			
i i	Lepidoptera	Nymphalidae	Issoria lathonia			210	s s	h	te te			
i i	Lepidoptera	Nymphalidae	Limenitis camilla				s	h	te			
i	Lepidoptera	Nymphalidae	Melitaea aurelia				S	h	te			
i	Lepidoptera	Nymphalidae	Melitaea cinxia		15	1000	s	h	te		0.51	1.70
i	Lepidoptera	Nymphalidae	Melitaea diamina		15	1000	s	h	te		0.45	1.37
i	Lepidoptera	Nymphalidae	Nymphalis c-album				g	h	te		0.45	1.57
i	Lepidoptera	Nymphalidae	Nymphalis io				g	h	te			
i	Lepidoptera	Nymphalidae	Nymphalis urticae				g	h	te			
i	Lepidoptera	Nymphalidae	Speyeria nokomis			1000	s	fn	te		0.60	4.00
i	Lepidoptera	Nymphalidae	Vanessa atalanta				g	h	te			
i	Lepidoptera	Nymphalidae	Vanessa cardui				g	h	te			
i	Lepidoptera	Papilionidae	Papilio machaon				g	h	te			
i	Lepidoptera	Papilionidae	Parnassius mnemosyne			1	s	h	te		0.25	1.35
i	Lepidoptera	Pieridae	Anthocharis cardamines				g	h	te			
i	Lepidoptera	Pieridae	Colias alfacariensis				s	h	te			
i	Lepidoptera	Pieridae	Gonepteryx rhamni				g	h	te			
i	Lepidoptera	Pieridae	Leptidea sinapis				S	h	te			
i	Lepidoptera	Pieridae	Pieris brassicae				g	h	te			
i	Lepidoptera	Pieridae	Pieris napi				g	h	te			
i	Lepidoptera	Pieridae	Pieris rapae				g	h	te			
i	Lepidoptera	Riodinidae	Hamearis lucina				s	h	te			
i	Lepidoptera	Satyridae	Aphantopus hyperantus				g	h	te			
i	Lepidoptera	Satyridae	Coenonympha arcania				S	h	te			
i	Lepidoptera	Satyridae	Coenonympha pamphilus				g	h	te			
i	Lepidoptera	Satyridae	Erebia aethiops				g	h	te			
i	Lepidoptera	Satyridae	Erebia medusa				S	h	te			
i	Lepidoptera	Satyridae	Lasiommata megera				g	h	te			
i	Lepidoptera	Satyridae	Maniola jurtina				g	h	te			
i	Lepidoptera	Satyridae	Melanargia galathea				g	h	te			
i	Lepidoptera	Satyridae	Pararge aegeria				g	h	te			
i	Lepidoptera	Tortricidae	Cydia nigricana		14	570	g	h	te			
i	Lepidoptera	Yponomeutidae	Argyresthia arceuthina				S	h	te			
i	Lepidoptera	Yponomeutidae	Argyresthia aurulentella				S	h	te			
i	Lepidoptera	Yponomeutidae	Argyresthia dilectella				S	h	te			
i	Lepidoptera	Zygaenidae	Zygaena carniolica				S	h	te			
i	Lepidoptera	Zygaenidae	Zygaena filipendulae				S	h	te			
i :	Lepidoptera	Zygaenidae	Zygaena hippocrepidis				s	h	te			
	Lepidoptera	Zygaenidae	Zygaena lonicerae				S	h	te			
i :	Lepidoptera	Zygaenidae	Zygaena purpuralis				S	h	te			
i :	Lepidoptera	Zygaenidae	Zygaena viciae		22	1000	s	h	te		0.01	
:	Orthoptera	Acrididae	Oedipoda caerulescens		22	1000	s	h	te		0.01	
1	Orthoptera	Tettigoniidae	Decticus verrucivorus		39	163	g	0	te		0.04	

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
i	Prostigmata	Phytoptidae	Trisetacus quadrisetus		1		s	h	ar			
i	Prostigmata	Tenuipalpidae	Pentamerismus sp.		0		S	h	ar			
i	Prostigmata	Tetranychidae	Oligonychus ununguis		0		g	h	ar			
m	Artiodactyla	Antilocapridae	Antilocapra americana	45375	1310	2	g	h	te	LR/lc		258
m	Artiodactyla	Bovidae	Bos bison	497667	2525	1	g	h	te	LR/cd	300	
m	Artiodactyla	Bovidae	Capra hircus	60000		2	g	h	te			80
m	Artiodactyla	Bovidae	Cephalophus harveyi	34375	1342	1		h	te	LR/cd		
m	Artiodactyla	Bovidae	Cephalophus monticola	6250	625	1	g	h	te	LR/lc		
m	Artiodactyla	Bovidae	Cephalophus spadix	55000	1200	1	S	fn	te	VU		
m	Artiodactyla	Bovidae	Ovis canadensis	68167		1	S	h	te	LR/cd		12.28
m	Artiodactyla	Bovidae	Philantomba monticola	5300		1	g	h	te			
m	Artiodactyla	Cervidae	Cervus elaphus	120333		1	g	h	te	LR/lc		18.50
m	Artiodactyla	Cervidae	Odocoileus hemionus	110000	1540	2	g	h	te	LR/lc	3	11.71
m	Artiodactyla	Cervidae	Odocoileus virginianus	95000	1700	2	g	h	te	LR/lc	15	11.74
m	Artiodactyla	Suidae	Sus scrofa	200000	1350	6	g	0	te	LR/lc		300
m	Carnivora	Canidae	Canis latrans	14500		5	g	c	te	LC	29.40	232.20
m	Carnivora	Canidae	Canis lupus	34875	2050	4	g	C	te	LC	137.50	809
m	Carnivora	Canidae	Urocyon cinereoargenteus	4220	988	4	g	c	te	LC		83.68
m	Carnivora	Canidae	Vulpes velox	2767	840	4	g	c	te	LC	11	200
m	Carnivora	Canidae	Vulpes vulpes	5200	1000	4	g	c	te	LC	20	394.50
m	Carnivora	Felidae	Felis silvestris	4150		7	g	c	te	LC		9.20
m	Carnivora	Felidae	Lynx canadensis	10000	825	3	S	c	te	LC	100	1000
m	Carnivora	Felidae	Lynx rufus	8200	828	3	g	c	te	LC		119
m	Carnivora	Felidae	Puma concolor	48000		1	g	c	te	NT		1067
m	Carnivora	Mustelidae	Gulo gulo	14500	1000	1	g	c	te	VU	224	300
m	Carnivora	Mustelidae	Lontra canadensis	6225	600	3	s	С	sa	LC		200
m	Carnivora	Mustelidae	Martes americana	1000	500	3	g	С	te	LR/lc	2.39	158
m	Carnivora	Mustelidae	Martes foina	1700		4	g	c	te	LR/lc		
m	Carnivora	Mustelidae	Meles meles	13000	745	4	g	0	te	LR/lc		8.30
m	Carnivora	Mustelidae	Mephitis mephitis	3250	688	6	g	0	te	LR/lc		21.70
m	Carnivora	Mustelidae	Mustela erminea	250	194	7	g	c	fo	LR/lc		5.60
m	Carnivora	Mustelidae	Mustela frenata	205	345	6	g	С	te	LR/lc		23.51
m	Carnivora	Mustelidae	Mustela nivalis	38	210	9	g	С	te	LR/lc		6.64
m	Carnivora	Mustelidae	Mustela vison	792		5	g	c	sa	LR/lc		45
m	Carnivora	Mustelidae	Spilogale gracilis	432		4	g	0	te			
m	Carnivora	Mustelidae	Spilogale putorius	341	492	7	g	0	te	LR/lc		3.84
m	Carnivora	Mustelidae	Taxidea taxus	6050	698	2	g	С	te	LR/lc		110
m	Carnivora	Procyonidae	Bassariscus astutus	976		3	g	c	te	LR/lc		
m	Carnivora	Procyonidae	Procyon lotor	6500	774	3	g	0	te	LR/lc		266
m	Carnivora	Ursidae	Ursus americanus	65250	3000	1	g	0	te	LR/lc	116	225
m	Carnivora	Ursidae	Ursus arctos	202500	2130	1	q	0	te	LR/lc	36.60	471
m	Carnivora	Viverridae	Genetta genetta	1867	545	5	g	c	te	LR/lc		50
m	Dasyuromorphia	Dasyuridae	Antechinus agilis	26	5.5	7	g	i	te	2.0.0	0.43	6.00
m	Dasyuromorphia	Dasyuridae	Phascogale calura	48	125	8	g	c	ar	EN	0.73	5.00
m	Dasyuromorphia	Dasyuridae	Sminthopsis granulipes	20	82	0	g	i	te	LR/lc		
m	Dasyuromorphia	Dasyuridae	Sminthopsis granunpes Sminthopsis murina	27	90	20	g	i	te	LR/lc		
	Didelphimorphia	Didelphidae	Didelphis aurita	1290	350	18		0	ar	LR/lc		1.30
m m	Didelphimorphia	Didelphidae	Didelphis aurita Didelphis marsupialis	1100	٥٥٥	18	g			LR/IC		4.30
m m	Didelphimorphia	Didelphidae	Didelphis virginiana	3050	1020	21	g	0	ar te	LR/IC		5.15
		Didelphidae	Gracilinanus microtarsus	33	1020	۷1	g	i		LR/nt		3.13
m m	Didelphimorphia	·	Monodelphis americana		01		g	i	ar			
m m	Didelphimorphia Diprotodontia	Didelphidae Macropodidae	Macropus fuliginosus	35 30800	91 1500	2	~		te	LR/nt LR/lc		
m m	•	Macropodidae Macropodidae			1500 780	2	g	h	te			
m	Diprotodontia	Macropodidae	Macropus irma	7300	780	4	g	h	te	LR/nt		
m	Diprotodontia	Macropodidae	Macropus robustus	22900	1400	1	g	h	te	LR/lc	F 40	12.00
m	Diprotodontia	Phalangeridae	Trichosurus vulpecula	1600	400	1	g	h	ar	LR/lc	5.40	12.80
m	Diprotodontia	Phascolarctidae	Phascolarctos cinereus	7825	750	1	S	h	ar	LR/nt	3.40	10.60
m	Diprotodontia	Tarsipedidae	Tarsipes spencerae	9	75	5	S	fn	te			
m	Hyracoidea	Procaviidae	Dendrohyrax arboreus	2950	,		g	h	ar	LC		
m	Insectivora	Soricidae	Blarina brevicauda	16	125	17	g	i	fo	LR/lc		7.71
m	Insectivora	Soricidae	Sorex arizonae	4	61		g	i	te	VU		
m	Insectivora	Soricidae	Sorex cinereus	4		12	g	i	te	LR/lc		5.09
m	Insectivora	Soricidae	Sorex longirostris	4		12	g	i	fo	LR/lc		5.14
m	Insectivora	Soricidae	Sorex merriami	6	96	12	S	i	fo	LR/lc		5.67

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microcitors	i	i	sa	LR/lc		3.95
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m Rodentia Muridae <i>Microtus ochrogaster</i> 42 15 s m Rodentia Muridae <i>Microtus pennsylvanicus</i> 44 120 13 g	h		fo	LR/lc		1.75
m Rodentia Muridae <i>Microtus pennsylvanicus</i> 44 120 13 g	h		te	LR/Ic		0.14
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in nouerida ivididae ividotus prietorum 75 MA A A	h		te	LR/lc		1.20
	h h		fo	LR/lc		1.55
m Rodentia Muridae Mus musculus 21 28 g m Rodentia Muridae Neotoma cinerea 317 202 7 g	h h		te te	LR/lc LR/lc		2.20

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
m	Rodentia	Muridae	Neotoma mexicana	160	177	4	g	h	te	LR/lc		9.69
m	Rodentia	Muridae	Notomys alexis	33	109		g	h	te	LR/lc		
m	Rodentia	Muridae	Notomys mitchellii	39	120		S	h	te	LR/lc	0.05	0.10
m	Rodentia	Muridae	Oligoryzomys nigripes	23			g	h	te	LR/lc		0.08
m	Rodentia	Muridae	Oryzomys angouya	62				h	ar			
m	Rodentia	Muridae	Oryzomys russatus	62				h	te		0.04	
m	Rodentia	Muridae	Oxymycterus dasitrychus	98	147			i	fo			_
m	Rodentia	Muridae	Peromyscus leucopus	21	95	17	g	0	te	LR/lc		1
m	Rodentia	Muridae	Peromyscus maniculatus	20	85	16	g	0	te	LR/lc	0.37	3.22
m	Rodentia	Muridae	Peromyscus melanotis	19	89	32	g	0	te	LR/lc		
m	Rodentia	Muridae	Peromyscus oreas	20	95	4.4	S	0	te	LR/lc		2.70
m	Rodentia Rodentia	Muridae Muridae	Phenacomys intermedius	27 23	108 80	11 4	g	h h	te	LR/lc LR/lc		3.70
m	Rodentia	Muridae	Pseudomys albocinereus	34	90	4	S	n h	te	EN		
m	Rodentia	Muridae	Pseudomys occidentalis	133	163	13	g		te	LR/lc	0.16	0.76
m m	Rodentia	Muridae	Rattus fuscipes Rattus rattus	89	103	25	g	0	te te	LR/Ic	0.16	0.76
m m	Rodentia	Nesomyidae	Eliurus myoxinus	70		25	g	h	ar	LR/Ic		
m	Rodentia	Nesomyidae	Eliurus webbi	88			g s	fn	ar	LR/nt		
m	Rodentia	Sciuridae	Cynomys Iudovicianus	1070	384	4	s	h	fo	LR/nt	2.40	9.66
m	Rodentia	Sciuridae	Glaucomys sabrinus	70	170	3	g	0	ar	LR/Ic	0.43	4.90
m	Rodentia	Sciuridae	Glaucomys volans	70	227	4		0	ar	LR/Ic	0.43	6.13
m	Rodentia	Sciuridae	Marmota flaviventris	3400	410	4	g g	h	te	LR/Ic	0.43	1.40
m	Rodentia	Sciuridae	Marmota mavventris	3676	415	5	s	h	te	LR/Ic		0.77
m	Rodentia	Sciuridae	Pteromys volans	130	413	4	g	h	ar	LR/nt		8
m	Rodentia	Sciuridae	Ratufa indica	1500	355	4	g	fn	ar	VU		Ü
m	Rodentia	Sciuridae	Sciurus aberti	795	300	5	s	h	ar	LR/lc		10.13
m	Rodentia	Sciuridae	Sciurus carolinensis	500	250	6	s	h	ar	LR/Ic		7
m	Rodentia	Sciuridae	Sciurus nayaritensis	707	284	3	g	h	ar	LR/Ic		,
m	Rodentia	Sciuridae	Sciurus niger	900	576	4	g	h	ar	LR/lc		4.10
m	Rodentia	Sciuridae	Sciurus vulgaris	330	228	11	g	h	ar	NT		0.73
m	Rodentia	Sciuridae	Spermophilus beldingi	382	205	5	s	h	fo	LR/lc	0.30	0.33
m	Rodentia	Sciuridae	Spermophilus columbianus	466	293	3	g	h	fo	LR/lc	0.75	2.20
m	Rodentia	Sciuridae	Spermophilus lateralis	250	185	5	g	0	fo	LR/lc		5.32
m	Rodentia	Sciuridae	Tamias canipes	70	135	4	g	h	te	LR/nt		6.77
m	Rodentia	Sciuridae	Tamias cinereicollis	62	129	5	g	h	te	LR/lc		6.77
m	Rodentia	Sciuridae	Tamias dorsalis	70	130	8	s	h	te	LR/lc		
m	Rodentia	Sciuridae	Tamias minimus	45	108	5	g	h	te	LR/lc		3.02
m	Rodentia	Sciuridae	Tamias quadrivittatus	58	120	7	g	0	te	LR/lc		7.19
m	Rodentia	Sciuridae	Tamias striatus	100	155	6	g	h	te	LR/lc	0.22	0.88
m	Rodentia	Sciuridae	Tamias townsendii	100	140	4	g	0	ar	LR/lc		
m	Rodentia	Sciuridae	Tamias umbrinus	57	124		g	h	ar	LR/lc		
m	Rodentia	Sciuridae	Tamiasciurus douglasii	200	170	15	g	h	sa	LR/lc		0.60
m	Rodentia	Sciuridae	Tamiasciurus hudsonicus	250	200	7	g	h	ar	LR/lc	0.36	1.61
r	Squamata	Agamidae	Amphibolurus cristatus		110		g	i	fo			
r	Squamata	Agamidae	Amphibolurus maculatus griseus		67		g	i	te			
r	Squamata	Agamidae	Amphibolurus maculatus maculatus		54		g	i	te			
r	Squamata	Agamidae	Amphibolurus minor		150	16	g	i	te			
r	Squamata	Agamidae	Amphibolurus ornatus		93	7	S	i	te			
r	Squamata	Agamidae	Amphibolurus reticulatus		108	7	g	i	fo			
r	Squamata	Agamidae	Amphibolurus salinarum		70	6	g	i	fo			
r	Squamata	Agamidae	Amphibolurus scutulatus		115		g	i	fo			
r	Squamata	Agamidae	Moloch horridus		110	7	S	i	te			
r	Squamata	Gekkonidae	Crenadactylus ocellatus		33	2	g	i	te			
r	Squamata	Gekkonidae	Diplodactylus alboguttatus		57		g	i	te			
r	Squamata	Gekkonidae	Diplodactylus granariensis		69	2	g	i	fo			
r	Squamata	Gekkonidae	Diplodactylus maini		54		g	i	te			
r	Squamata	Gekkonidae	Diplodactylus michaelseni		50		g	i	te			
r	Squamata	Gekkonidae	Diplodactylus ornatus		58		g	i	te			
r	Squamata	Gekkonidae	Diplodactylus pulcher		62	2	g	i	te			
r	Squamata	Gekkonidae	Diplodactylus spinigerus		70	_	g	i	ar			
r r	Squamata Squamata	Gekkonidae Gekkonidae	Gehyra variegata Heteronotia binoei	3	50 54	2 2	g g	i o	ar fo			

Taxa	Order	Family	Species	Mass, g	Length, mm	Fecundity	Specialization	Diet	Habit	IUCN status	Mean dispersal dist, km	Max dispersal dist, km
r	Squamata	Gekkonidae	Nephrurus levis		102		g	i	fo			
r	Squamata	Gekkonidae	Oedura reticulata		64	2	S	i	ar			
r	Squamata	Gekkonidae	Phyllurus milii		96	2	g	i	te			
r	Squamata	Phrynosomatidae	Sceloporus woodi		44	12	S	i	te		0.11	0.75
r	Squamata	Pygopodidae	Delma australis		88	2	g	i	te			
r	Squamata	Pygopodidae	Delma fraseri		128	2	g	i	te			
r	Squamata	Pygopodidae	Delma grayii		121	2	g	i	te			
r	Squamata	Pygopodidae	Lialis burtonis		290	2	g	c	te			
r	Squamata	Pygopodidae	Pygopus lepidopodus		240	2	g	i	te			
r	Squamata	Pygopodidae	Pygopus nigriceps		227	2	g	0	te			
r	Squamata	Scincidae	Cryptoblepharus carnabyi		55		g	i	ar			
r	Squamata	Scincidae	Cryptoblepharus plagiocephalus		45	3	g	i	ar			
r	Squamata	Scincidae	Ctenotus impar		68		g	i	fo			
r	Squamata	Scincidae	Ctenotus mimetes		82		g	i	te			
r	Squamata	Scincidae	Ctenotus pantherinus		102		g	i	te			
r	Squamata	Scincidae	Ctenotus schomburgkii		52		s	i	te			
r	Squamata	Scincidae	Ctenotus uber		70		g	i	te			
r	Squamata	Scincidae	Egernia inornata		84	2	g	0	te			
r	Squamata	Scincidae	Egernia multiscutata bos		96	2	g	0	te			
r	Squamata	Scincidae	Lerista distinguenda		46		g	i	fo			
r	Squamata	Scincidae	Lerista muelleri		50		g	i	te			
r	Squamata	Scincidae	Menetia greyii		38	5	g	i	te			
r	Squamata	Scincidae	Menetia surda		32		g	i	te			
r	Squamata	Scincidae	Morethia butleri		56		g	i	te			
r	Squamata	Scincidae	Morethia lineocellata		49	5	g	i	te			
r	Squamata	Scincidae	Morethia obscura		56	4	g	i	te			
r	Squamata	Scincidae	Tiliqua occipitalis		320	7	g	0	te			
r	Squamata	Scincidae	Tiliqua rugosa		285	2	g	0	te			
r	Squamata	Teiidae	Cnemidophorus sexlineatus		75	7	g	i	te			
r	Squamata	Varanidae	Varanus gouldii		378	14	g	С	fo			
r	Squamata	Varanidae	Varanus tristis		250	10	g	С	ar			

Taxa: a = amphibian, b = bird, i = invertebrate, m = mammal, r = reptile. Fecundity is the number of offspring per female per year. Specialization: s = specialist (primarily uses 1 food source or habitat), g = generalist (uses several foods or habitats). Diet: c = carnivore, d = detritivore, h = herbivore/granivore, fn = frugivore/nectivore, i = insectivore/parasitoid, o = omnivore. Habit: ar = arboreal, fo = fossorial, te = terrestrial, sa = semiaquatic. IUCN status: CR = critically endangered, EN = endangered, VU = vulnerable, NT = near threatened, LR/cd = lower risk: conservation dependent, LC = least concern, DD = data deficient. Mean and max dispersal distances are the average and maximum recorded dispersal distances of individuals, respectively (in km).