

LITERATURE CITED

- Adriaensen F, Chardon JP, DeBlust G, Swinnen E, Villalba S, Gulinck H, and Matthysen E (2003). The application of 'least-cost' modelling as a functional landscape model. *Landscape and Urban Planning*, 64, 233-247.
- Banerjee K and Jhala YV (2012). Demographic parameters of endangered Asiatic lions (*Panthera leo persica*) in Gir Forests, India. *Journal of Mammalogy*, 93, 1420-1430.
- Beier P, Majka DR, and Spencer WD (2008). Forks in the road: choices in procedures for designing wildland linkages. *Conservation Biology*, 22, 836-851.
- Beier P and Noss RF (1998). Do habitat corridors provide connectivity? *Conservation Biology*, 12, 1241-1252.
- Brown JH, Kodric-Brown A (1977). Turnover rates in insular biogeography: effect of immigration on extinction. *Ecology*, 58, 445-449.
- Calabrese JM and Fagan WF (2004). A comparison-shopper's guide to connectivity metrics. *Frontiers of Ecology and Environment*, 2, 529-536.
- Caro TM, and O'Doherty G (1999). On the use of surrogate species in conservation biology. *Conservation Biology*, 13, 805-814.
- Chapron G, Miquelle DG, Lambert A, Goodrich JM, Legendre S and Clobert J (2008). The impact on tigers of poaching versus prey depletion. *Journal of Applied Ecology*, 45, 1667-1674.
- Chapron G. et al. (2014). Recovery of large carnivores in Europe's modern human-dominated landscapes. *Science*, 346, 1517-1519.
- Check E (2006). Conservation biology: The tiger's retreat. *Nature*, 441, 927-930.
- Clark W, Curlee AP and Reading RP (1996). Crafting effective solutions to the large carnivore conservation problem. *Conservation Biology*, 10, 940-948.
- Compton B, Mc Garigal K., Cushman SA and Gamble L (2007). A resistant kernel model of connectivity for vernal pool breeding amphibians. *Conservation Biology*, 21, 788-799.
- Crooks K (2002). Relative Sensitivities of Mammalian Carnivores to Habitat Fragmentation. *Conservation Biology*, 2, 488-502.
- Crooks KR, Sanjayan M (2006). Connectivity conservation; Crooks KR, Sanjayan M, editors. Cambridge, UK.: Cambridge University Press. 712 p.
- Cushman SA and Lewis J (2010). Movement behavior explains genetic differentiation in American black bear. *Landscape Ecology*, 25, 1613-1625.
- Cushman SA, Landguth EL (2010). Scale dependent inference in landscape genetics. *Landscape Ecology*, 25, 967-979.
- Cushman SA, Raphael MG, Ruggiero LF, Shirk AS, Wasserman TN, O'Doherty EC (2011). Limiting factors and landscape connectivity: the American marten in the Rocky Mountains. *Landscape Ecology*, 26, 1137-1149.
- Cushman SA, Schwartz MK, Hayden J, McKelvey KS (2006). Gene flow in complex landscapes: confronting models with data. *American Naturalist*, 168, 486-499.
- Dinerstein E, Loucks C, Wikramanayake E, Ginsberg J, Sanderson E, Seidensticker J, Forrest J, Bryja G, Heydlauff A, Klenzendorf S, Leimgruber P, Mill J, O'Brien TG, Shrestha M, Simons R and Songer M (2007). The fate of wild tigers. *BioScience*, 57, 508-514.
- Dolrenry S, Stenglein J, Hazzah L, Lutz RS and Frank L (2014). A metapopulation approach to African lion (*Panthera leo*) conservation. *PLOS one*, 9, 2, e88081. doi:10.1371/journal.pone.0088081
- Fischer J and Lindenmayer DB (2002). Small patches can be valuable for biodiversity conservation: two case studies on birds in south eastern Australia. *Biological Conservation*, 106, 129-136.
- Forman RTT, Godron M (1986). *Landscape ecology*. John Wiley & Sons, New York
- Frankham R, Ballou JD and Briscoe D (2002). *Introduction to Conservation Genetics*. Cambridge University Press, Cambridge, UK.
- Gittleman JL, Funk SM, Macdonald DW and Wayne RK (2001). *Carnivore conservation*. Cambridge: Cambridge University Press. 690 p. editors.
- Gopal R, Qureshi Q, Bharadwaj M, Singh RKJ and Jhala YV (2010). Evaluating the status of the endangered tiger *Panthera tigris* and its prey in Panna Tiger Reserve, Madhya Pradesh, India, *Oryx*, 44, 383-398.
- Gopal, R, Yadav SP, Majumder A, and Areendran G. (Eds) (2014). *Global Tiger Atlas*. A collaborative compilation by Global Tiger Forum, WWF-India and Tiger Range Countries (pages 1-38)
- Hanski I (1999). *Metapopulation ecology*. New York: Oxford University Press. 313 p.





- Hanski I, Gilpin M, editors (1997). *Metapopulation biology: ecology, genetics and evolution*. San Diego, California: Academic Press. 512 p.
- Hanski I. and Ovaskainen O (2000). The metapopulation capacity of a fragmented landscape. *Nature*, 404, 755–758.
- Hanski IA (1994). A practical model of metapopulation dynamics. *Journal of Animal Ecology*, 63, 151-162.
- Harrison S (1991). Local extinction in a metapopulation context: an empirical evaluation. *Biological Journal of the Linnean Society*, 42, 73-88.
- Inglis G and Underwood AJ (1992). Comments on Some Designs Proposed for Experiments on the Biological Importance of Corridors. *Conservation Biology*, 6, 581-586.
- Jhala YV, Gopal R and Qureshi Q eds. (2008). *Status of the tigers, co-predators, and prey in India*. National Tiger Conservation Authority, Ministry of Environment and Forests, Government of India, New Delhi and Wildlife Institute of India, Dehradun. TR08/001 pp164. http://oldwww.wii.gov.in/publications/statusof_tigers2008.pdf
- Jhala YV, Qureshi Q and Gopal R (2011a). Can the abundance of tigers be assessed from their signs? *Journal of Applied Ecology*, 48, 14-24.
- Karanth KU and Gopal R (2005). An ecology-based policy framework for human-tiger coexistence in India. Pages 373-387 in *People and Wildlife: Conflict or Coexistence?* (Editors: R. Woodroffe, S. Thirgood and A. Rabinowitz). Cambridge University Press.
- Kenney JS, Smith JLD, Starfield AM and McDougal CW (1995). The long term effects of tiger poaching on population viability. *Conservation Biology*, 9, 1127-1133.
- Lambeck, RJ (1997). Focal species: a multi-species umbrella for nature conservation. *Conservation Biology*, 11, 849–856.
- Lindenmayer DB, and Fischer J (2003). Sound science or social hook – a response to Brooker’s application of the focal species approach. *Landscape and Urban Planning*, 62, 149–158.
- Linkie M, Chapron G, Martyr DJ, Holden J and Leader-Williams N (2006). Assessing the viability of tiger subpopulations in a fragmented landscape. *Journal of Applied Ecology*, 43, 576-586.
- Lowe, W. and Allendorf, F (2010). What can genetics tell us about population connectivity? *Molecular Ecology* 19, 3038–3051
- McRae BH, Dickson BG, Keitt TH, and Shah VB (2008). Using circuit theory to model connectivity in ecology, evolution, and conservation. *Ecology*, 89, 2712–2724.
- Moilanen A, Hanski I (2001). On the use of connectivity measures in spatial ecology. *Oikos*, 95, 147–151. doi:10.1034/j.1600-0706.2001.950116.x
- Mondol S, Karanth KU, Ramakrishnan U (2009) Why the Indian Subcontinent Holds the Key to Global Tiger Recovery. *PLoS Genet* 5(8): e1000585. doi:10.1371/journal.pgen.1000585
- Narain S, Panwar HS, Gadgil M and Thapar V (2005). *Joining the dots: The report of the Tiger Task Force*. Project Tiger, Union Ministry of Environment and Forests, New Delhi.
- Natural Areas Journal*, 19, 392-411.
- Noss RF (1987). Corridors in real landscapes: a reply to Simberloff and Cox. *Conservation Biology*, 1, 159-164.
- Noss, RF, Strittholt JR, Vance-Borland K, Carroll C, and Frost P (1999). *A conservation plan for the Klamath-Siskiyou ecoregion*.
- Palmer SCF, Coulon A, Travis JMJ (2011). Introducing a “stochastic movement simulator” for estimating habitat connectivity. *Methods in Ecology and Evolution*, 2(3), 258-268.
- Pascual-Hortal L and Saura S (2006). Comparison and development of new graph-based landscape connectivity indices: towards the prioritization of habitat patches and corridors for conservation. *Landscape Ecology*, 21, 959–967.
- Proctor MF, McLellan BN, Strobeck C and Barclay RMR (2005). Genetic analysis reveals demographic fragmentation of grizzly bears yielding vulnerably small populations. *Proceedings of the Royal Society B: Biological Sciences*, 272, 2409-2416.
- Purvis A, Agapow PM, Gittleman JL and Mace GM (2000). Non random Extinction and the Loss of Evolutionary History. *Science*, 14, 288, 328–330.
- Rangarajan M (1996). *Fencing the forest: conservation and ecological change in India’s Central Provinces, 1860-1914*. Oxford University Press, Delhi, India.
- Rangarajan M (2006). *India’s wildlife history: an introduction*. Permanent Black, New Delhi.
- Rayfield BM, Fortin J and Fall A 2010. The sensitivity of least-cost habitat graphs to relative cost surface values. *Landscape Ecology*, 25, 519 – 532.

- Revilla E, Wiegand T (2008). Individual movement behavior, matrix heterogeneity, and the dynamics of spatially structured populations. *Proceedings of the National Academy of Sciences, USA*, 105, 19120–19125.
- Sanderson E, Forrest J, Loucks C, Ginsberg J, Dinerstein E, Seidensticker J, Leimgruber P, Songer M, Heydlauff A, O'Brien T, Bryja G, Klenzendorf S and Wikramanayake E (2006). "Setting Priorities for the Conservation and Recovery of Wild Tigers: 2005-2015." The Technical Assessment. WCS, WWF, Smithsonian, and NFWF-STF, New York – Washington, D.C.
- Sanderson, EW, Jaiteh M, Levy MA, Redford KH, Wannebo AV, and Woolmer G (2002). The Human Footprint and The Last of the Wild. *BioScience*, 52(10), 891-904, [http://dx.doi.org/10.1641/0006-3568\(2002\)052\[0891:THFATL\]2.0.CO;2](http://dx.doi.org/10.1641/0006-3568(2002)052[0891:THFATL]2.0.CO;2)
- Sawyer H, Kauffman MJ, Nielson RM, (2009). Influence of well pad activity on winter habitat selection patterns of mule deer. *Journal of Wildlife Management*, 73, 1052–1061.
- Simberloff, D (1998). Flagships, umbrellas, and keystones: is single-species management passé in the landscape era? *Biological Conservation*, 83, 247–257.
- Smith JLD (1993). The role of dispersal in structuring the Chitwan tiger population. *Behaviour*, 124, 165-195.
- Spear SF, Balkenhol N, Fortin MJ, McRae BH, Scribner K (2010). Use of resistance surfaces for landscape genetic studies: considerations for parameterization and analysis. *Molecular Ecology*, 19, 3576–3591.
- Tilson RL and Seal US (1987). *Tigers of the world*. Park Ridge, New Jersey, Noyes Publications.
- Tischendorf L, Fahrig L (2000). How should we measure landscape connectivity? *Landscape Ecology*, 15, 633–641. doi:10.1023/A:1008177324187
- Urban DL and Keitt T (2001). Landscape connectivity: a graph-theoretic perspective. *Ecology*, 82, 1205–1218
- Urban DL, Minor ES, Treml EA, and Schick RS (2009). Graph models of habitat mosaics. *Ecological Letters*, 12, 260–273.
- Walston J, Robinson JG, Bennett EL, Breitenmoser U, et al. (2010). Bringing the tiger back from the brink – the six percent solution. *PLoS Biology*, 8, e1000485 doi:10.1371/journal.pbio.1000485.
- Wiens, JA, Hayward GD, Holthausen, RS, and Wisdom MJ (2008). Using surrogate species and groups for conservation planning and management. *BioScience*, 58, 241–252.
- Wilcox BA and Murphy DB (1985). Conservation strategy: The effects of fragmentation on extinction. *The American Naturalist*, 125, 879-887.
- Woodroffe R (2000). Predators and people: using human densities to interpret declines of large carnivores. *Animal Conservation*, 3, 165-173.
- Woodroffe R and Ginsberg JR (1998). Edge effects and the extinction of populations inside protected areas. *Science*, 280, 2126-2128.
- Yumnam B, Jhala YV, Qureshi Q, Maldonado JE, Gopal R, Saini S, Srinivas Y, Fleischer, R. C (2014). Prioritizing Tiger Conservation through Landscape Genetics and Habitat Linkages. *PLoS ONE* 9(11): e111207. doi:10.1371/journal.pone.0111207





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