**Patch definition**

* The metapopulation approach provides a framework to model the population dynamics of a set of interconnected subpopulations (Hanski 1999).
* The colonization rate of empty patches increases with increasing connectivity, as inter-patch migration is critical for recolonizing suitable, unoccupied habitat.
* Patch deﬁnition is pivotal to the construction of the realistic metapopulation model, because it will determine patch size and connectivity, the latter being a function of the size and distance of neighboring patches.
* Real fragmented landscapes typically show much spatial variation in patch areas and isolations. Individual and population processes and community patterns are generally influenced by patch area and isolation, and it is desirable to include these effects into metapopulation models, especially because such models can often be parameterized with data that are readily available from ®field studies (ref. 48, and I.H., J. Alho and A. Moilanen, manuscript in preparation). Adding the patch area and isolation effects into patch occupancy models of metapopulation dynamics has promoted a close link between modelling and ®field studies.