

## 2.2 Patch primer

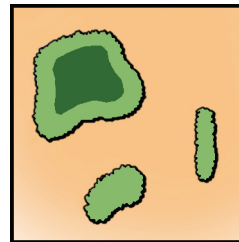
Large patches typically conserve a greater variety and quality of habitats, resulting in higher species diversity and abundance. The larger the patch is, the higher percentage of interior habitat that it will contain. This benefits interior species which are often the most vulnerable to habitat loss and fragmentation.

Minimum patch area requirements for species are highly dependent on species, quality of habitat, and landscape context. The table below provides a summary of patch area requirements. In general, larger animals require larger patches. A biologist should be consulted to refine these ranges.

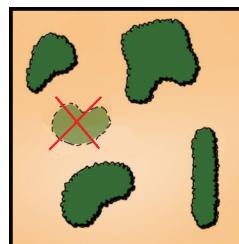
Example Ranges of Minimum Patch Area	
Taxa	Patch Area
Plants	5 to $\geq$ 250 ac
Invertebrates	50 sq ft to $\geq$ 2.5 ac
Reptiles and Amphibians	3 to $\geq$ 35 ac
Grassland Birds	12 to $\geq$ 135 ac
Waterfowl	$\geq$ 12 ac
Forest Birds	5 to $\geq$ 95 ac
Small Mammals	2.5 to $\geq$ 25 ac
Large Mammals	40 ac to $\geq$ 2 sq mi
Large Predator Mammals	3.5 to $\geq$ 850 sq mi

### Key patch guidelines

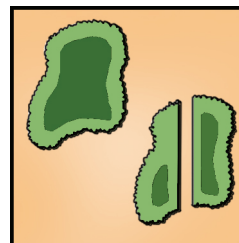
Small patches play a critical role in protecting biodiversity, particularly in areas with limited habitat. Small patches can capture a range of habitat types or unique habitats. Include large and small patches in a plan.



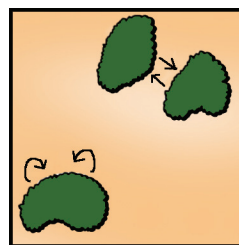
Redundancy is an essential component of ecosystems at all scales. If several patches exist in an area, species may not be seriously threatened or lost if one of the patches is destroyed or degraded.



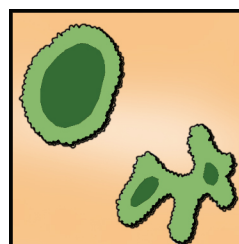
Of two patches having exactly the same area, one fragmented and one unified, the unified patch will be of far greater value. Biodiversity will remain higher and negative edge effects will be reduced.



Opportunities for species to interact become greater as the distance between patches decreases. This potential interaction is dependent on species and their movement capabilities.



A less convoluted patch will have a lower proportion of edge habitat and will provide greater benefits for interior species which are often species of concern.



## 2.2 References

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