



Evolutionary Significant Units and Management Units

ESUs were defined as historically isolated and independently evolving sets of populations, without regard to the current distribution of phenotypic variation, and are diagnosed as sets of populations showing reciprocal monophyly of mtDNA combined with significant divergence of allele frequencies at nuclear loci. By contrast, Management Units (MUs) represent demographically independent populations, i.e., the functional components of the (usually larger) ESU, and are diagnosed as populations showing divergence in allele frequencies at mtDNA and/or nuclear loci. Whether these MUs also partition phenotypic variation will depend on the form and strength of idiosyncratic selection pressures in relation to gene flow.

Moritz, C., 1999. Conservation units and translocations: strategies for conserving evolutionary processes. *Hereditas*, 130(3), pp.217-228.

RECIPROCAL MONOPHYLY - This is a term typically applied to analyses of gene tree data from two sister species. If we consider two species, A, and B, to say that they are reciprocally monophyletic means that all of the haplotypes sampled from species A are more closely related to each other than any haplotype from species B, and vice versa.