

Combining Data in Species Distribution Models

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Abstract: The purpose of species distribution models is to use data on observations of species to infer their full distributions, and the drivers of their distributions. But the data itself can come from a variety of sources, from planned surveys to citizen science records and expert range maps. If we are to use this data efficiently, we should be able to combine the different types of data into a single model (Marion *et al.* 2012). A state space approach, modelling the actual distribution as a continuous intensity and developing observation models that are appropriate to the data, will be outlined.

We will use data from the Map of Life project (Jetz *et al.* 2011, www.mappinglife.org) to demonstrate how this approach can be applied to point counts, species lists from nature reserves, and expert range maps.

References

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