Driver uncertainty in species loss

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Understanding the pressures that lead to a high risk of species extinction is crucial for stemming biodiversity loss (see S. L. Maxwell *et al*. *Nature* **536,** 143-145; 2016). However, the large number of species that remain classified as 'data-deficient' can introduce considerable uncertainty in identifying these drivers.

Data-deficient species represent one in six species on the IUCN Red List, some 13,465 species currently (http://www.iucnredlist.org). Uncertainties over extinction drivers depend on the proportion of such species within a group [*1 – editor: please format*]. In birds, uncertainty is low because 0.58% of species are data-deficient; 24% of amphibians and 49% of freshwater crabs are data-deficient, so uncertainties in these groups are likely to be high.

Data-deficient species tend to have limited geographical ranges, to be small in size and to occupy highly specific, often remote habitats. They are unlikely to be threatened by hunting, but could be more susceptible to wide-ranging threats such as deforestation or climate change (L. M. Bland *et al. Cons. Biol.* **29,** 250-259; 2015).

Addressing the problem of data deficiency is fundamental to diagnosing the causes of high extinction risk and therefore to planning conservation strategies.

[1] Butchart, S. H. M. & Bird, J. P. Data Deficient birds on the IUCN Red List: What don't we know and why does it matter? *Biological Conservation* **143**, 239-247, doi:10.1016/j.biocon.2009.10.008 (2010).