Supplementary Figure S1. Ancestral state reconstruction of sidewinding specialization using maximum likelihood estimates for discrete characters (Pagel 1994), as implemented by the ace function of the R package APE (Paradis et al. 2004). Pie charts at nodes show the likelihood of a specialization for sidewinding locomotion vs. a generalist state. We used the phylogeny from Alencar et al. (2016) and the narrowest categorization of sidewinding specialization, coding species listed in Table S1 as sidewinding specialists. If we assume that all nodes with >50% likelihood of having the sidewinding state were in fact sidewinders, then specialized sidewinding has evolved 5 times, potentially with a reversal (*Bitis schneideri*, which may show population differences in sidewinding tendency, Table S2). Note that one species in a sidewinding clade, *Pseudocerastes urarachnoides*, was only recently described (Bostanchi et al. 2006) after having been previously been mistaken for one of its congeners, and it is therefore uncertain whether it is similarly specialized for sidewinding.