

Assessing the environmental status of Protected Areas (PAs) is a challenging issue. To indicate that status, the identification of a common set of variables that are scientifically sound, and easy to assess and monitor by the PA practitioners, is particularly important. In this study, a set of 27 Essential Variables (EVs) for PA management was selected in a bottom-up process from 67 harmonised variables that describe the status of Ecosystem Functions and Structures, Ecosystem Services, and Threats in PAs. This bottom-up process involved 27 internationally recognised PAs, mostly European, with different level of protection, different extent, and a wide range of human-nature interactions. The EVs were selected by more than 120 practitioners, i.e. PA managers and rangers, as well as scientists, working in terrestrial and aquatic PAs. Across both terrestrial and aquatic PAs, scientists and practitioners largely identified the same variables as important. Data availability for these 27 EVs varied between PAs and averaged 67 % across all studied PAs. As this set of EVs for PAs is defined through a bottom-up approach considering variables already in use both in management and research, it is more than for previous EVs likely to be adopted, applied and developed to record the status and changes in the ecological and socio-economic conditions of PAs and to forecast future changes. The perceived status of the EVs, on an average 3.6 on a scale to a maximum of 5, indicates the surveyed PAs are in a moderate to good environmental condition.