

Data Standards

New population data can only be added to the Living Planet Database if they meet the requirements outlined below.

What is a population?

We use the term 'population' to define each record in the database. We use it as a shorthand for 'population time-series' or 'time-series', the data for a single species that has been monitored at a specific location over time. The use of the term 'population' here does not correspond to an ecological definition.

Types of population data

The LPI uses time-series to track trends in the abundance of a large number of populations of species globally. Specific types of population abundance data can be used for this purpose. These include:

- Full population count
- Estimate (e.g. where population size was estimated from measured parameters)
- Density
- Index
- Proxy (e.g. breeding pairs, nests, tracks)
- Measure per unit effort (e.g. the number of fish caught per net per hour)
- Biomass (e.g. spawning stock biomass)
- Sample (e.g. where a proportion of the population is regularly monitored)
- Occupancy

Data types that are not used in this database are:

- Data from experimental observations (testing different treatments to populations over time)
- Survival rate
- Recruitment data such as number of eggs or young
- Catch or hunting data unless there has been a measure of effort
- Data where changes in survey area or method has changed over time and this has not been corrected for

Data requirements

Abundance data need to have been collected from a single vertebrate species (mammals, birds, fish, reptiles and amphibians) over a period of at least two years, which do not need to be consecutive. If multiple measurements are taken over the course of a year, these will need to be transformed into a single annual figure.

Information is also needed on the geographic location and method used. To present an accurate measure of abundance change, it is important that these are consistent across monitoring years. If the method changes within the study period, unless corrected for, the data should be entered separately. If only part of the dataset is appropriate for entry, all other values should be excluded.

The data may come from a variety of sources, as long as these are referenced and traceable, including peer-reviewed scientific articles, books, government reports, online databases, stock assessments and grey literature.