



# IT ALL counts

The Animal Demography Unit has been the core partner in a series of landmark productions relating to the biodiversity of southern Africa. When the history of biodiversity in this region finally gets reviewed and written, the first bird atlas (1997), the IBA directory (1999), the Red Data Book for birds (2000), the frog atlas (2004), the butterfly atlas (2013) and the reptile atlas (2013, with a 2014 launch date) will certainly be seen as milestones in the documentation of biodiversity in this region.

One of the ADU's core values is described as 'openness'. By this we mean that we have adopted an 'open access' data-sharing paradigm which maximises the benefit derived from data collectively gathered, thus advancing interdisciplinary scholarly research and informing conservation needs. Of course the data cannot responsibly be totally open access; there is a short list of species for which distribution data are not disclosed. This includes, obviously, the rhinos, but it also encompasses those reptiles which are in demand in the pet trade.

At the end of October 2013, the ADU's data holdings amounted to 18 million records of digital biodiversity data. Of these, 12.7 million came from the two bird atlas projects, 2.5 million from SAFRING and 1.9 million from the BIRP and MyBirdPatch projects. The Virtual Museums hold in

excess of 600 000 records of frogs, reptiles and butterflies; to a large extent these are the digitised versions of the inventory of these taxa.

To put these holdings into perspective, the international depository of digital biodiversity, the Global Biodiversity Information Facility (GBIF), has 417 million records (visit [www.gbif.org](http://www.gbif.org)). The ADU is one of the 577 'data publishers' in GBIF. Openness is one of GBIF's platforms too – and they describe themselves as providing 'free and open access to biodiversity data'. Although all the ADU data has been uploaded into the GBIF system, and we make this transfer on an annual basis, not all of it is available yet.

The 18 million ADU records look insignificant compared to GBIF's 417 million. But that translates into 4.3 per cent which is actually an incredibly impressive proportion. One small institute, at the southern tip of the continent of Africa, accounts for more than four per cent of the global open access biodiversity data. Put another way, one record in every 23 comes from the ADU.

This statistic captures the scale of the citizen science effort in southern Africa. But the important thing to grasp is that the records generated do not simply sit gathering electronic dust in a database. The data get rolled up the long and difficult hill to the point where they make the biggest

impact. The records contributed by our citizen scientists get turned into distribution maps, which then get interpreted both from a species (Red-listing exercise) and a landscape perspective (the IBAs do this for birds). The milestone publications noted above result in a better understanding of the distributions of species, and therefore their conservation imperatives.

And finally, the data are contributed to the global biodiversity database at GBIF where, whether the ADU stands or falls, the data are safely curated in perpetuity. It is our intention not to fall. The ADU's role in the biodiversity landscape in Africa is too important to allow that.

