

The value of baseline or long-term data for detecting and responding to declines in wildlife populations

IT would be a fair guess that few, if any, readers of *Pacific Conservation Biology* would have heard of *Faunistische Abhandlungen Staatliches Museum für Tierkunde in Dresden* (although thanks to the internet, it is possible to access some of the papers without resort to the resources of a good academic library). Even German conservation researchers are infrequent readers. Sebastian Schuch from the Georg-August-University of Göttingen and his colleagues acknowledge that it was only because of a tip from another colleague, Herbert Nickel, that they discovered an obscure but immensely valuable 1969 paper by H. Schiemenz (*Faunistische Abhandlungen Staatliches Museum für Tierkunde in Dresden* **6**, 201–280). Between 1963 and 1967, Schiemenz had documented meticulously the auchenorrhynchan (a sub-order of the true bugs, Hemiptera) fauna of 48 protected dry, grassland sites in Eastern Germany, and published the full data along with a detailed methodology.

Schuch and his colleagues were able to resurvey 26 of these sites using Schiemenz's original methodology to study long-term changes in species richness and abundance of the auchenorrhynchan fauna, possibly a unique study for this habitat (*Biological Conservation* **149**, 75–83). Although species richness hardly changed over 40 years, the overall numbers of individuals had declined, probably because of changed agricultural practices adjacent to the protected sites and nitrogen deposition from air pollution. In a companion study that also used Schiemenz's data as a baseline (*Journal of Insect Conservation* **15**, 811–822), Schuch's team found that over four decades the orthopteran (grasshoppers, crickets and related insects) fauna of these grasslands showed only small changes in species composition, and that diversity within the group remained very similar.

Significant though these results are, my point is that they were possible only because of Schiemenz's original dedication and thoroughness in collecting the data and the availability of a long-lived publication outlet prepared to devote 80 pages to recording the complete data and methodology. Today, the opportunity and willingness to collect and publish such baseline data are compromised by

difficulty in obtaining funding, the preference of researchers to pursue “hot” topics, and changed editorial policies in many regional or taxon-based journals to discourage publication of extended data sets or purely descriptive studies. This is not just my opinion — see the concerns expressed by contributors to the forthcoming Royal Zoological Society of New South Wales book *Science under siege: zoology under threat*, edited by Peter Banks, Dan Lunney and Chris Dickman.

Ironically, these declines in opportunity and motivation are occurring at a time of great interest in early baseline or long-term data sets to document and interpret changed patterns of abundance and distribution (e.g., in addition to the above studies by Schuch's team, see Jeff Short's 2004 re-evaluation of Guy Shortridge's early 20th C mammal collections from Western Australia in *Australian Zoologist* **32**, 605–624, or Hugh Ford's insights from long-term studies in *Biological Conservation* **97**, 71–88 and *Pacific Conservation Biology* **17**, 303–309).

In this context, I re-affirm *Pacific Conservation Biology's* commitment to publishing descriptive manuscripts and extended data sets. While they may not necessarily be of immediate significance, their value will grow with time in the same way as the original patient studies by Schiemenz and Shortridge or the long-term work referenced by Ford. Over time, the contribution of base-line data may be more substantive and long-lasting than many an experimental study riding on a current bandwagon.

Mike Calver