



Melophorus majeri

Jonathan David Majer - Curriculum vitae



Career summary

My mission has been to educate students, managers, politicians and the public to appreciate and take into account the importance of insects and allied forms to our wellbeing and survival. Having trained, post-doctorate, as an educator, I have worked my way up through academia, and have developed a continuous, 40 year, research program and a parallel program in South America.

I have spearheaded research in five main areas:

- invertebrates as bioindicators of environmental health;
- the role of fauna in restoration;
- the use of ants to control tree-crop pests;
- tree canopy fauna;
- surveillance against invasive insects.

At all times, this research has been directed towards conservation of our natural environment, while at the same time enabling developments to proceed.

I have now retired from university life and established a consulting company that specialises in terrestrial invertebrate-related matters, particularly biomonitoring of environmental health.

Degrees and academic distinctions

- Bachelor of Science (Honours) University of Bristol 1970
- Fellow of the Royal Entomological Society 1972
- Doctor of Philosophy (PhD), University of Ghana 1974
- Diploma of Imperial College (DIC), Imperial College London 1974
- Certificate of Education (Cert. Ed.), University of London 1974

Professional affiliations

Fellow of the Royal Entomological Society of London; Member of the following: Australian Entomological Society; Royal Society of Western Australia; Environmental Institute of Australia and New Zealand.

Professional activities

Australian Entomological Society: Regional Councillor 1976-78, Convenor of Conservation Committee 1995-2002, Member of Conservation Committee 2003-present, National Secretary 1990-92, President 2006-08, Organising Committee of three annual conferences 1988, 2002, 2010.

Member of the editorial board of: *Restoration Ecology* (1994–2013), *Pacific Conservation Ecology* (1996–present), *Neotropical Entomology* (2008–present) and *Psyche* (guest editor 2012), *Halteres* (2013 – present).

Professional employment

1970–72	Study and Serve Scheme (a British ODA scheme), University of Ghana
1973	Lecturer in Biology, Guildford Technical College, UK
1975–76	Senior Tutor in Biology, Western Australian Institute of Technology (WAIT)
1977–81	Lecturer in Animal Biology, WAIT
1983	Visiting Researcher, University of Queensland
1982–90	Senior Lecturer in Animal Biology, WAIT/Curtin University
1989	Visiting Professor, Federal University of Viçosa, Brazil
1991	Associate Professor in Animal Biology, Curtin University
1999–2000	Professor and Head of School of Environmental Biology, Curtin University
2001–2002	Head of School of Chemical and Biological Sciences, Curtin University
2003–2010	Professor and Head of Department of Environmental Biology (now Environment and Agriculture), Curtin University
2010–2013	Professor of Invertebrate Conservation, Environment and Agriculture, Curtin University
2013-present	Adjunct Professor, Curtin University
2013-present	Director of Biomonitoring International
2015-present	Adjunct Professor, University of Western Australia
2015 -present	Associate of the WA Museum

Teaching responsibilities (recent)

All of my teaching has been directed towards considering the importance of invertebrates in our lives. Units I have taught include: Animal Biology 102; Environmental Awareness 102; Ecological Sustainable Design 102; Invertebrate Animals 201; Plant Protection 201; Work Experience 301; Biology Project 301/2; Landcare Revegetation 301; Ecology 301; Resource Management 302; Biomonitoring 302. Supervised post-graduate students from Korea, Timor, Rwanda, Sri Lanka and Egypt.

Research interests

Conservation and ecology of terrestrial invertebrates; ant ecology; restoration; role of fauna in land reclamation; tropical insect ecology; insect–plant interactions; insect–vertebrate interactions; canopy invertebrates; invasive organisms; assessment of arthropod diversity; sustainability, invertebrate surveillance. My research has mostly been mission-orientated and often performed in conjunction with industry and government (Annexe 1)

Grants

- 1975-2011 Grants from various forestry, agricultural and mining companies. \$603,747
- 1976-8 Rural Credits Development Fund. Role of ants in Jarrah forest. \$35,841
- 1987-91 ARC Discovery grant. Relationship between canopy arthropods and birds. \$124,253
- 1993-4 ARC Discovery grant. Diversity of invertebrates in Australia. \$99,264
- 1998-2001 ARC Discovery grant. Diversity of arthropods on tree trunks and relationship with birds. \$177,253
- 2005-9 ARC Discovery grant. Effect of ant seed dispersal on plant speciation. \$230,000
- 2005-9 ARC Discovery grant. Role of invasive ants in urban ecosystems. \$285,000
- 2007-10 Commonwealth Environmental Research Facility grant. Ant taxonomy. \$200,000
- 2005-10 Alcoa Foundation. Sustaining Gondwana. \$1.5 million
- 2005-9 Chevron. Documenting Barrow Island invertebrates.
- 2010-4 Chevron. Surveillance for introduced invertebrates during Gorgon gas project.

Awards and service

- Curtin University's 2005 Researcher of the Year, Division of Resources and Environment

- Recipient of the Australian and New Zealand Association for the Advancement of Science (ANZAAS) Mueller Medal, 2006.
- Received a tribute award for lifetime's research on ant ecology at the XXII Simpósio de Mirmecologia held in Ilheus, Brazil, 2015.
- I have regularly been asked to attend and comment at management workshops organised by the then Department of Environment and Conservation, the Commonwealth Forest Taskforce, CSIRO, Greening Australia and similar organisations (Annexe 2). In addition, I sit, or have sat, on a number of State and Commonwealth committees associated with such issues as bauxite mining, forest fauna, threatened species, biodiversity and reservation of representative forest ecosystems. My input at these venues has directly contributed to the management of our natural resources.
- By regularly speaking through the media, at conferences, at schools, at special interest groups and so forth, I have been able to convey my viewpoints and the results of my research to the general public so that they better understand some of the important invertebrate, conservation and management issues which are facing us today.

Consultances

Having developed a means of using invertebrates as indicators of the success of minesite rehabilitation, I have been invited and funded to carry out evaluations at minesites throughout Western Australia and at Groote Eylandt (NT), Gove (NT), Weipa (QLD) and North Stradbroke Island (QLD). On the forest management/conservation side, I was appointed by the Commonwealth Government to a Special Advisory Group in 1995 whose role was to adjudicate on the Deferred Forest Assessment process. I was again contracted in 1997 to write a review of the impact of disturbance on invertebrates in the Western Australian forest. This review contributed to the setting aside of forest reservations under the Regional Forest Agreement process.

In recent years, I have been invited and funded to disseminate my findings at conferences and/or minicourses in South Africa, India, China, Brazil, Switzerland and Botswana. I have also been invited and funded to carry out evaluations on minesite rehabilitation success in South Africa, south east Brazil and also in the Amazon. In 1997 the US National Science Foundation funded a workshop in Bahia, Brazil on the use of ants as bioindicators of ecosystem health. I was funded to attend and have co-edited the subsequent handbook of methods and case studies. I also undertook a joint consultancy to The World Bank on the impact of forest management practices throughout the World on forest faunal biodiversity (see Annexe 3).

My most recent involvement was with Chevron's Gorgon Gas project on Barrow Island, in which I was assisting them to fulfil their ministerial obligations by ensuring that no alien invertebrates are introduced throughout the life of the project. This culminated in the publication of a book on invertebrates of Barrow Island.

Publications

I have published 5 books, 8 monographs, 50 chapters in refereed books, 167 refereed journal articles, 75 articles in miscellaneous publications, 142 conference papers or abstracts and 8 book reviews. Current *Web of Science* h-index is 33, with mean citations per journal article of 24.8. Current *Google* h-index is 50. Current *ResearchGate* RG score is 37.8. A full list of publications can be found in the Publications (Annexe 4).

Media outreach

I routinely convey the results of my work to journalists and appear in the press at least three times per year, with major articles appearing in the *Australian* and *West Australian* newspapers and in the Brazilian national paper *Globo*. Coupled with this, I am also interviewed for radio or TV on environmental and invertebrate-related topics at least twice per year. My work has been featured on ABC *Quantum* on two occasions, once on the relationship between trees, insects and bird conservation and the second on the importance to conservation of isolated trees in agricultural areas (see Videos section). As well as writing journal articles, I convey my findings to the public through popular articles, with influential articles on the two *Quantum* topics appearing in *Geo* and *Nature Australia*, respectively.