

MELU 2007

Nicole Middleton

Nicole Middleton, Collection Manager, MELU, removing specimens from the cupboards built in 1925–1926 to house the collection.

For further information on the MELU Herbarium see <http://www.botany.unimelb.edu.au/herbarium> or contact Nicole Middleton, Collection Manager, University of Melbourne Herbarium, School of Botany, University of Melbourne, Victoria 3010.

Today the University of Melbourne Herbarium (MELU) holds an estimated 100,000 specimens. The collection spans the breadth of the plant world and includes flowering plants, fungi, algae, mosses, liverworts, ferns and gymnosperms. Specimens collected by the likes of Rupp, 'Dr Mac', 'Sony', Sophie Ducker and Dave Ashton live on in the Herbarium. Their relevance for teaching and research is still as imperative today as the day they were collected. Their significance and value have increased exponentially.

Today the Herbarium is used extensively for teaching. Several subjects taught at the University require students to make their own herbarium specimens, and the MELU collections are continuously used by students as aids for plant identification. Since 1999, student involvement in the Herbarium has increased through the establishment of volunteer programs. These provide botany, history and other enthusiastic students with the opportunity to gain on-the-job experience whilst completing their studies.

Alongside teaching, the Herbarium also plays a major role in research. Researchers from within the University and around the world utilise the MELU collection through specimen loans and exchanges.



MELU is registered with the Convention on International Trade in Endangered Species (CITES), Australian Quarantine and Inspection Service (AQIS) and Environment Australia, so has permission to send and receive herbarium specimens between international and domestic scientific research institutions. Research on specimens collected decades or centuries ago can provide many clues to predicting the future. Sophie Ducker's Bogong High Plains collection is being used to indicate some effects of climate change, while Sony's specimens collected from now urbanised areas show us which species do not require watering when planted in gardens. Within MELU a wealth of such information is peacefully waiting its chance to come to life.

Through modern technology, DNA can now be extracted from herbarium specimens and with this, the future for herbaria becomes almost as limitless as a scientist's

creativity. But before the hoards of specimens can be utilised in this way they need to be rediscovered. With Dr Mac's card catalogue now vastly out-of-date, database cataloguing and digitising the MELU collection are necessary to document exactly what specimens are present in the collection and to allow access to their accompanying information.

Database entry at MELU is at present a slow process, undertaken largely by volunteers. Small grants have enabled four per cent of the collection to be recorded electronically. At this rate it will take a century before we can fully make the most of the information held in MELU, by which time many of the species may be extinct and information pertinent to their conservation irrelevant. To speed up the process, funding is required. Only when the database is complete will the MELU collection be fully available to anyone, anywhere around the world, bringing the specimens to life.

Nicole Middleton is a graduate of the School of Botany, and has been Collection Manager at the University of Melbourne Herbarium since 1997. In addition to curating the collection, running the Herbarium's volunteer program and organising specimen loans, her duties include teaching and support in field botany, plant systematics and evolution, vegetation management and conservation, and flora of Victoria.